

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL080425\
 Data File : VL042822.D
 Acq On : 05 Aug 2025 00:45
 Operator : SY/MD
 Sample : Q2750-02DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 05 03:20:05 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	2.787	49	146942	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	366115	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	315576	10.000	ppbv	0.00

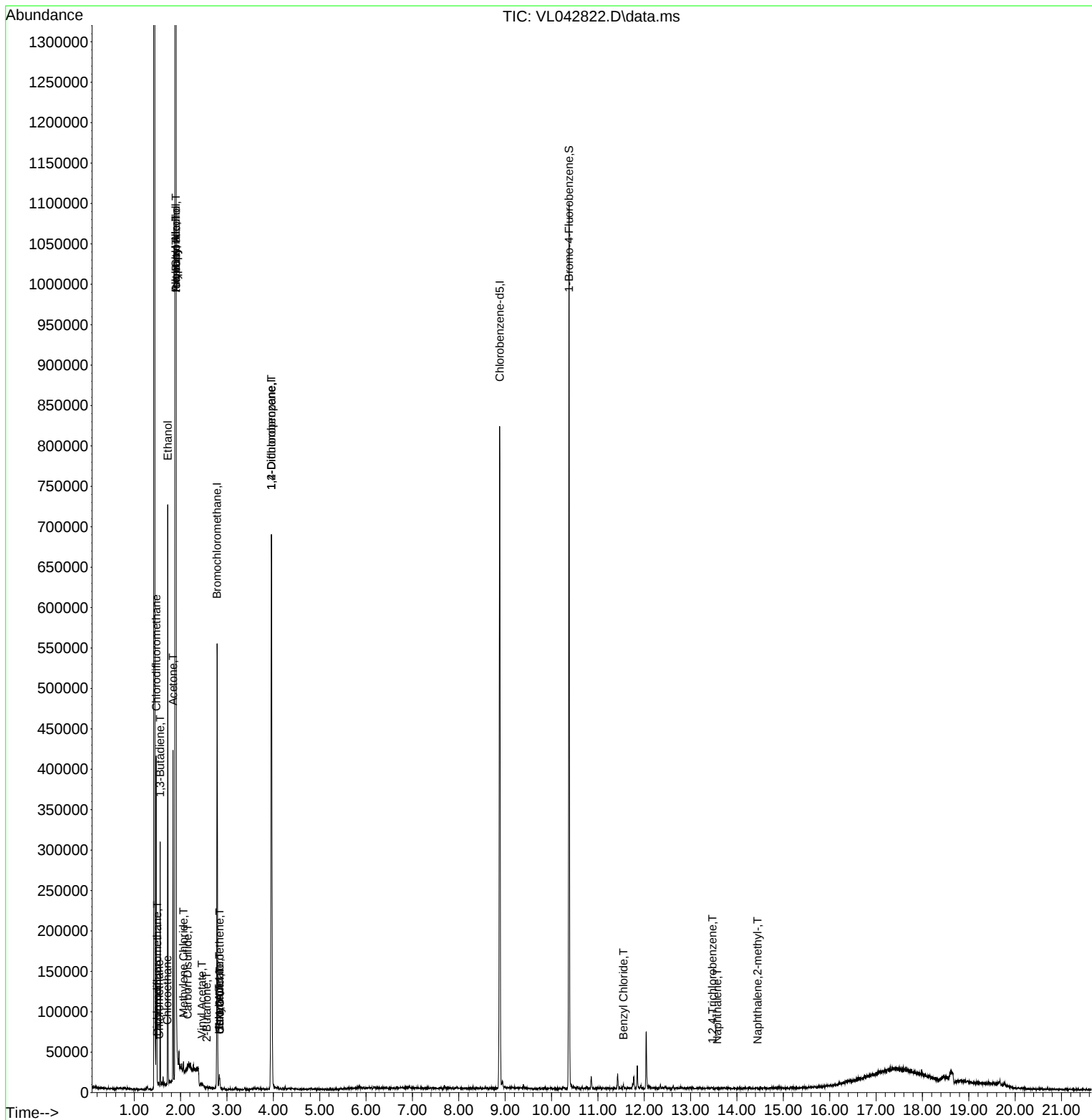
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	245322	9.816	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.200%

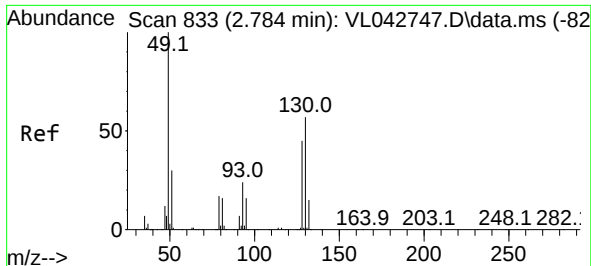
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.499	85	517	0.027	ppbv #	57
3) Chlorodifluoromethane	1.476	51	133315	5.268	ppbv	100
4) Chloromethane	1.535	50	542	0.069	ppbv #	72
7) Chloroethane	1.713	64	142	0.047	ppbv #	83
9) Propene	1.897	41	1321523	143.672	ppbv	94
13) Ethanol	1.722	45	247776	368.803	ppbv	89
15) Acetone	1.836	43	168914	8.325	ppbv	100
16) 1,3-Butadiene	1.561	39	16971	1.961	ppbv #	18
17) tert-Butyl alcohol	1.897	59	577897	31.579	ppbv #	94
19) Isopropyl Alcohol	1.897	45	4808998	445.998	ppbv #	40
20) Methylene Chloride	2.065	84	1787	0.279	ppbv #	83
21) Allyl Chloride	1.897	41	1321523	105.677	ppbv #	83
23) Vinyl Acetate	2.457	43	1086	0.044	ppbv #	16
25) Ethyl Acetate	2.836	43	8515	0.190	ppbv #	67
26) Hexane	2.829	57	1135	0.058	ppbv #	1
27) Carbon Disulfide	2.150	76	3077	0.182	ppbv #	66
29) Chloroform	2.845	83	660	0.022	ppbv #	51
31) cis-1,2-Dichloroethene	2.842	61	970	0.048	ppbv #	23
34) 2-Butanone	2.561	43	1052	0.041	ppbv	94
39) 1,2-Dichloropropane	3.959	63	96193	7.510	ppbv #	22
66) Benzyl Chloride	11.552	91	206	0.048	ppbv #	86
79) Naphthalene	13.572	128	64	0.436	ppbv #	69
80) Naphthalene,2-methyl-	14.446	142	45	1.130	ppbv #	17
81) 1,2,4-Trichlorobenzene	13.471	180	28	0.436	ppbv #	1

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

ClientSampleId :

Response via : Initial Calibration

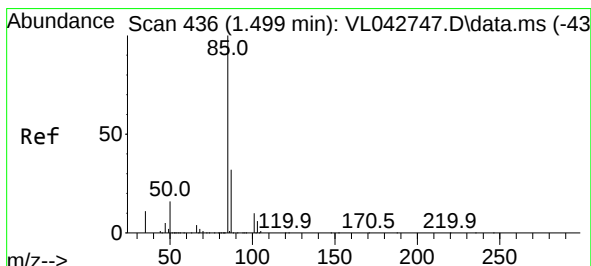
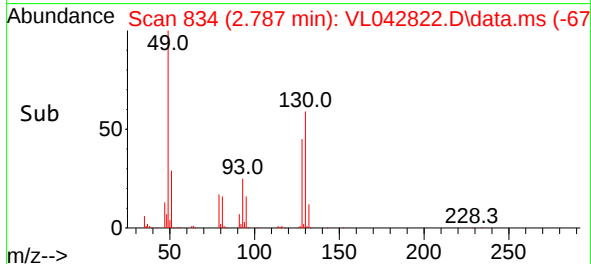
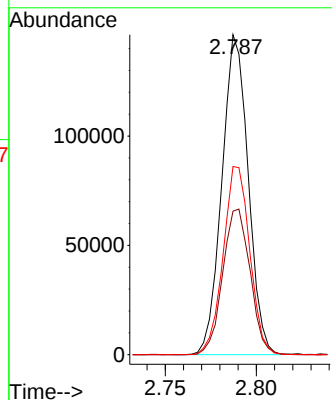
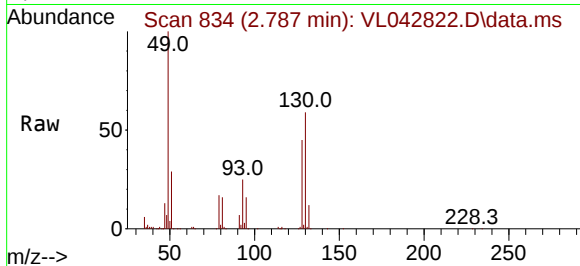




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

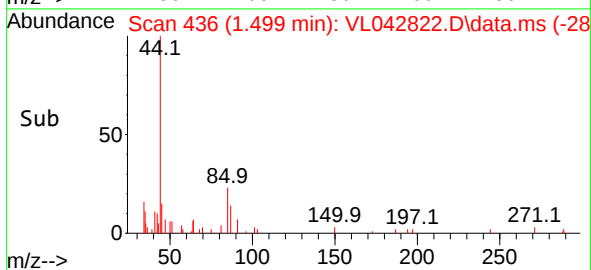
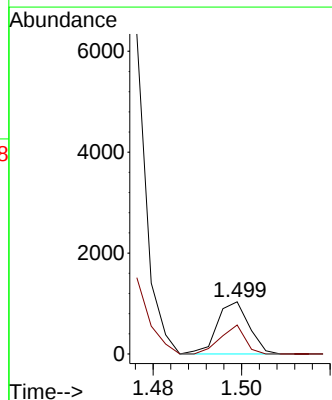
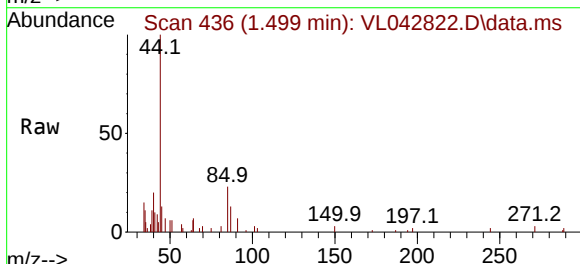
Instrument :
MSVOA_L
ClientSampleId :

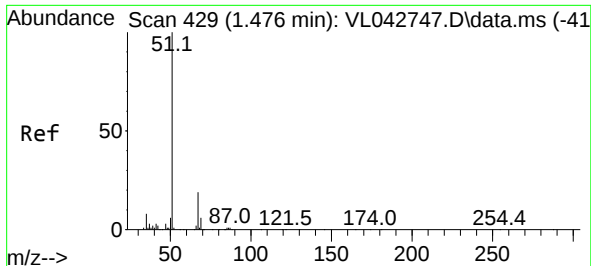
Tgt Ion: 49 Resp: 146942
Ion Ratio Lower Upper
49 100
128 47.5 23.6 71.0
130 59.6 30.3 90.8



#2
Dichlorodifluoromethane
Concen: 0.027 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 85 Resp: 517
Ion Ratio Lower Upper
85 100
87 55.7 25.4 38.2#

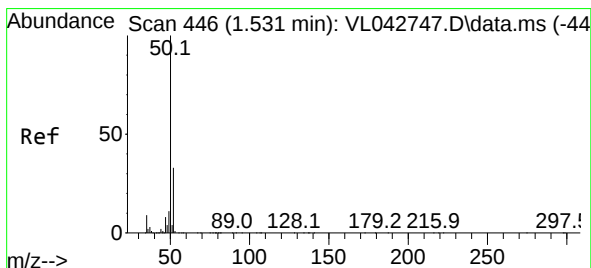
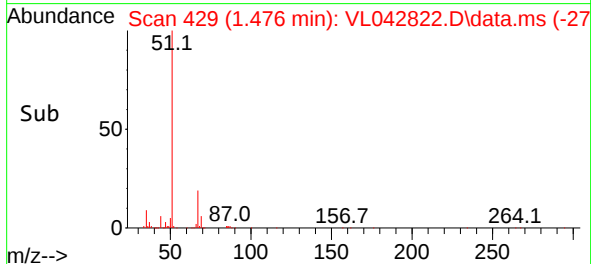
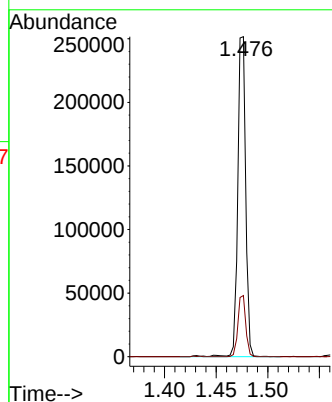
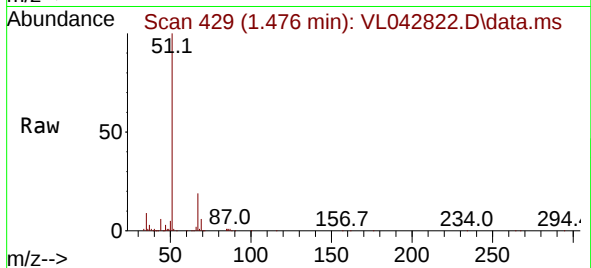




#3
Chlorodifluoromethane
Concen: 5.268 ppbv
RT: 1.476 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

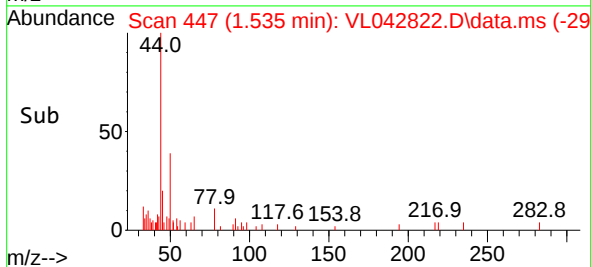
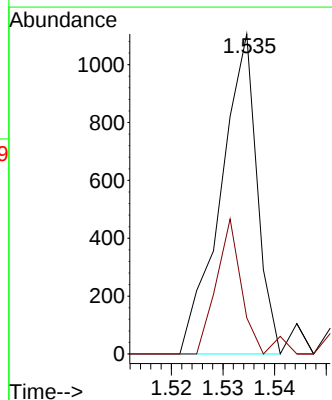
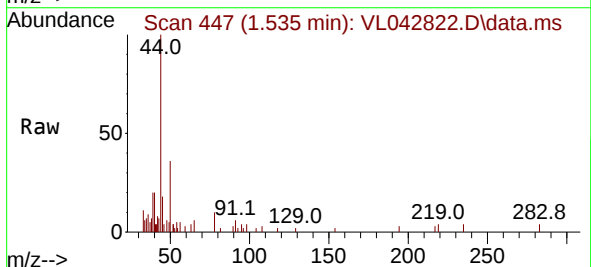
Instrument :
MSVOA_L
ClientSampleId :

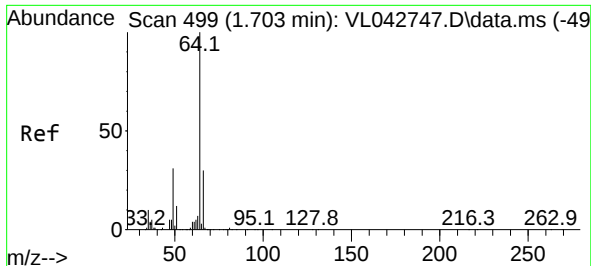
Tgt Ion: 51 Resp: 133315
Ion Ratio Lower Upper
51 100
67 18.9 15.0 22.6



#4
Chloromethane
Concen: 0.069 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 50 Resp: 542
Ion Ratio Lower Upper
50 100
52 17.4 26.6 40.0#

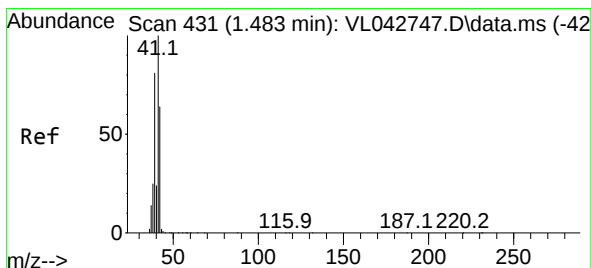
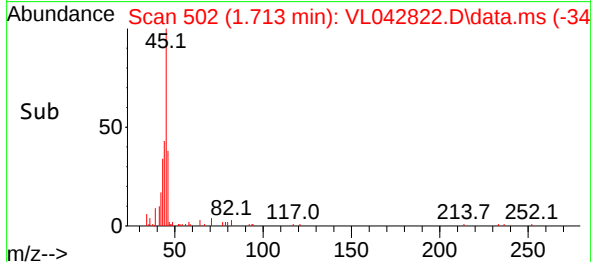
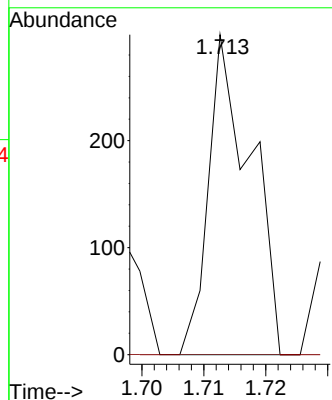
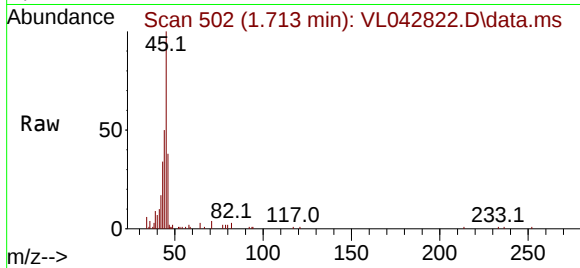




#7
Chloroethane
Concen: 0.047 ppbv
RT: 1.713 min Scan# 501
Delta R.T. 0.010 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

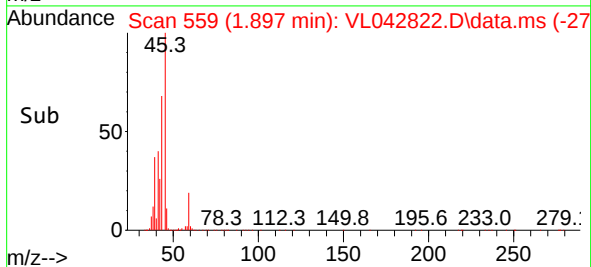
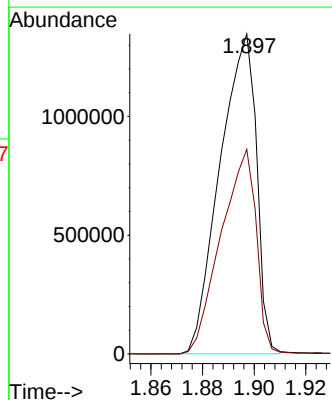
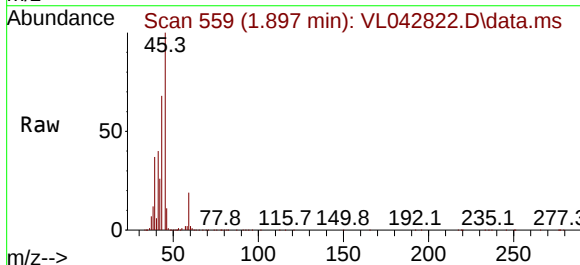
Instrument :
MSVOA_L
ClientSampleId :

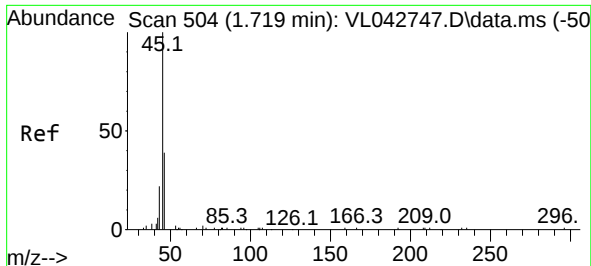
Tgt Ion: 64 Resp: 142
Ion Ratio Lower Upper
64 100
66 21.1 24.1 36.1#



#9
Propene
Concen: 143.672 ppbv
RT: 1.897 min Scan# 559
Delta R.T. 0.414 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 41 Resp: 1321523
Ion Ratio Lower Upper
41 100
42 62.0 53.2 79.8

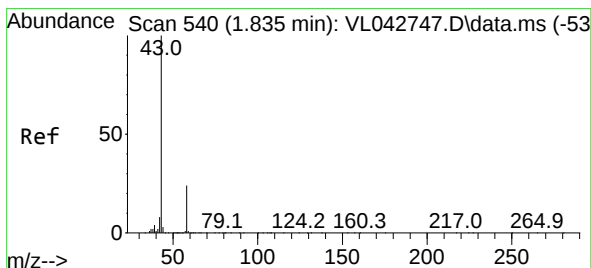
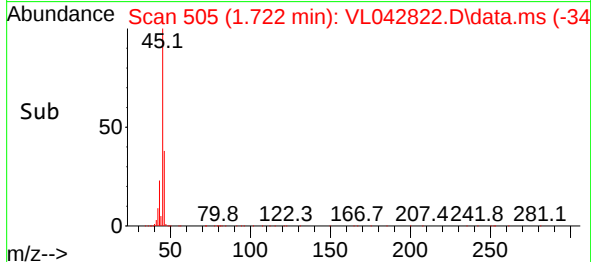
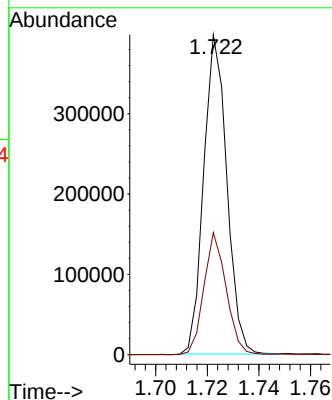
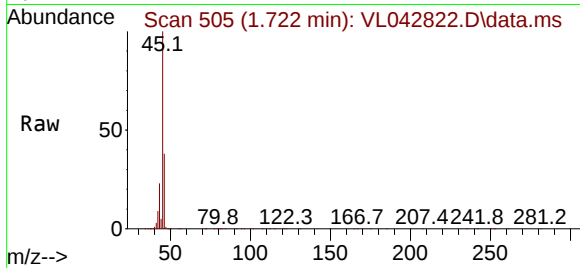




#13
Ethanol
Concen: 368.803 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

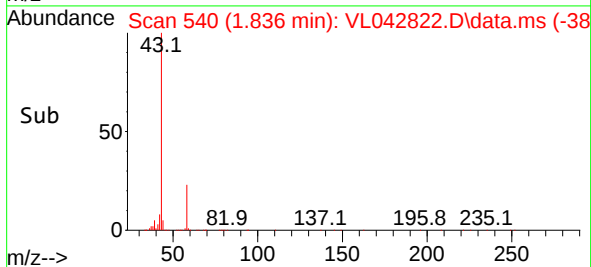
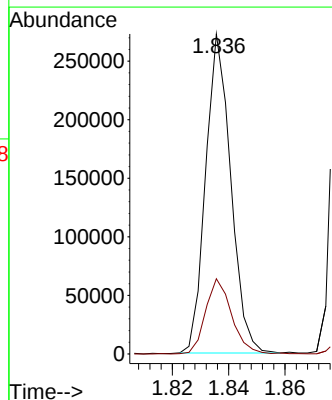
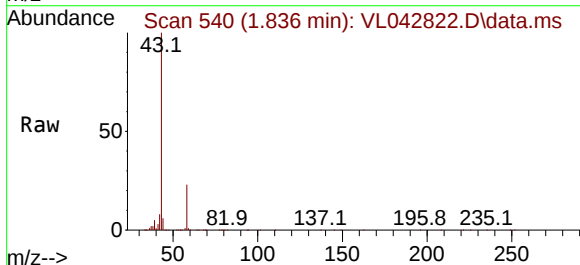
Instrument :
MSVOA_L
ClientSampleId :

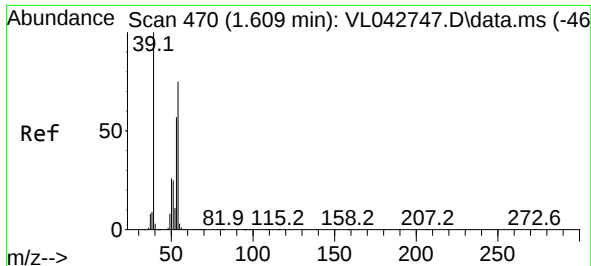
Tgt Ion: 45 Resp: 247776
Ion Ratio Lower Upper
45 100
46 37.4 17.8 71.4



#15
Acetone
Concen: 8.325 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 43 Resp: 168914
Ion Ratio Lower Upper
43 100
58 24.6 19.8 29.8

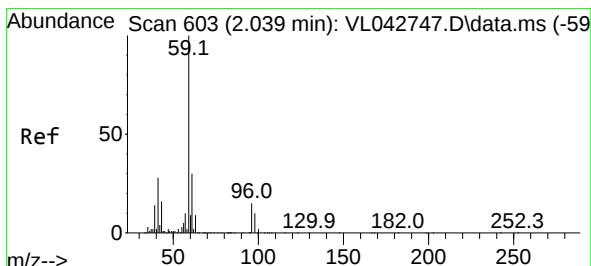
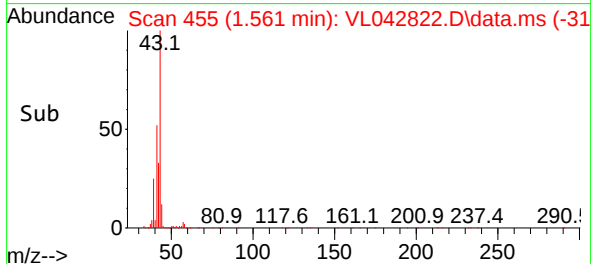
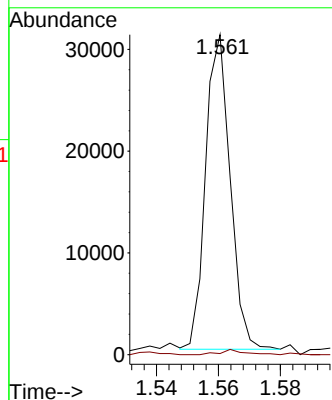
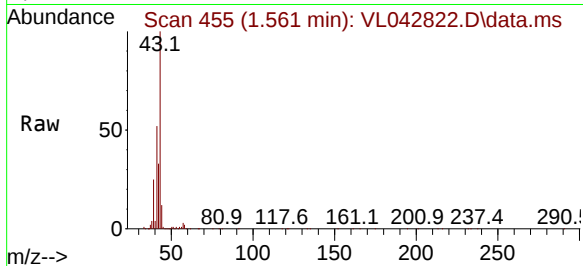




#16
1,3-Butadiene
Concen: 1.961 ppbv
RT: 1.561 min Scan# 41
Delta R.T. -0.048 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

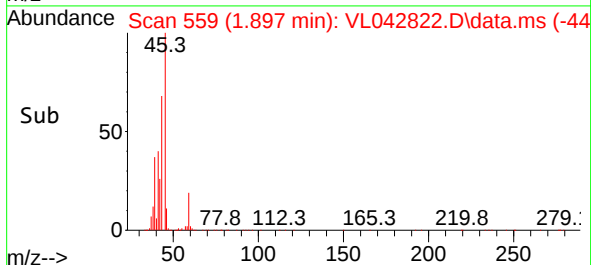
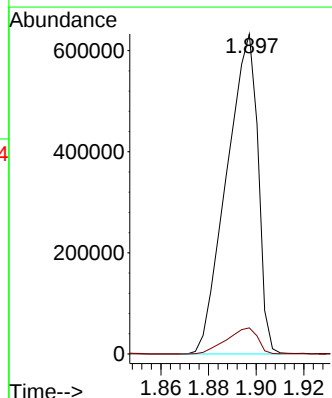
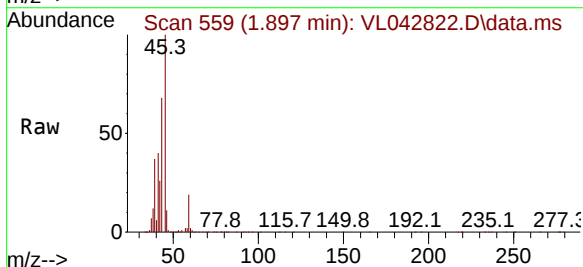
Instrument :
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ClientSampleId :

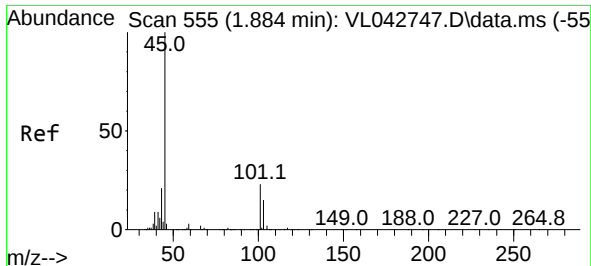
Tgt Ion: 39 Resp: 16971
Ion Ratio Lower Upper
39 100
54 1.9 54.5 81.7#



#17
tert-Butyl alcohol
Concen: 31.579 ppbv
RT: 1.897 min Scan# 559
Delta R.T. -0.142 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 59 Resp: 577897
Ion Ratio Lower Upper
59 100
57 8.2 8.3 12.5#

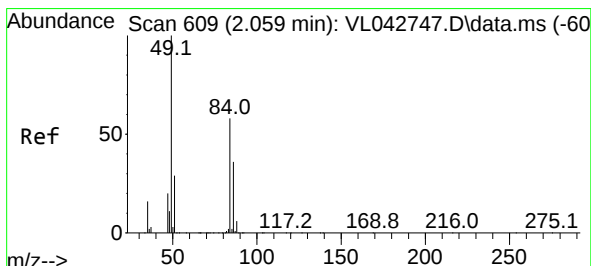
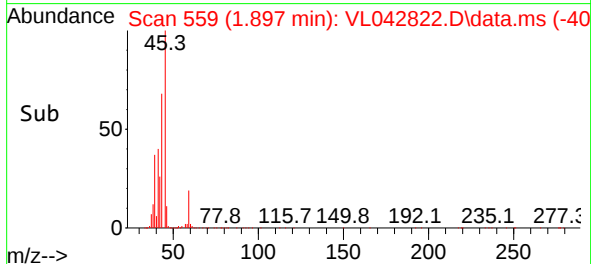
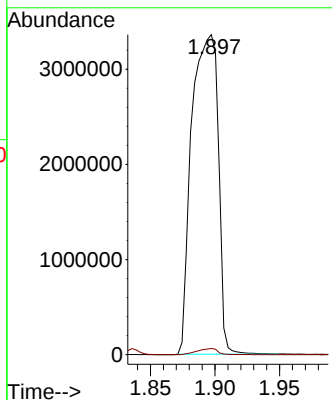
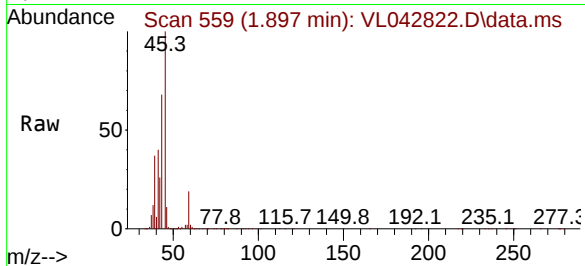




#19
Isopropyl Alcohol
Concen: 445.998 ppbv
RT: 1.897 min Scan# 511
Delta R.T. 0.013 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

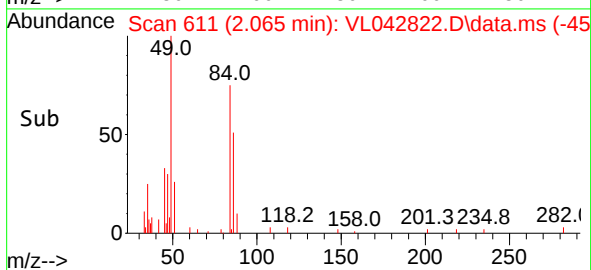
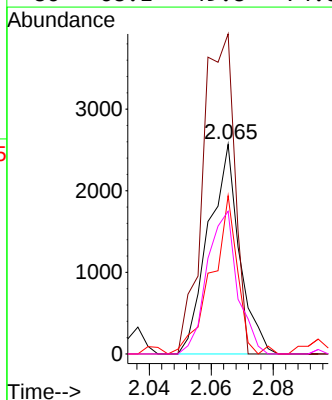
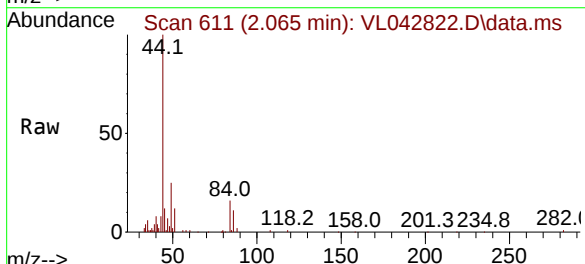
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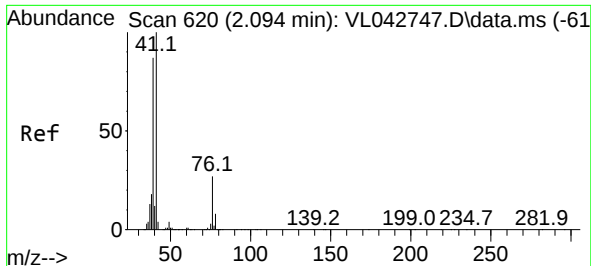
Tgt Ion: 45 Resp: 4808998
Ion Ratio Lower Upper
45 100
58 1.5 30.0 45.0#



#20
Methylene Chloride
Concen: 0.279 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.007 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 84 Resp: 1787
Ion Ratio Lower Upper
84 100
49 152.7 138.6 208.0
51 75.5 40.6 61.0#
86 68.1 49.8 74.8

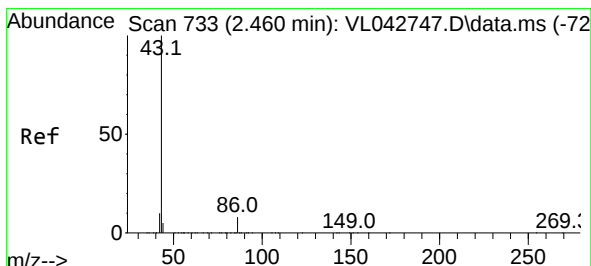
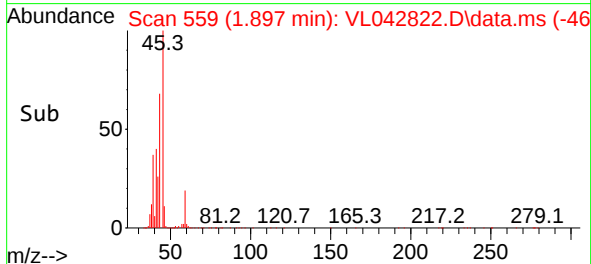
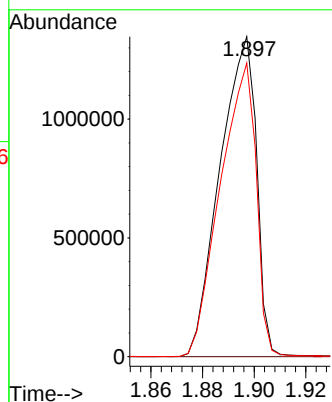
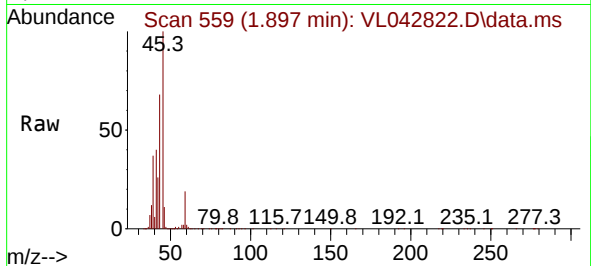




#21
 Allyl Chloride
 Concen: 105.677 ppbv
 RT: 1.897 min Scan# 51
 Delta R.T. -0.197 min
 Lab File: VL042822.D
 Acq: 05 Aug 2025 00:45

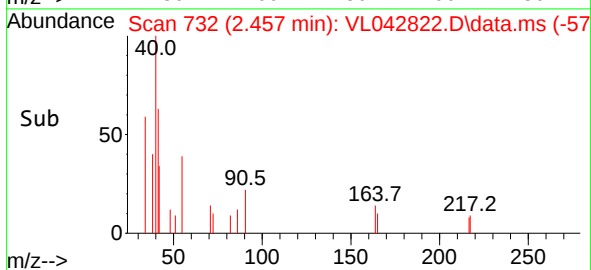
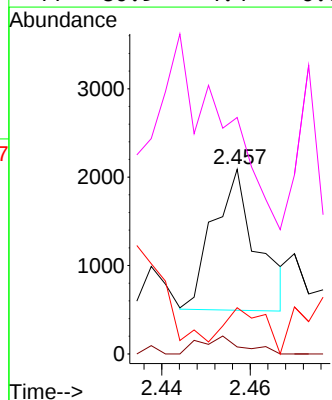
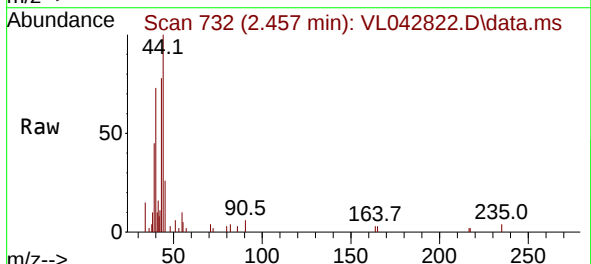
Instrument :
 MSVOA_L
 ClientSampleId :

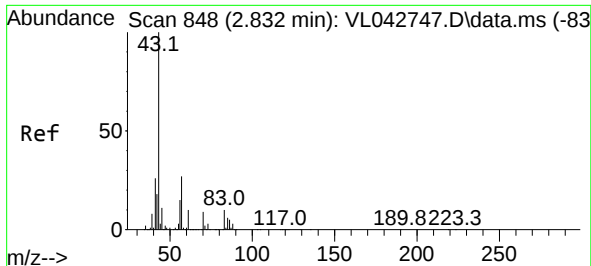
Tgt Ion: 41 Resp: 1321523
 Ion Ratio Lower Upper
 41 100
 76 0.0 21.1 31.7#
 39 90.6 68.3 102.5



#23
 Vinyl Acetate
 Concen: 0.044 ppbv
 RT: 2.457 min Scan# 732
 Delta R.T. -0.003 min
 Lab File: VL042822.D
 Acq: 05 Aug 2025 00:45

Tgt Ion: 43 Resp: 1086
 Ion Ratio Lower Upper
 43 100
 86 5.0 6.1 9.1#
 42 33.4 7.8 11.8#
 44 80.9 4.4 6.6#

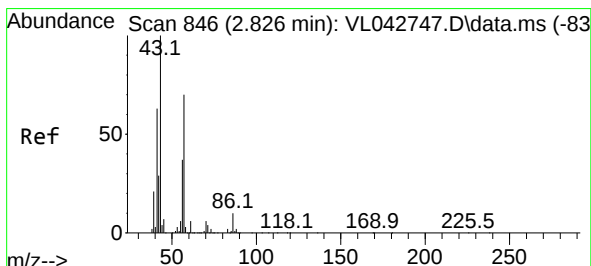
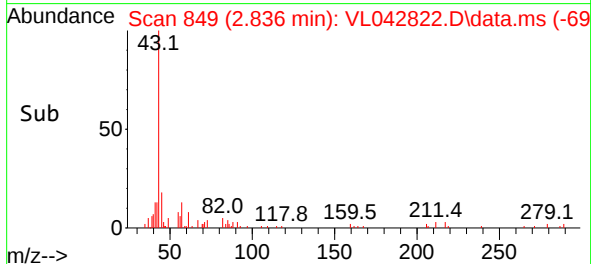
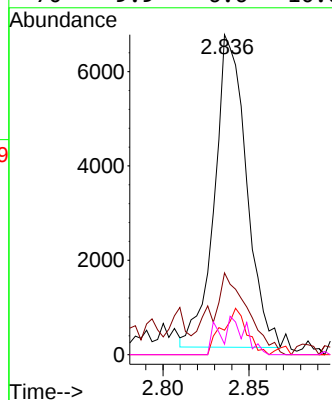
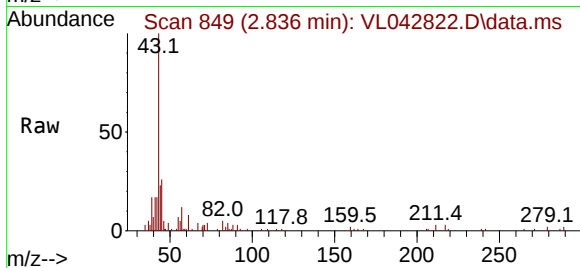




#25
Ethyl Acetate
Concen: 0.190 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

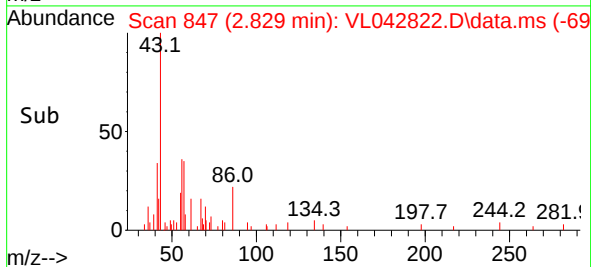
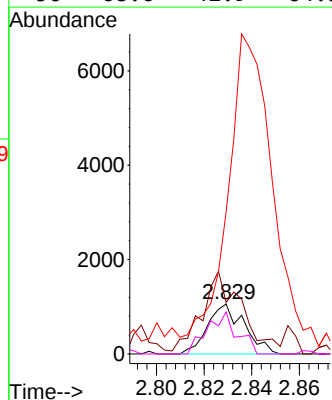
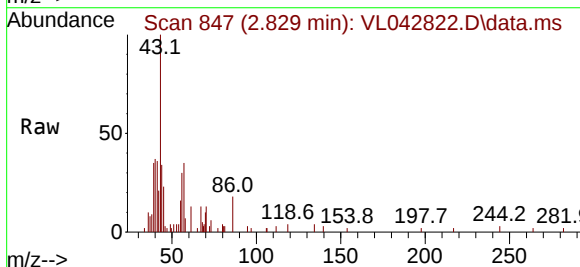
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MSVOA_L
ClientSampleId :

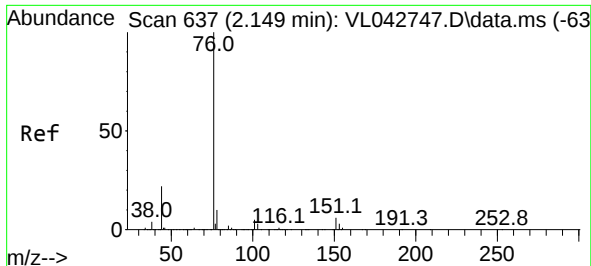
Tgt Ion: 43	Resp: 8515
Ion Ratio	Lower Upper
43 100	
45 37.7	7.8 11.6#
61 12.3	6.7 10.1#
70 9.9	6.6 10.0



#26
Hexane
Concen: 0.058 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 57	Resp: 1135
Ion Ratio	Lower Upper
57 100	
41 226.0	75.4 113.2#
43 793.9	185.0 277.6#
56 68.6	42.9 64.3#

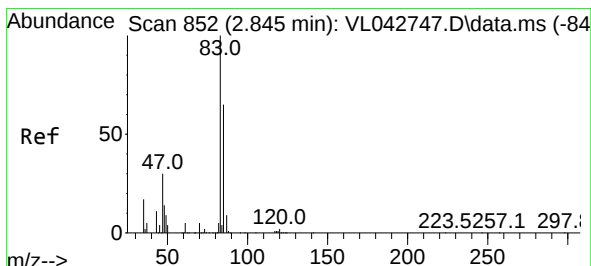
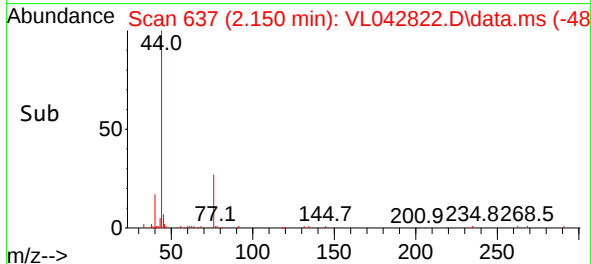
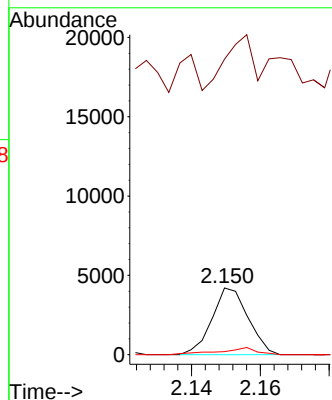
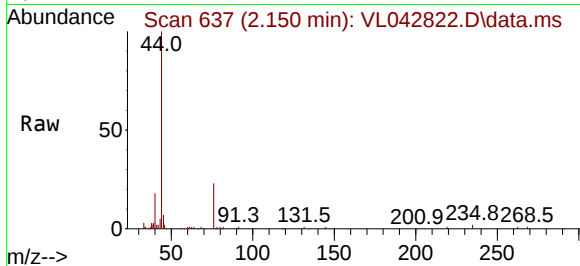




#27
Carbon Disulfide
Concen: 0.182 ppbv
RT: 2.150 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

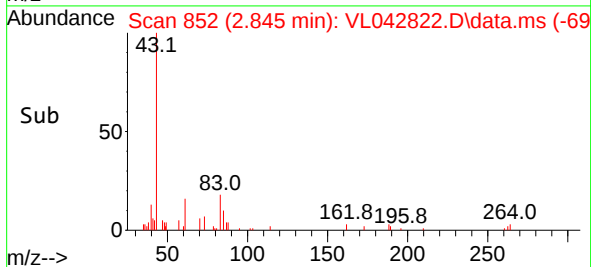
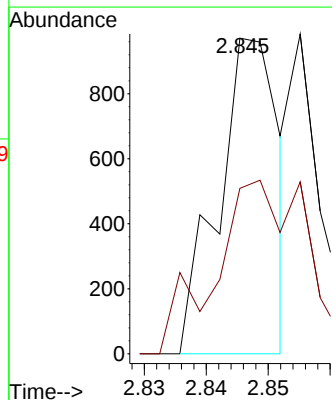
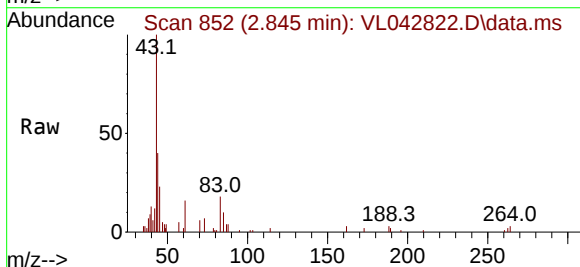
Instrument :
MSVOA_L
ClientSampleId :

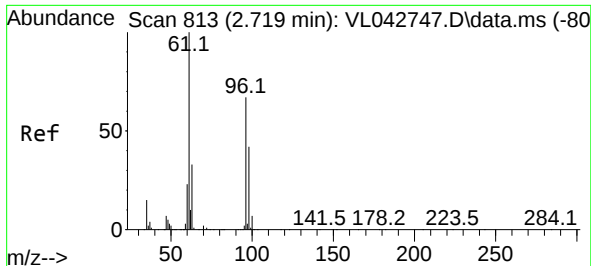
Tgt Ion: 76 Resp: 3077
Ion Ratio Lower Upper
76 100
44 0.0 19.3 28.9#
78 10.8 9.9 14.9



#29
Chloroform
Concen: 0.022 ppbv
RT: 2.845 min Scan# 852
Delta R.T. 0.000 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 83 Resp: 660
Ion Ratio Lower Upper
83 100
85 26.7 52.2 78.2#

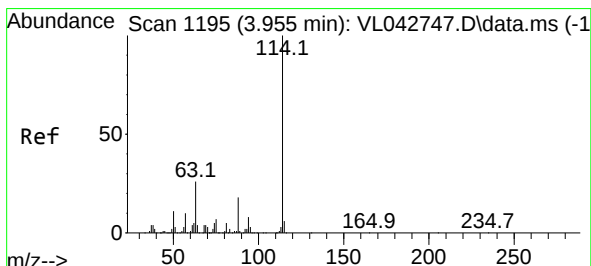
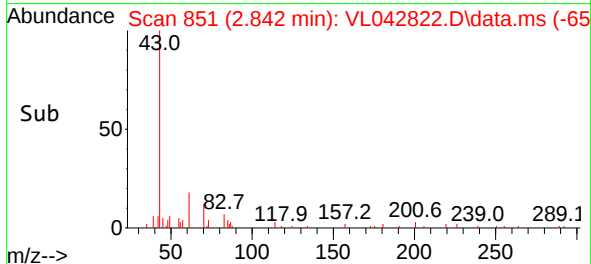
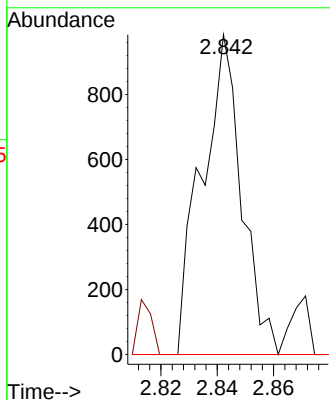
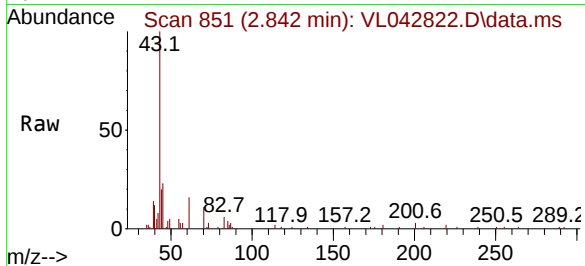




#31
 cis-1,2-Dichloroethene
 Concen: 0.048 ppbv
 RT: 2.842 min Scan# 813
 Delta R.T. 0.123 min
 Lab File: VL042822.D
 Acq: 05 Aug 2025 00:45

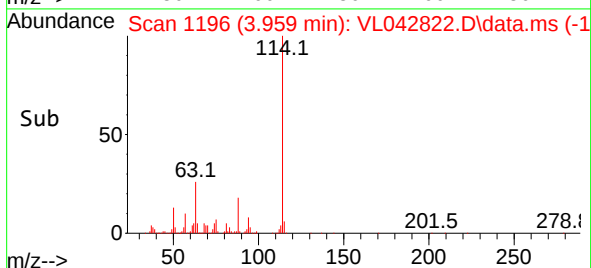
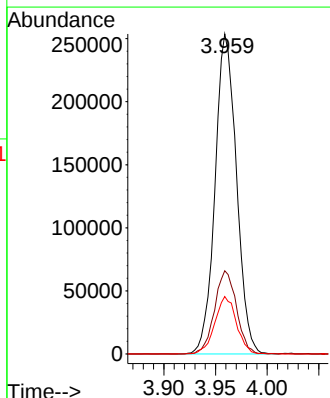
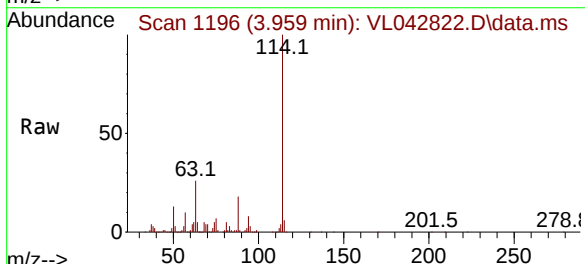
Instrument :
 MSVOA_L
 ClientSampleId :

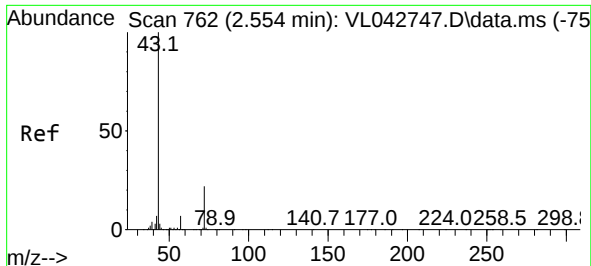
Tgt Ion: 61 Resp: 970
 Ion Ratio Lower Upper
 61 100
 96 0.0 53.5 80.3#
 98 0.0 33.6 50.4#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.959 min Scan# 1196
 Delta R.T. 0.003 min
 Lab File: VL042822.D
 Acq: 05 Aug 2025 00:45

Tgt Ion: 114 Resp: 366115
 Ion Ratio Lower Upper
 114 100
 63 26.8 20.5 30.7
 88 18.1 14.0 21.0

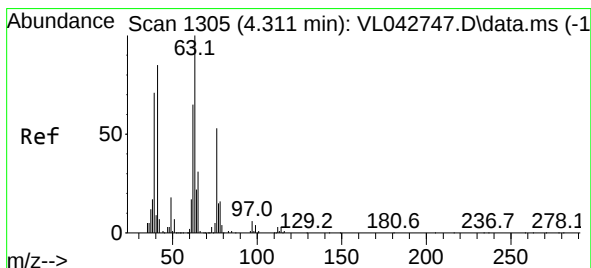
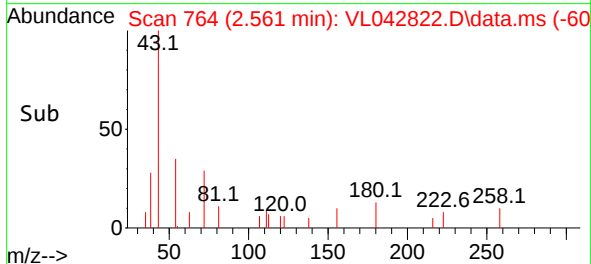
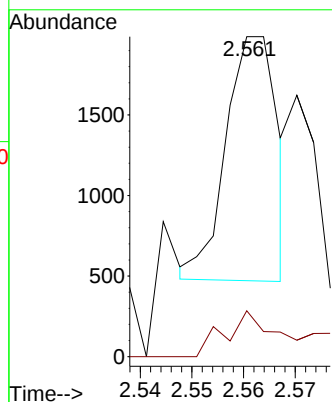
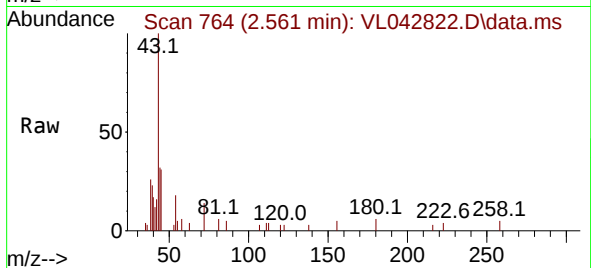




#34
2-Butanone
Concen: 0.041 ppbv
RT: 2.561 min Scan# 71
Delta R.T. 0.007 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

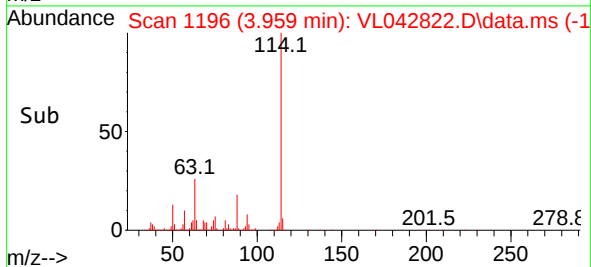
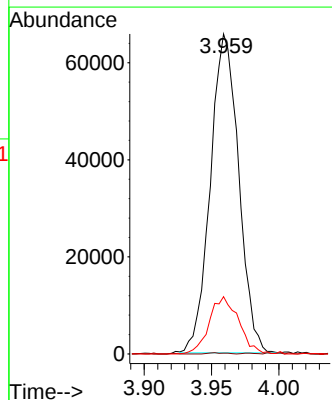
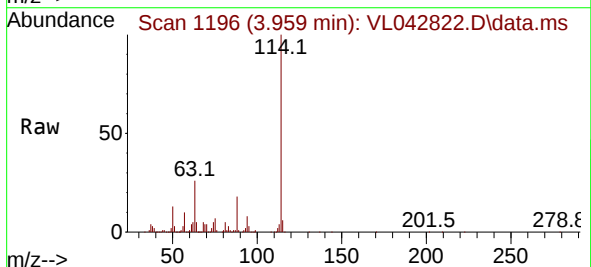
Instrument :
MSVOA_L
ClientSampleId :

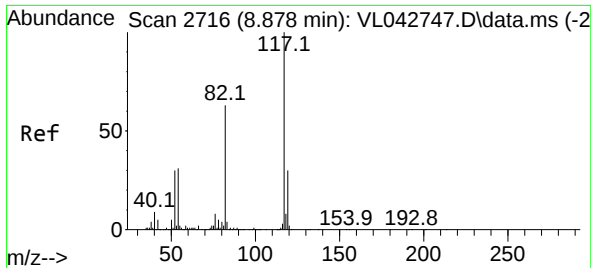
Tgt Ion: 43 Resp: 1052
Ion Ratio Lower Upper
43 100
72 24.5 17.4 26.0



#39
1,2-Dichloropropane
Concen: 7.510 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 63 Resp: 96193
Ion Ratio Lower Upper
63 100
41 0.5 68.2 102.4#
62 17.9 52.0 78.0#

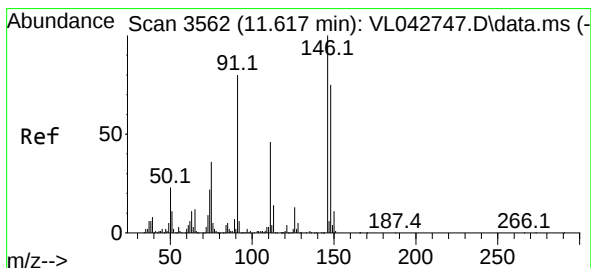
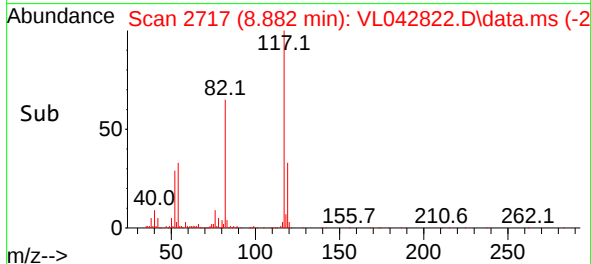
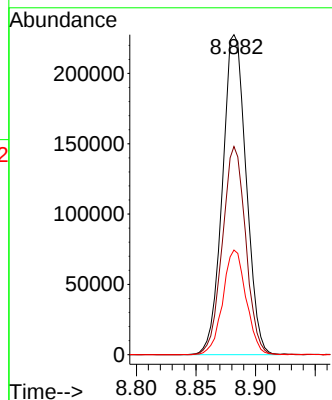
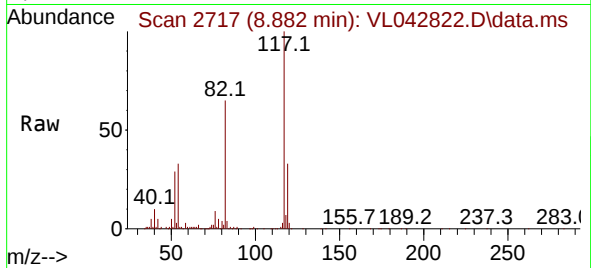




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

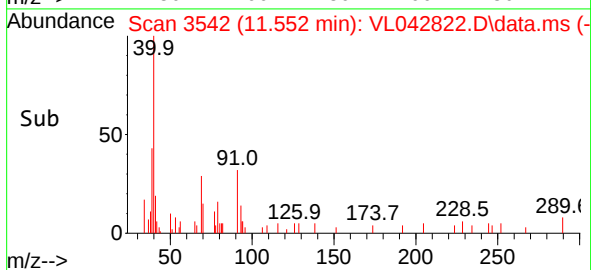
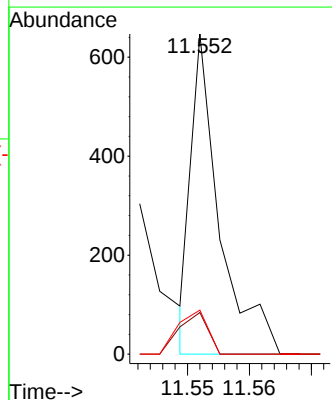
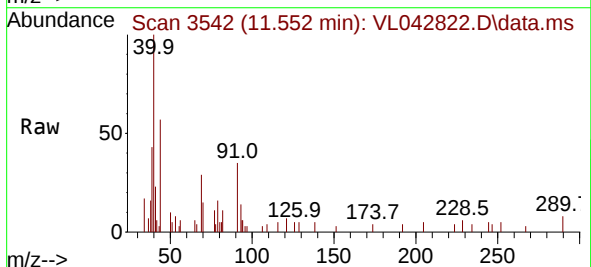
Instrument :
MSVOA_L
ClientSampleId :

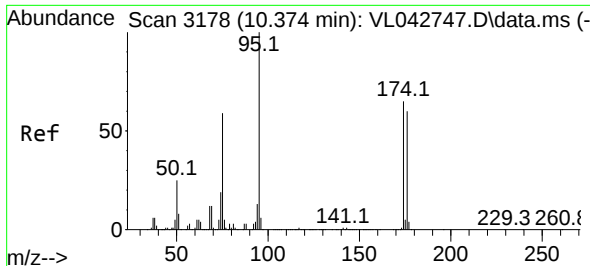
Tgt Ion:117 Resp: 315576
Ion Ratio Lower Upper
117 100
82 63.9 53.3 79.9
119 32.2 25.8 38.6



#66
Benzyl Chloride
Concen: 0.048 ppbv
RT: 11.552 min Scan# 3542
Delta R.T. -0.065 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 91 Resp: 206
Ion Ratio Lower Upper
91 100
126 13.1 14.4 21.6#
128 14.6 5.2 7.8#

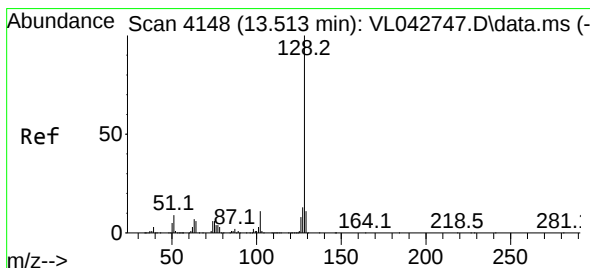
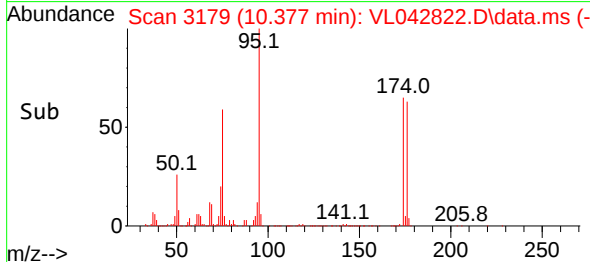
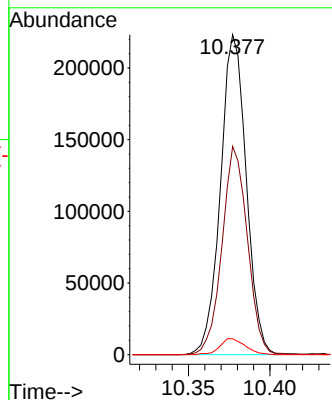
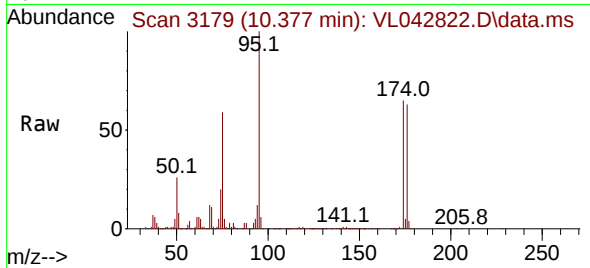




#68
1-Bromo-4-Fluorobenzene
Concen: 9.816 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.003 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

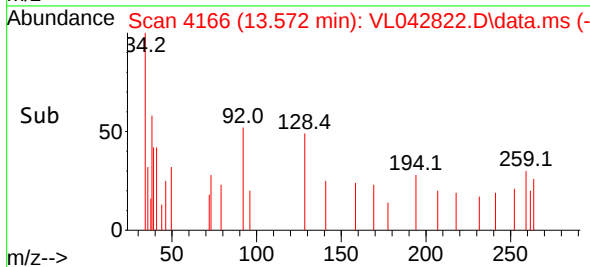
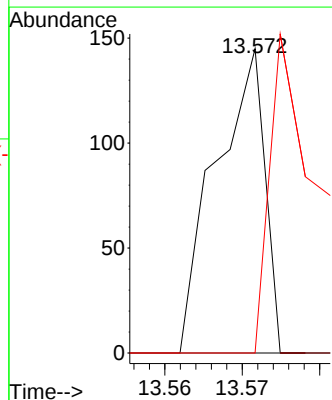
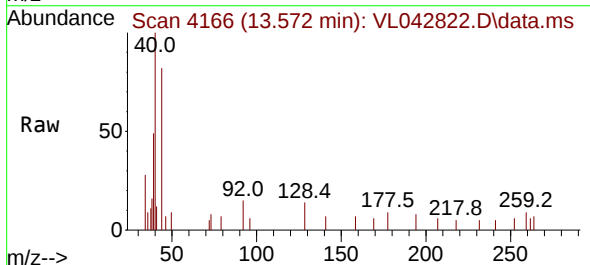
Instrument :
MSVOA_L
ClientSampleId :

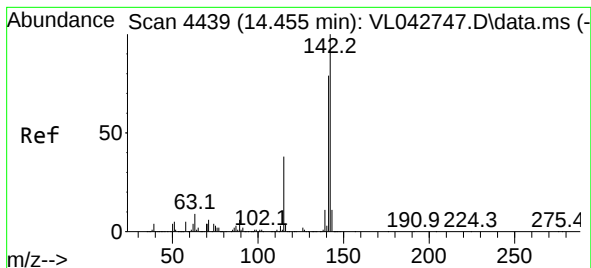
Tgt Ion: 95 Resp: 245322
Ion Ratio Lower Upper
95 100
174 64.3 53.8 80.6
175 5.0 4.0 6.0



#79
Naphthalene
Concen: 0.436 ppbv
RT: 13.572 min Scan# 4166
Delta R.T. 0.058 min
Lab File: VL042822.D
Acq: 05 Aug 2025 00:45

Tgt Ion: 128 Resp: 64
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: 1.130 ppbv

RT: 14.446 min Scan# 4439

Delta R.T. -0.010 min

Lab File: VL042822.D

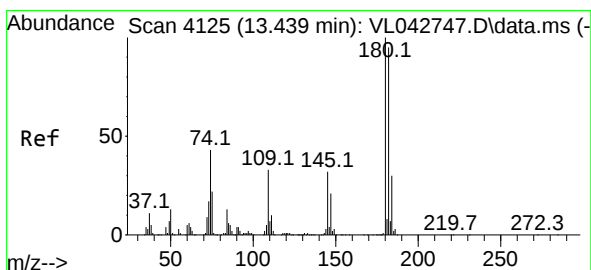
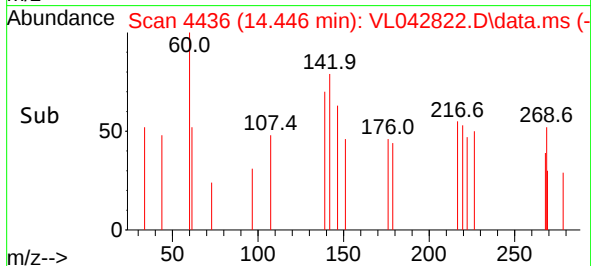
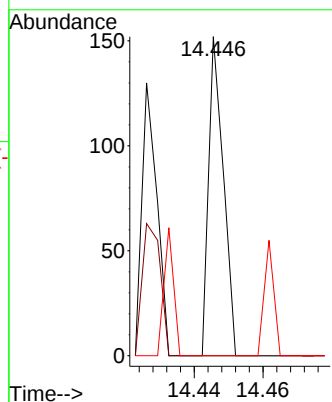
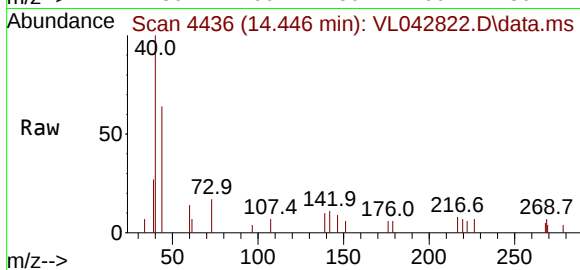
Acq: 05 Aug 2025 00:45

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:142	Resp:	45
Ion Ratio	Lower	Upper
142	100	
141	0.0	65.8 98.8#
115	0.0	31.2 46.8#



#81

1,2,4-Trichlorobenzene

Concen: 0.436 ppbv

RT: 13.471 min Scan# 4135

Delta R.T. 0.033 min

Lab File: VL042822.D

Acq: 05 Aug 2025 00:45

Tgt Ion:180	Resp:	28
Ion Ratio	Lower	Upper
180	100	
182	0.0	76.2 114.2#
184	132.1	24.8 37.2#

