

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031025\
 Data File : VL042132.D
 Acq On : 10 Mar 2025 18:57
 Operator : SY/MD
 Sample : Q1533-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Quant Time: Mar 11 01:29:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Feb 26 01:08:36 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.800	49	159604	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.981	114	375544	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.901	117	321362	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	247451	10.009	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.100%

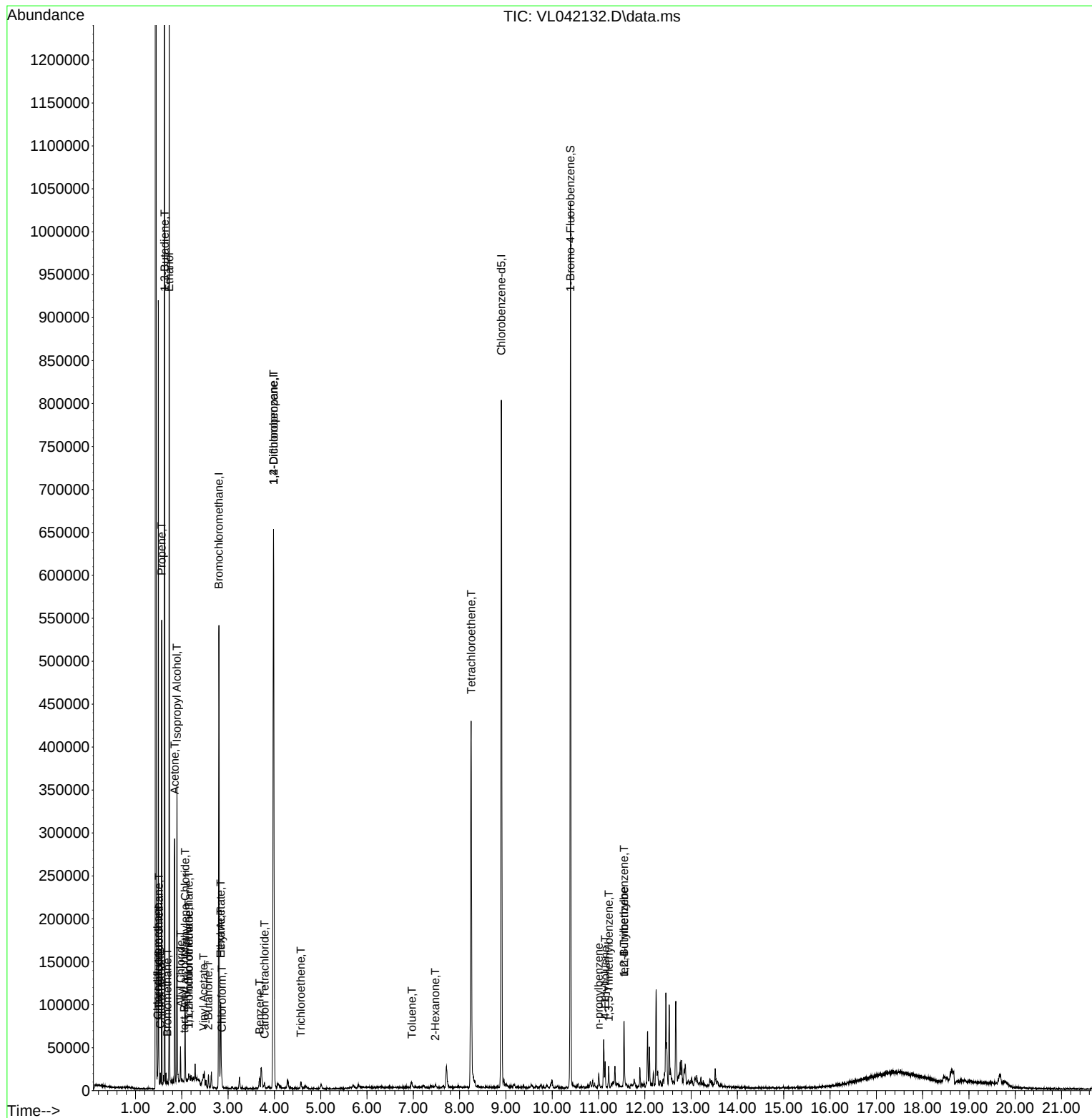
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	9353	0.564	ppbv	99
3) Chlorodifluoromethane	1.483	51	11280	0.486	ppbv #	84
4) Chloromethane	1.538	50	4002	0.652	ppbv #	77
6) Bromomethane	1.690	94	100	0.036	ppbv #	2
9) Propene	1.567	41	57643	6.100	ppbv	96
11) Trichlorofluoromethane	2.149	101	1075	0.065	ppbv	85
12) 1,1,2-Trichlorotrifluo...	2.149	101	1075	0.081	ppbv	94
13) Ethanol	1.729	45	477214	795.501	ppbv	93
15) Acetone	1.845	43	127232	9.027	ppbv	99
16) 1,3-Butadiene	1.628	39	107793	16.434	ppbv #	14
17) tert-Butyl alcohol	2.055	59	1594	0.090	ppbv #	70
19) Isopropyl Alcohol	1.894	45	145417	17.961	ppbv #	66
20) Methylene Chloride	2.072	84	14289	2.680	ppbv	97
21) Allyl Chloride	1.975	41	5191	0.510	ppbv #	19
23) Vinyl Acetate	2.467	43	7527	0.759	ppbv #	84
25) Ethyl Acetate	2.842	43	19827	0.351	ppbv #	87
26) Hexane	2.839	57	19683	0.863	ppbv #	39
29) Chloroform	2.865	83	3392	0.110	ppbv	94
34) 2-Butanone	2.573	43	9462	0.323	ppbv	97
35) Carbon Tetrachloride	3.787	117	976	0.038	ppbv #	66
36) Benzene	3.680	78	4292	0.109	ppbv #	86
38) Trichloroethene	4.570	130	1105	0.069	ppbv #	79
39) 1,2-Dichloropropane	3.981	63	95611	6.407	ppbv #	22
51) 2-Hexanone	7.470	43	1445	0.055	ppbv #	28
52) Tetrachloroethene	8.250	164	75686	5.624	ppbv	97
53) Toluene	6.969	91	1449	0.033	ppbv #	1
64) n-propylbenzene	11.005	120	1721	0.093	ppbv	84
65) tert-Butylbenzene	11.552	119	3282	0.051	ppbv #	60
72) 4-Ethyltoluene	11.144	105	11587	0.200	ppbv #	62
73) 1,3,5-Trimethylbenzene	11.218	105	8012	0.160	ppbv	98
74) 1,2,4-Trimethylbenzene	11.552	105	25333	0.449	ppbv #	69

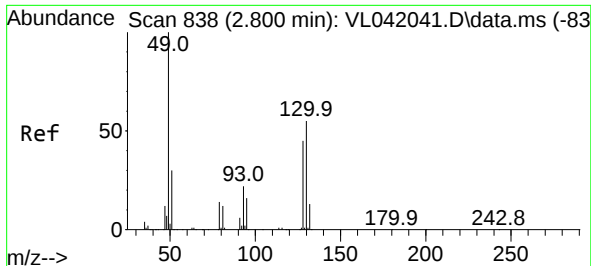
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031025\  
Data File : VL042132.D  
Acq On    : 10 Mar 2025  18:57  
Operator  : SY/MD  
Sample    : Q1533-02  
Misc      : 400mL/MSVOA_L  
ALS Vial  : 1      Sample Multiplier: 1
```

Instrument :
MSVOA_L
ClientSampleId :
IA1

Quant Time: Mar 11 01:29:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

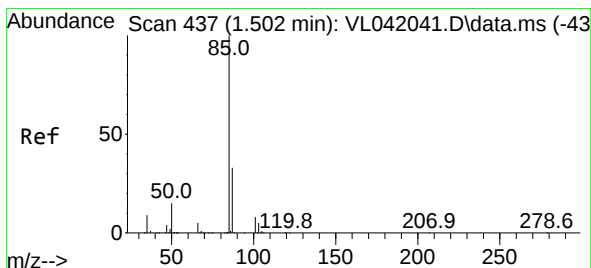
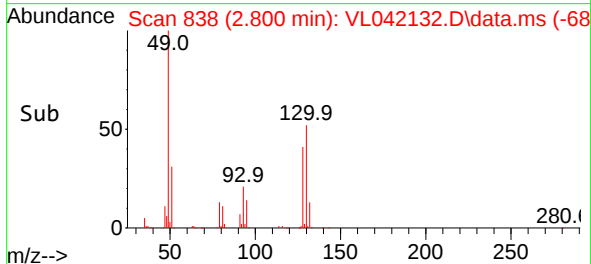
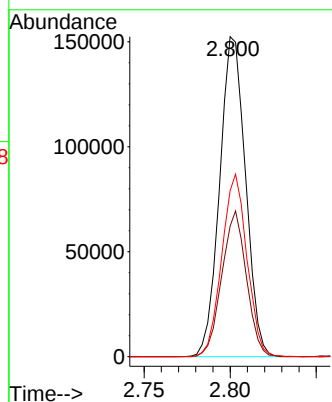
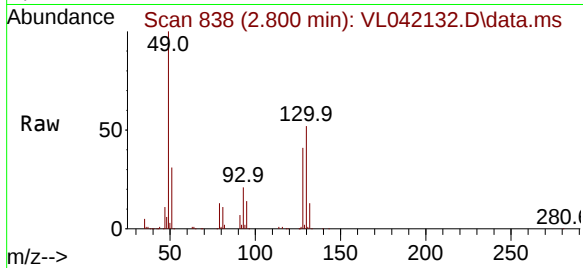




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.800 min Scan# 81
 Delta R.T. -0.000 min
 Lab File: VL042132.D
 Acq: 10 Mar 2025 18:57

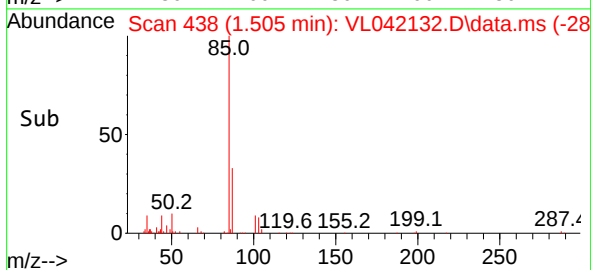
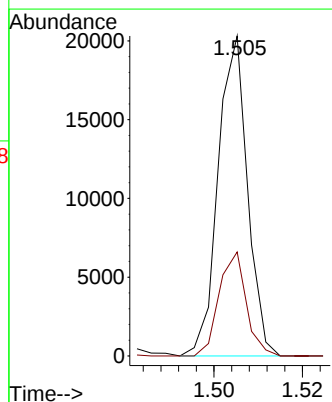
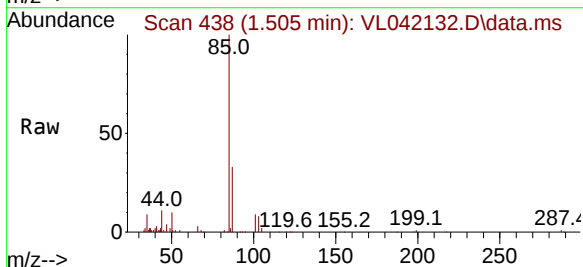
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

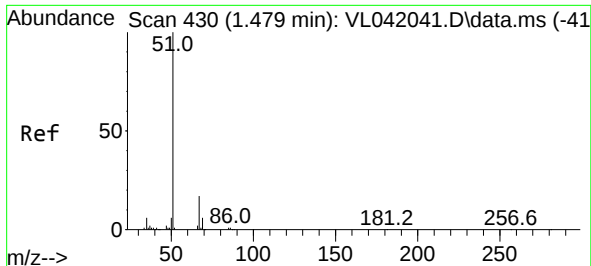
Tgt Ion: 49 Resp: 159604
 Ion Ratio Lower Upper
 49 100
 128 43.2 21.6 64.8
 130 55.4 27.8 83.4



#2
 Dichlorodifluoromethane
 Concen: 0.564 ppbv
 RT: 1.505 min Scan# 438
 Delta R.T. 0.003 min
 Lab File: VL042132.D
 Acq: 10 Mar 2025 18:57

Tgt Ion: 85 Resp: 9353
 Ion Ratio Lower Upper
 85 100
 87 32.5 26.4 39.6

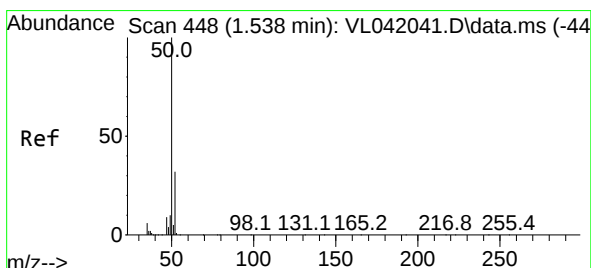
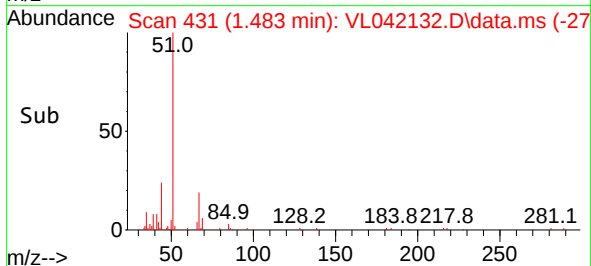
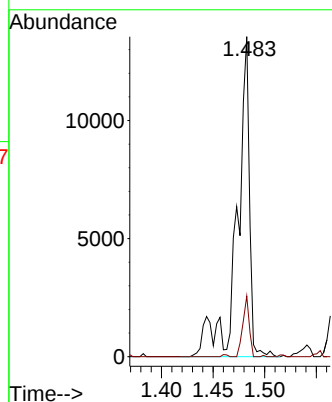
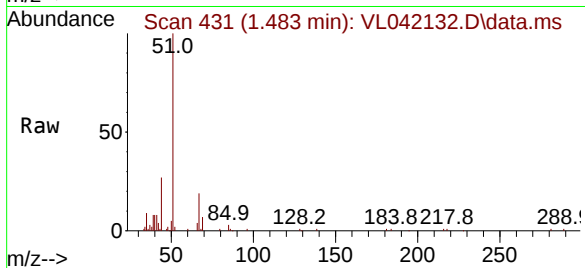




#3
Chlorodifluoromethane
Concen: 0.486 ppbv
RT: 1.483 min Scan# 431
Delta R.T. 0.003 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

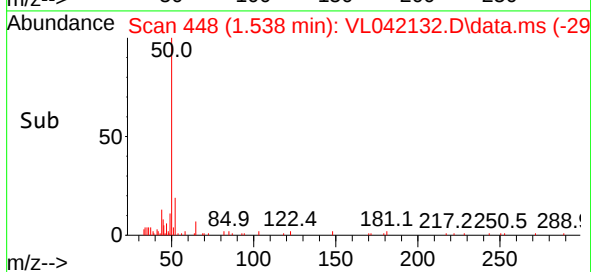
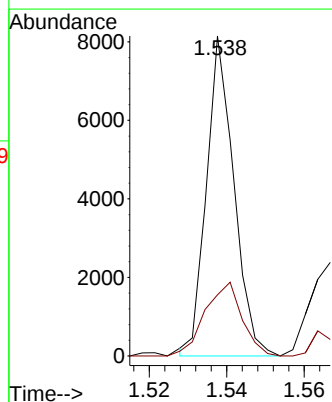
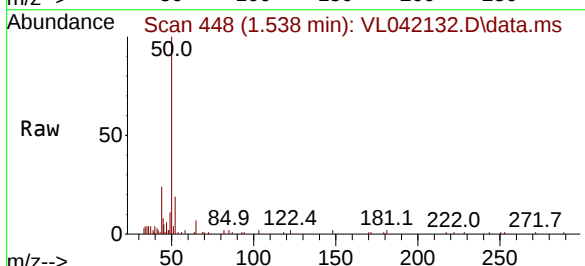
Instrument :
MSVOA_L
ClientSampleId :
IA1

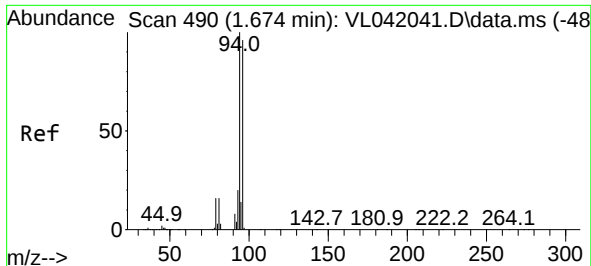
Tgt Ion: 51 Resp: 11280
Ion Ratio Lower Upper
51 100
67 10.1 13.7 20.5#



#4
Chloromethane
Concen: 0.652 ppbv
RT: 1.538 min Scan# 448
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 50 Resp: 4002
Ion Ratio Lower Upper
50 100
52 19.1 25.4 38.0#

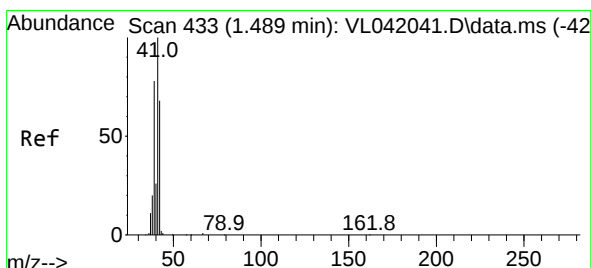
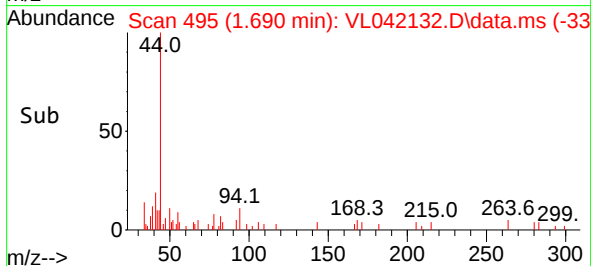
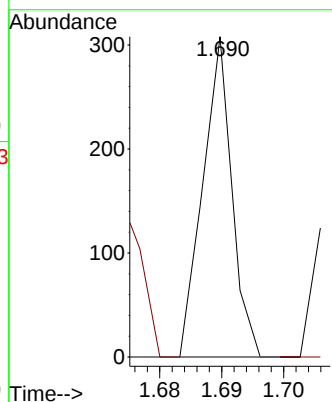
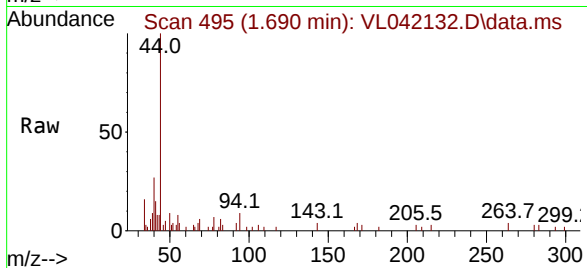




#6
Bromomethane
Concen: 0.036 ppbv
RT: 1.690 min Scan# 490
Delta R.T. 0.016 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

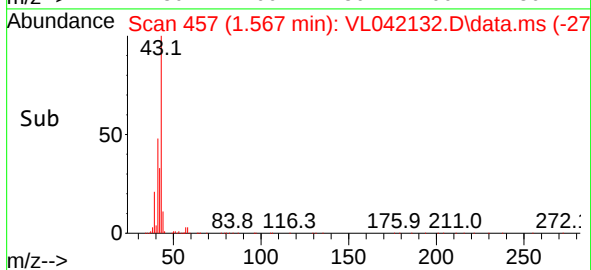
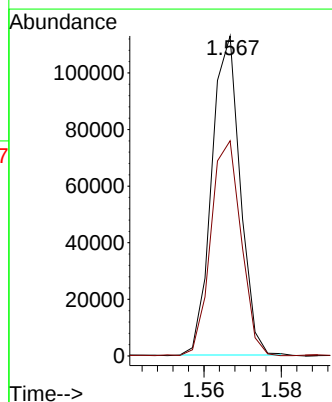
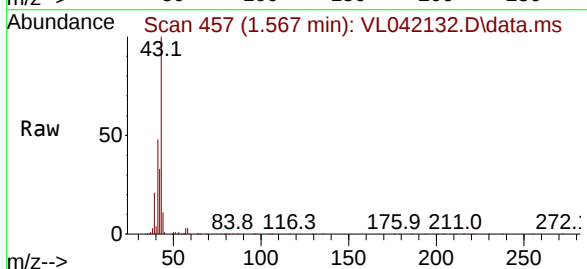
Instrument :
MSVOA_L
ClientSampleId :
IA1

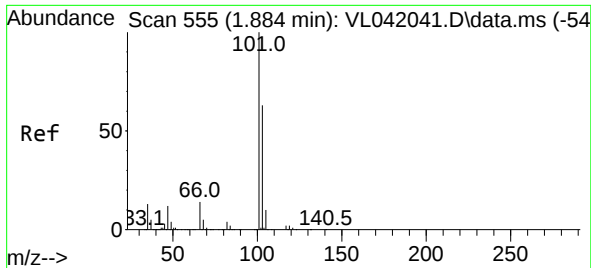
Tgt Ion: 94 Resp: 100
Ion Ratio Lower Upper
94 100
96 0.0 76.5 114.7#



#9
Propene
Concen: 6.100 ppbv
RT: 1.567 min Scan# 457
Delta R.T. 0.078 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 41 Resp: 57643
Ion Ratio Lower Upper
41 100
42 72.6 55.8 83.6





#11

Trichlorofluoromethane

Concen: 0.065 ppbv

RT: 2.149 min Scan# 61

Delta R.T. 0.265 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

Instrument :

MSVOA_L

ClientSampleId :

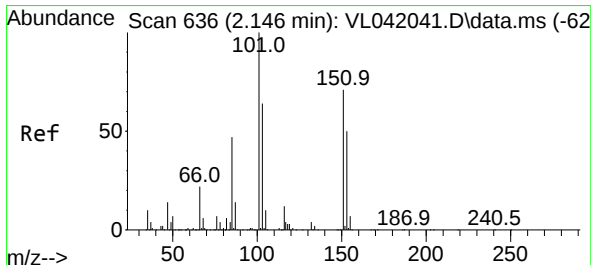
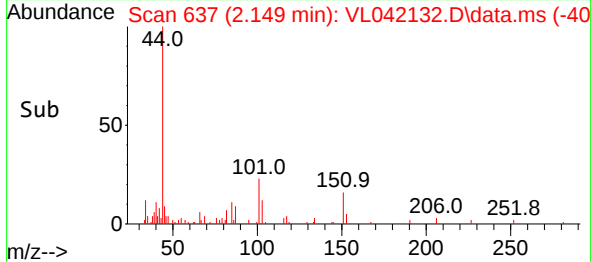
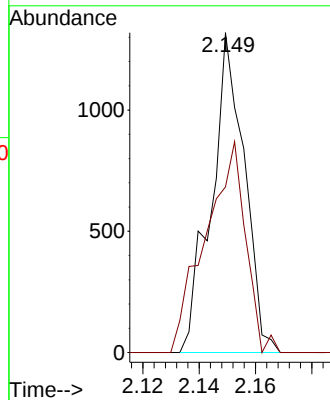
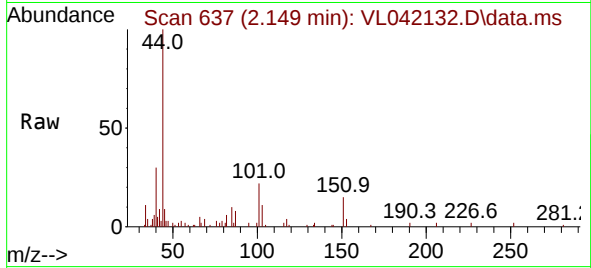
IA1

Tgt Ion:101 Resp: 1075

Ion Ratio Lower Upper

101 100

103 51.8 50.6 75.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.081 ppbv

RT: 2.149 min Scan# 637

Delta R.T. 0.003 min

Lab File: VL042132.D

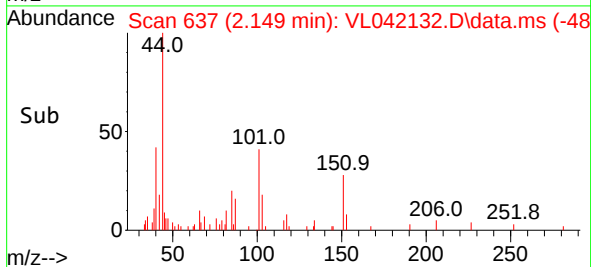
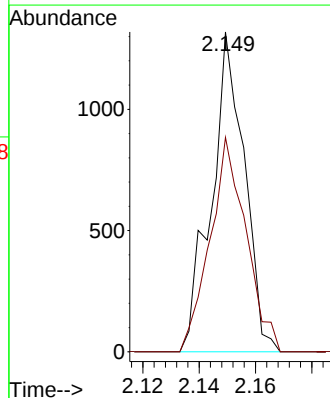
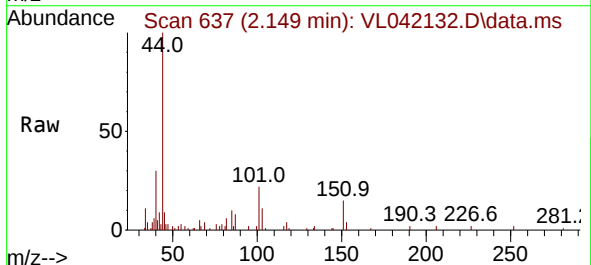
Acq: 10 Mar 2025 18:57

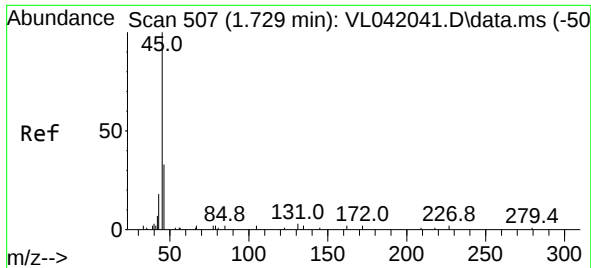
Tgt Ion:101 Resp: 1075

Ion Ratio Lower Upper

101 100

151 73.0 62.6 94.0

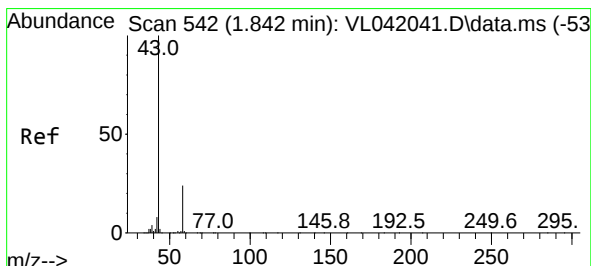
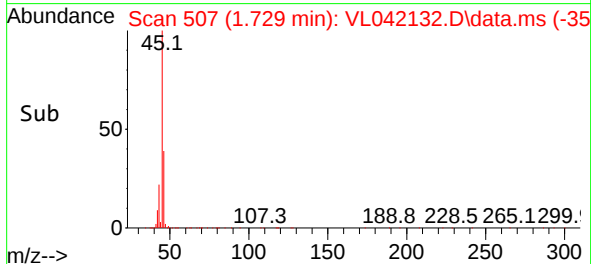
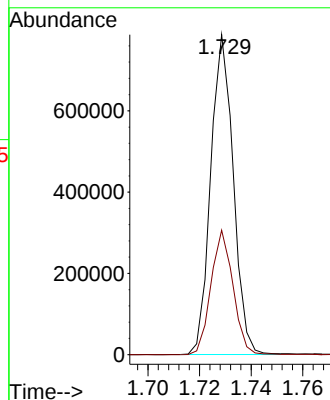
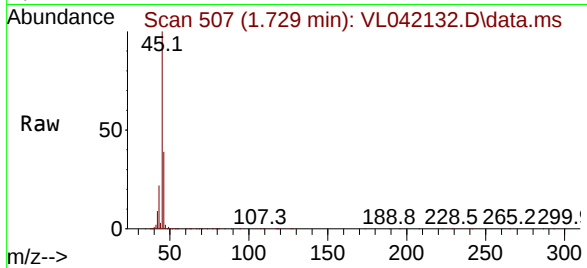




#13
Ethanol
Concen: 795.501 ppbv
RT: 1.729 min Scan# 507
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

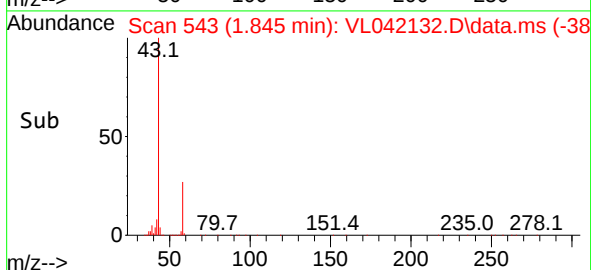
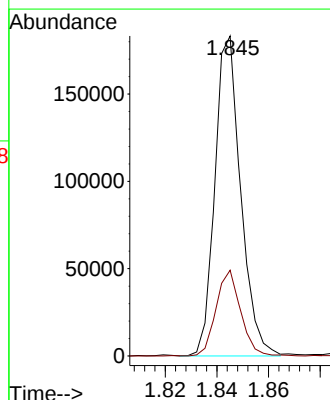
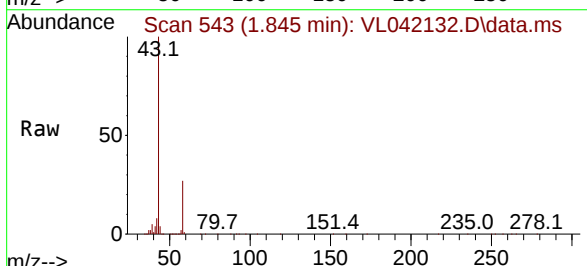
Instrument :
MSVOA_L
ClientSampleId :
IA1

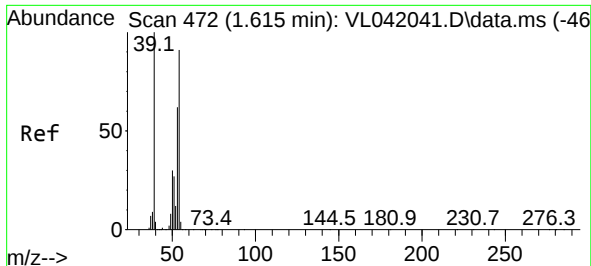
Tgt Ion: 45 Resp: 477214
Ion Ratio Lower Upper
45 100
46 38.4 17.1 68.3



#15
Acetone
Concen: 9.027 ppbv
RT: 1.845 min Scan# 543
Delta R.T. 0.003 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 43 Resp: 127232
Ion Ratio Lower Upper
43 100
58 25.6 20.7 31.1

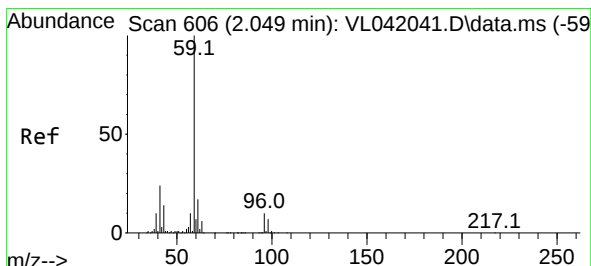
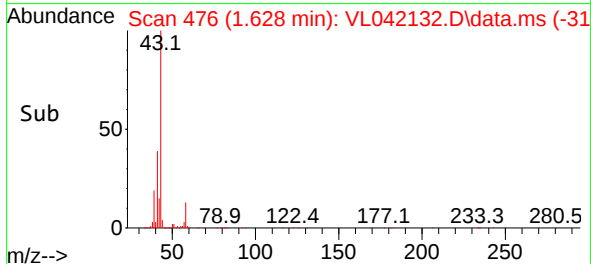
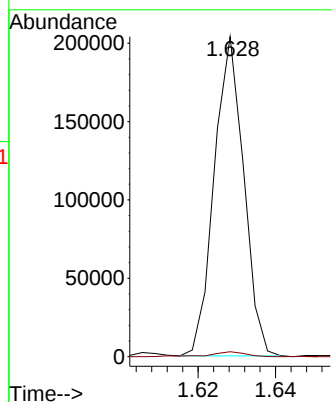
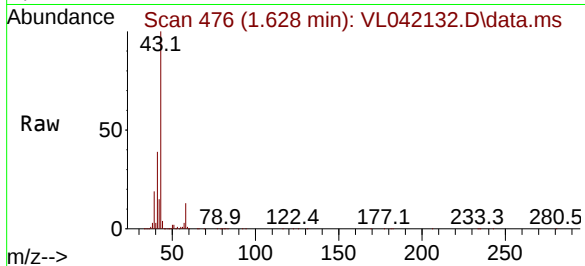




#16
1,3-Butadiene
Concen: 16.434 ppbv
RT: 1.628 min Scan# 41
Delta R.T. 0.013 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

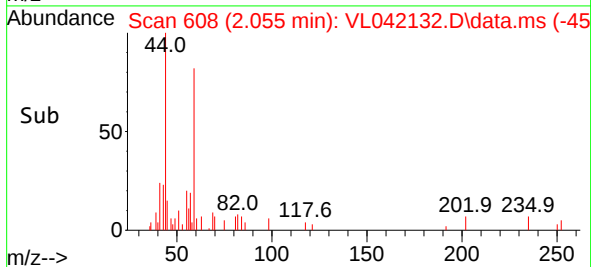
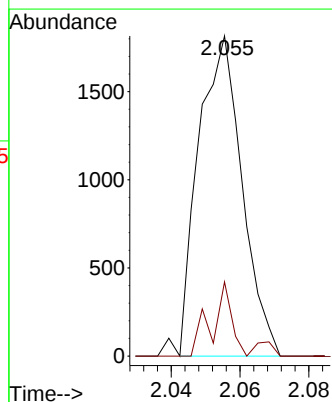
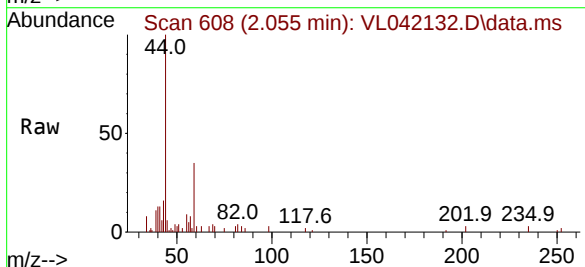
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ClientSampleId :
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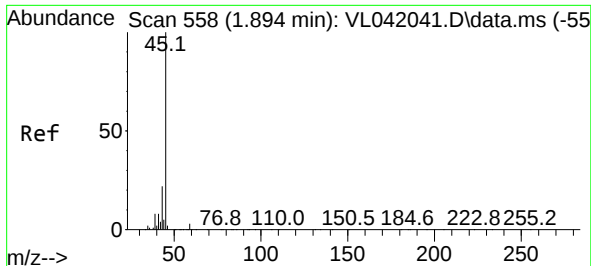
Tgt Ion: 39 Resp: 107793
Ion Ratio Lower Upper
39 100
54 1.9 59.6 89.4#



#17
tert-Butyl alcohol
Concen: 0.090 ppbv
RT: 2.055 min Scan# 608
Delta R.T. 0.006 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 59 Resp: 1594
Ion Ratio Lower Upper
59 100
57 0.0 9.3 13.9#

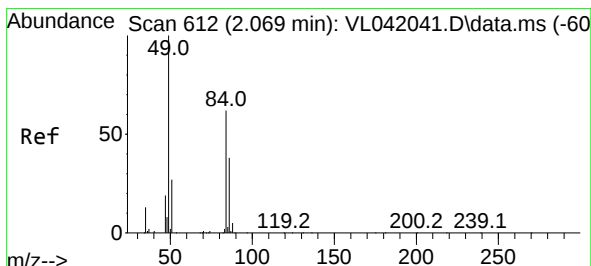
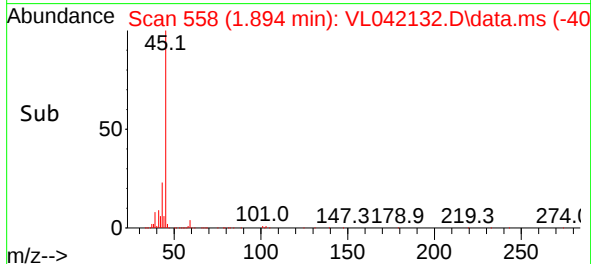
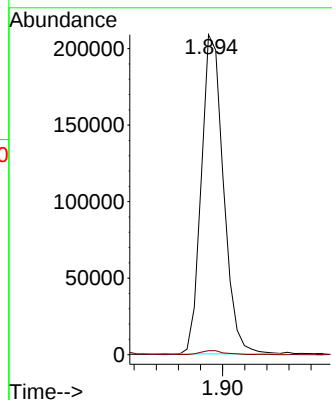
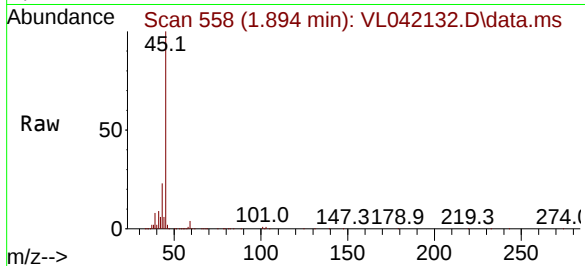




#19
Isopropyl Alcohol
Concen: 17.961 ppbv
RT: 1.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

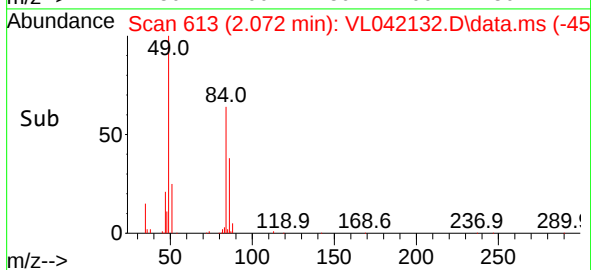
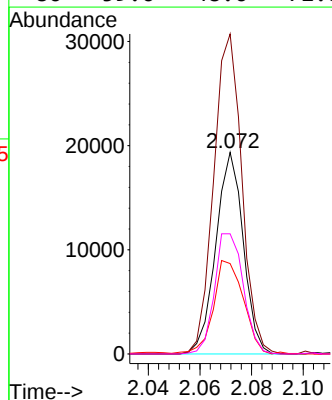
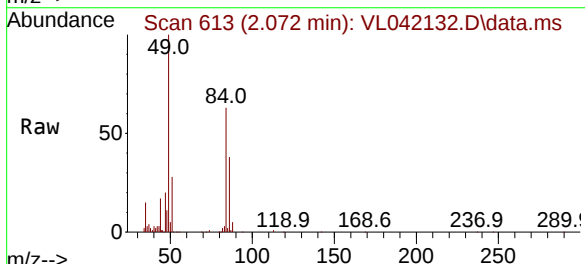
Instrument :
MSVOA_L
ClientSampleId :
IA1

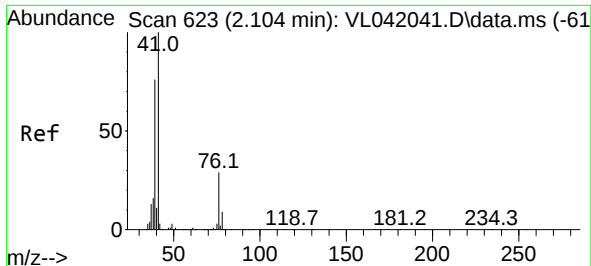
Tgt Ion: 45 Resp: 145417
Ion Ratio Lower Upper
45 100
58 22.4 35.3 52.9#



#20
Methylene Chloride
Concen: 2.680 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.003 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 84 Resp: 14289
Ion Ratio Lower Upper
84 100
49 158.8 130.0 195.0
51 44.6 37.4 56.0
86 59.6 48.6 72.8

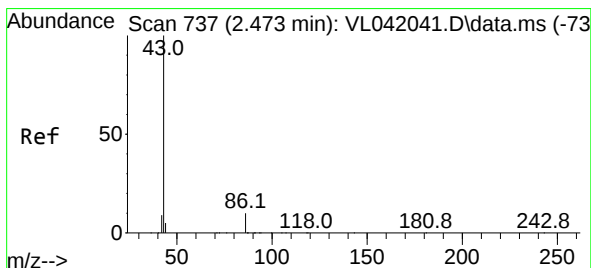
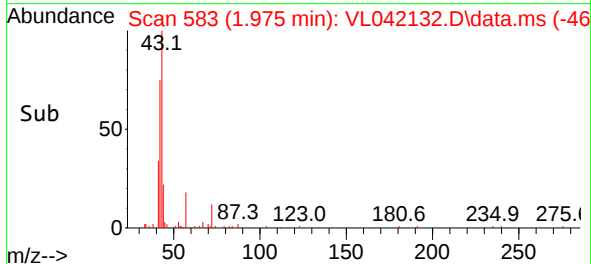
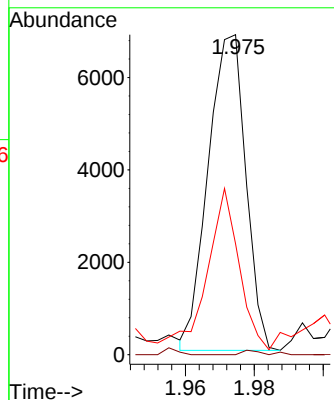
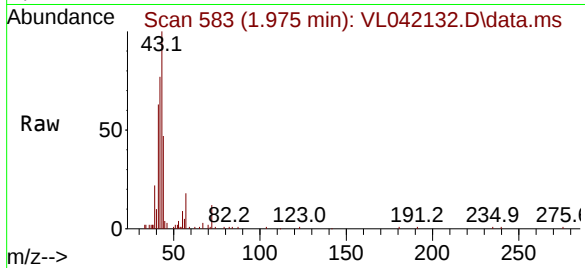




#21
 Allyl Chloride
 Concen: 0.510 ppbv
 RT: 1.975 min Scan# 51
 Delta R.T. -0.130 min
 Lab File: VL042132.D
 Acq: 10 Mar 2025 18:57

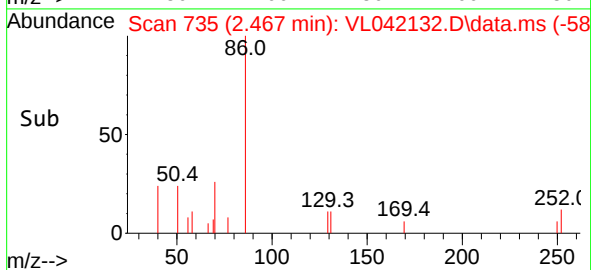
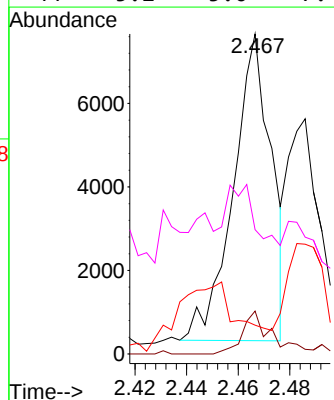
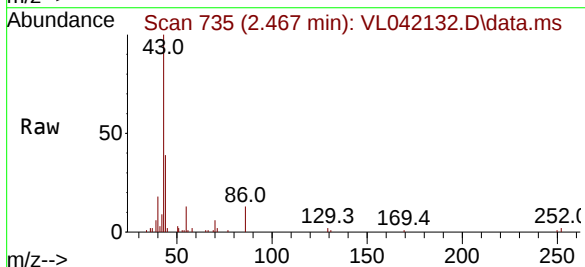
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

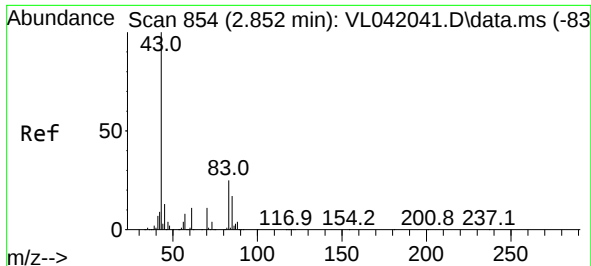
Tgt Ion: 41 Resp: 5191
 Ion Ratio Lower Upper
 41 100
 76 0.8 23.8 35.6#
 39 0.0 63.8 95.6#



#23
 Vinyl Acetate
 Concen: 0.759 ppbv
 RT: 2.467 min Scan# 735
 Delta R.T. -0.007 min
 Lab File: VL042132.D
 Acq: 10 Mar 2025 18:57

Tgt Ion: 43 Resp: 7527
 Ion Ratio Lower Upper
 43 100
 86 14.0 7.0 10.4#
 42 0.0 7.6 11.4#
 44 5.2 5.0 7.4





#25

Ethyl Acetate

Concen: 0.351 ppbv

RT: 2.842 min Scan# 81

Delta R.T. -0.010 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion: 43 Resp: 19827

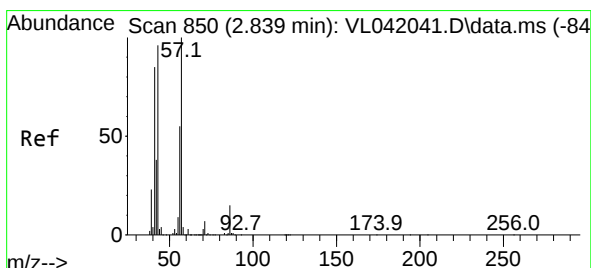
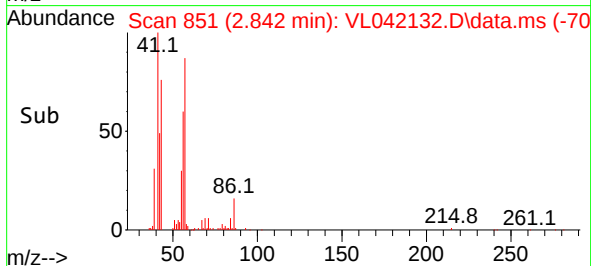
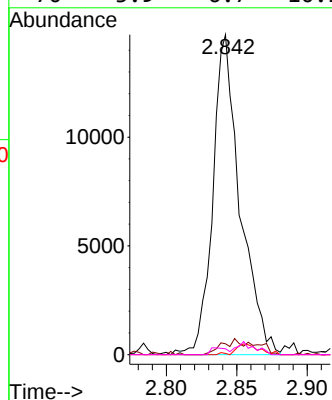
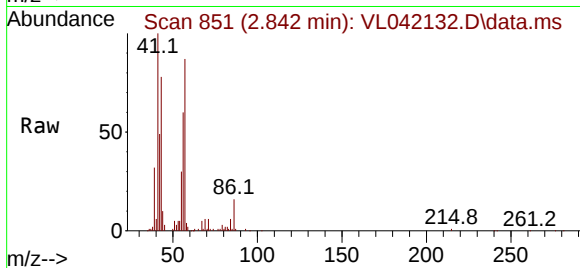
Ion Ratio Lower Upper

43 100

45 6.3 8.1 12.1#

61 2.8 7.2 10.8#

70 3.9 6.7 10.1#



#26

Hexane

Concen: 0.863 ppbv

RT: 2.839 min Scan# 850

Delta R.T. -0.000 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

Tgt Ion: 57 Resp: 19683

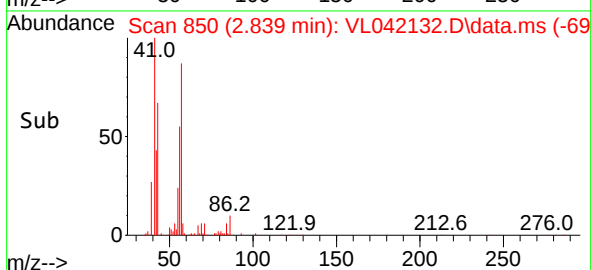
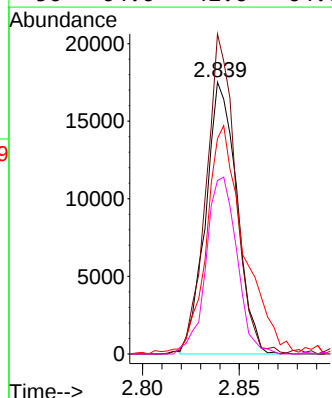
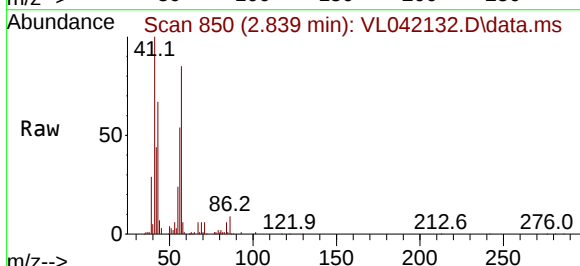
Ion Ratio Lower Upper

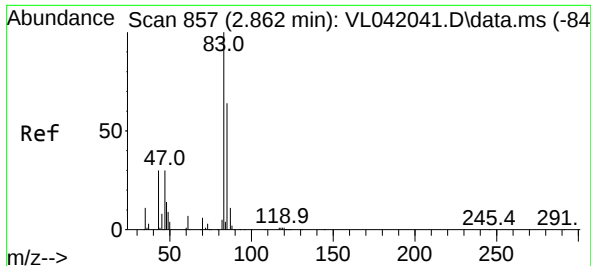
57 100

41 112.5 70.6 106.0#

43 104.2 199.4 299.0#

56 64.6 42.6 64.0#





#29

Chloroform

Concen: 0.110 ppbv

RT: 2.865 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

Instrument :

MSVOA_L

ClientSampleId :

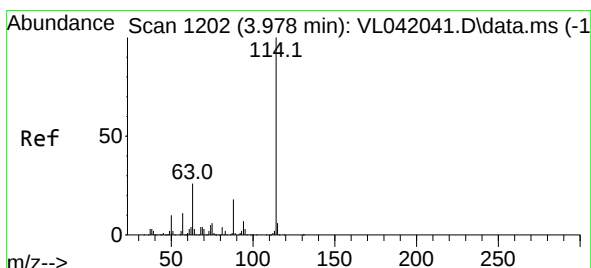
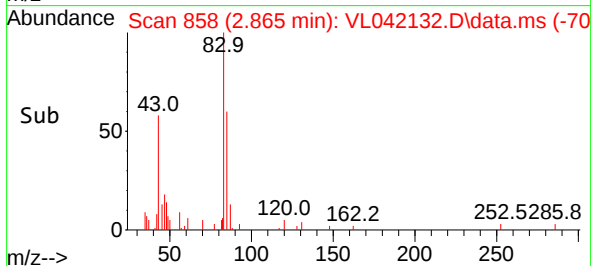
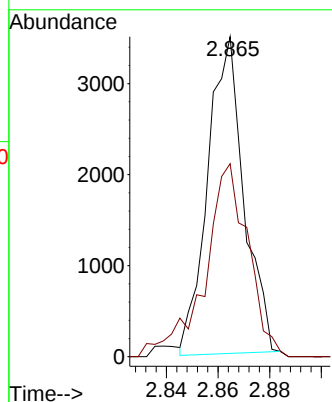
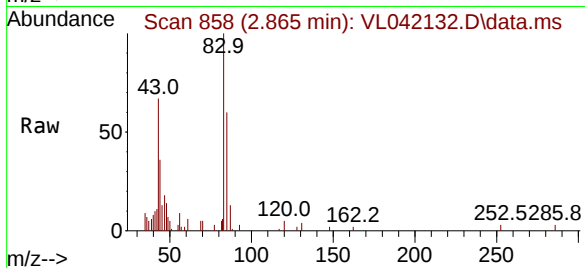
IA1

Tgt Ion: 83 Resp: 3392

Ion Ratio Lower Upper

83 100

85 59.4 51.2 76.8



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.981 min Scan# 1203

Delta R.T. 0.003 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

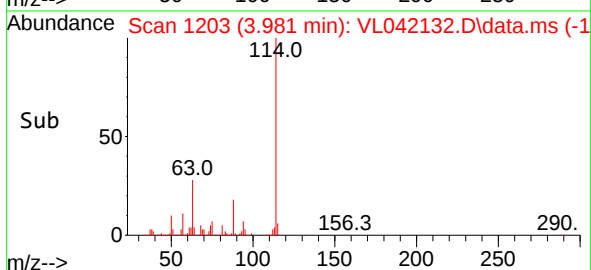
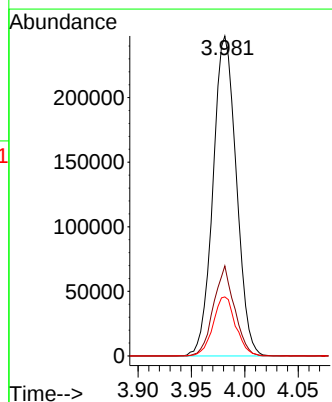
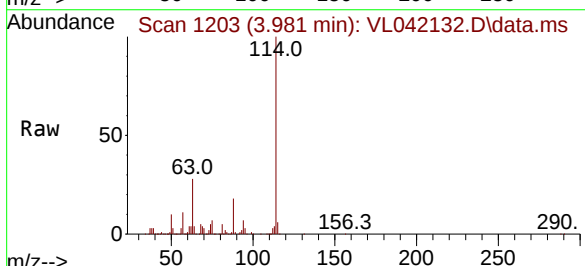
Tgt Ion: 114 Resp: 375544

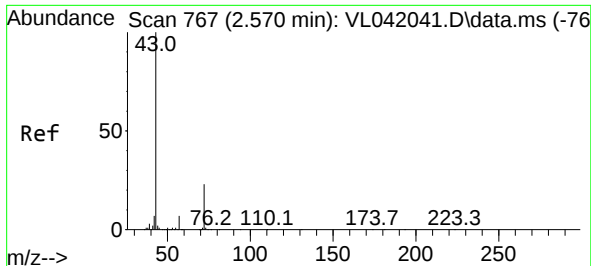
Ion Ratio Lower Upper

114 100

63 25.5 20.1 30.1

88 17.9 14.3 21.5

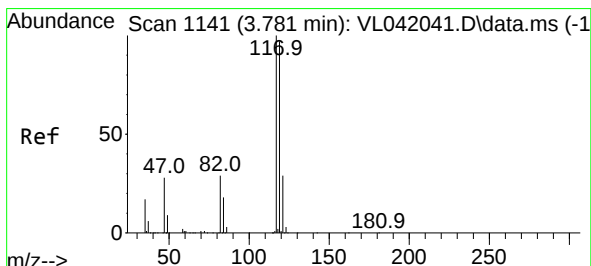
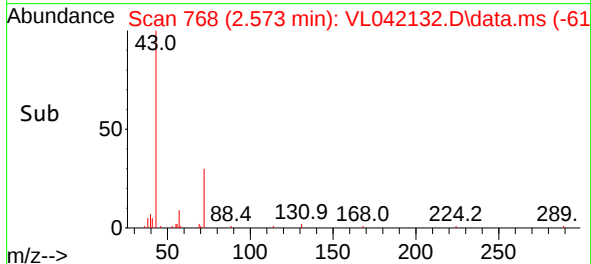
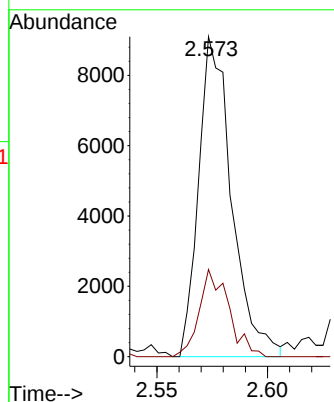
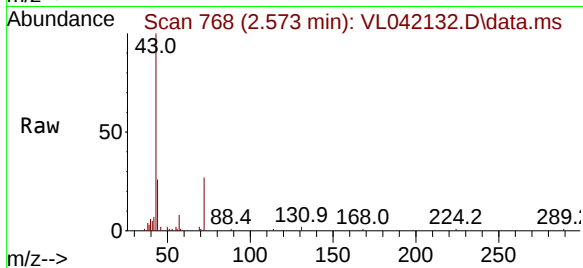




#34
2-Butanone
Concen: 0.323 ppbv
RT: 2.573 min Scan# 768
Delta R.T. 0.003 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

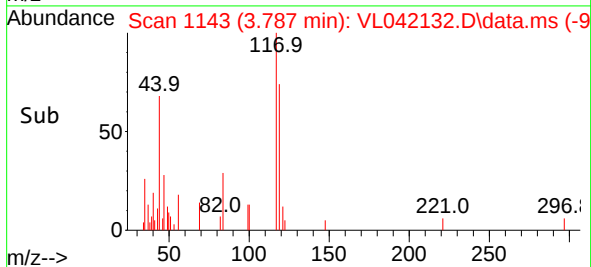
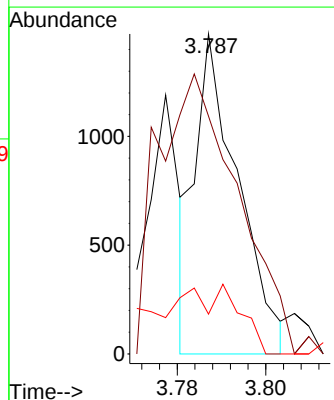
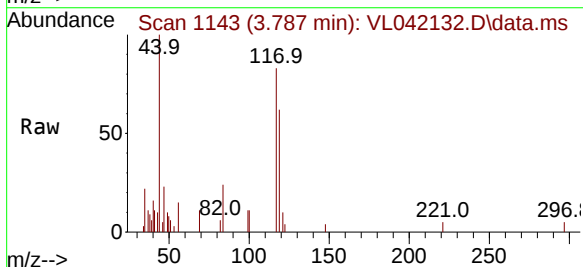
Instrument :
MSVOA_L
ClientSampleId :
IA1

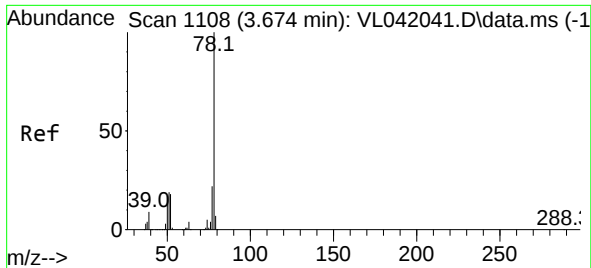
Tgt Ion: 43 Resp: 9462
Ion Ratio Lower Upper
43 100
72 24.4 18.5 27.7



#35
Carbon Tetrachloride
Concen: 0.038 ppbv
RT: 3.787 min Scan# 1143
Delta R.T. 0.006 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 117 Resp: 976
Ion Ratio Lower Upper
117 100
119 62.5 77.8 116.8#
121 13.9 23.4 35.0#

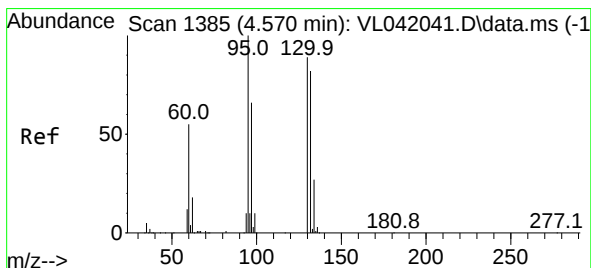
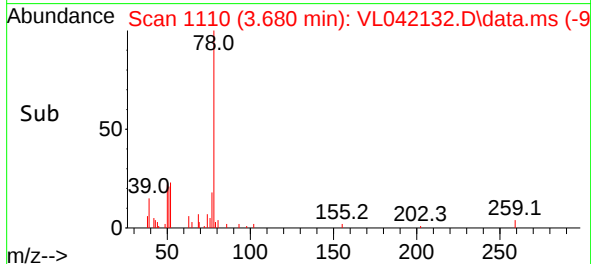
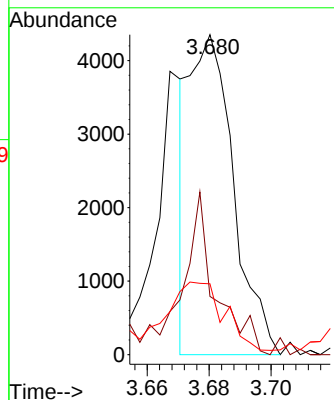
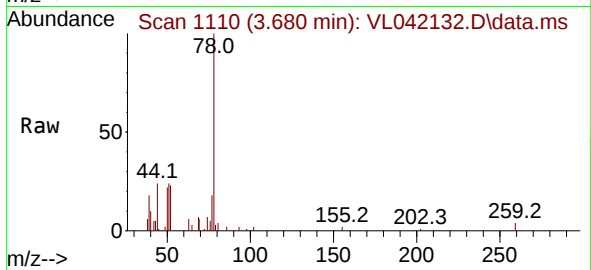




#36
Benzene
Concen: 0.109 ppbv
RT: 3.680 min Scan# 1108
Delta R.T. 0.006 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

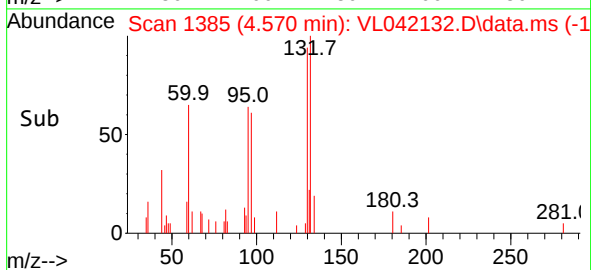
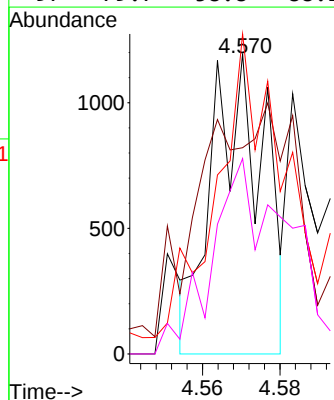
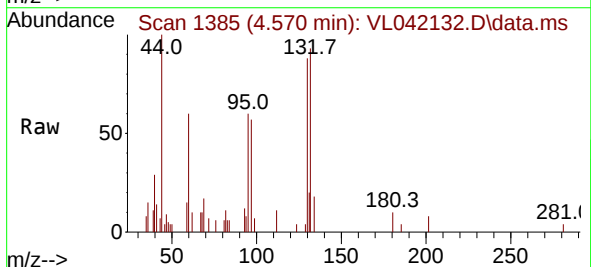
Instrument :
MSVOA_L
ClientSampleId :
IA1

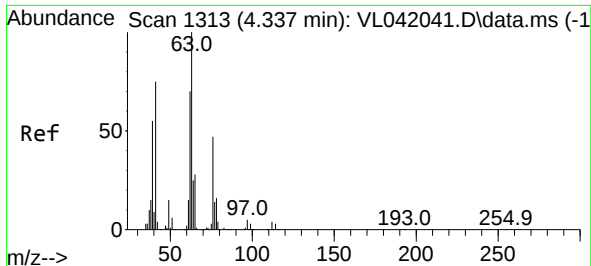
Tgt Ion: 78 Resp: 4292
Ion Ratio Lower Upper
78 100
77 12.9 17.7 26.5#
50 20.6 13.9 20.9



#38
Trichloroethene
Concen: 0.069 ppbv
RT: 4.570 min Scan# 1385
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 130 Resp: 1105
Ion Ratio Lower Upper
130 100
95 64.5 89.5 134.3#
132 94.5 73.8 110.6
97 79.7 58.8 88.2





#39

1,2-Dichloropropane

Concen: 6.407 ppbv

RT: 3.981 min Scan# 11

Delta R.T. -0.356 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

Instrument :

MSVOA_L

ClientSampleId :

IA1

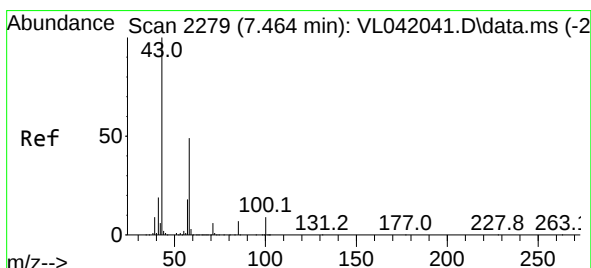
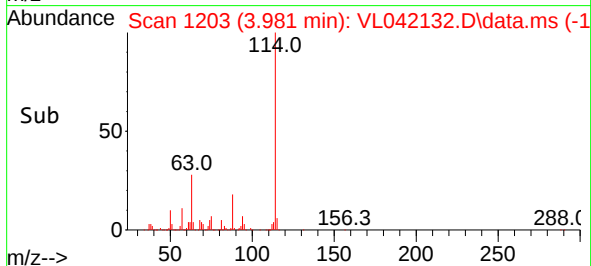
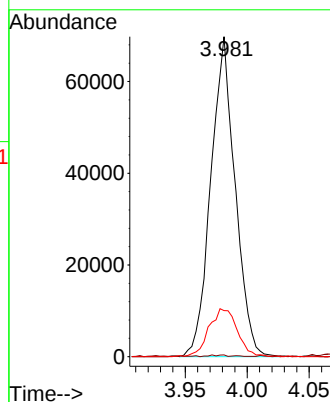
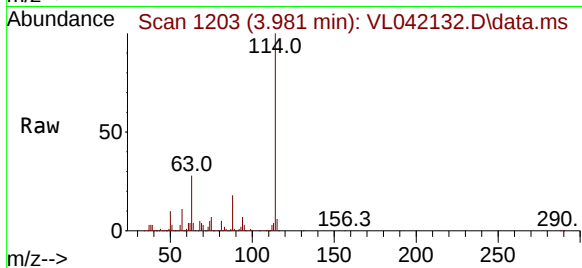
Tgt Ion: 63 Resp: 95611

Ion Ratio Lower Upper

63 100

41 0.5 60.1 90.1#

62 14.4 55.8 83.8#



#51

2-Hexanone

Concen: 0.055 ppbv

RT: 7.470 min Scan# 2281

Delta R.T. 0.006 min

Lab File: VL042132.D

Acq: 10 Mar 2025 18:57

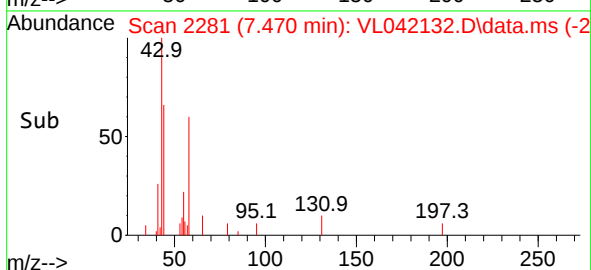
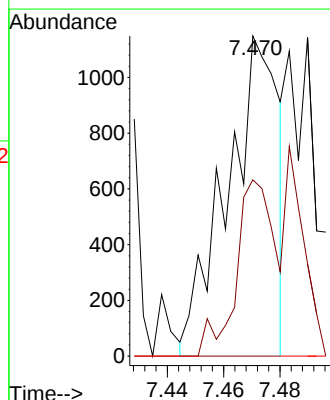
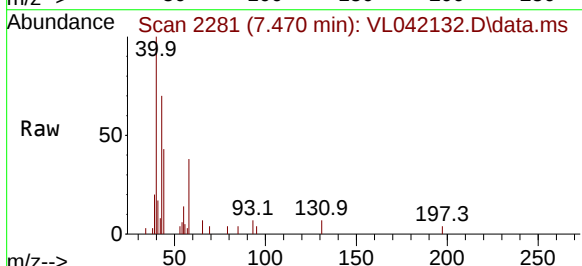
Tgt Ion: 43 Resp: 1445

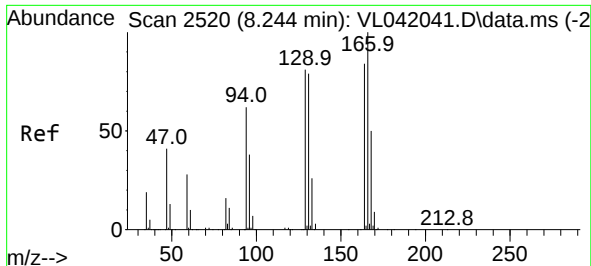
Ion Ratio Lower Upper

43 100

58 0.0 39.0 58.6#

98 0.0 0.1 0.1#

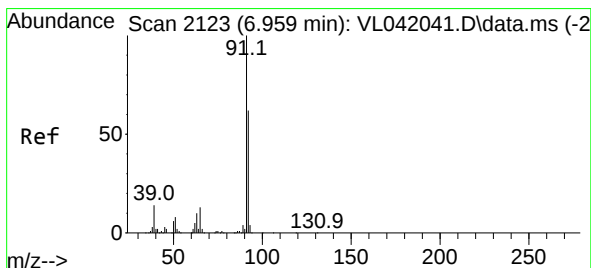
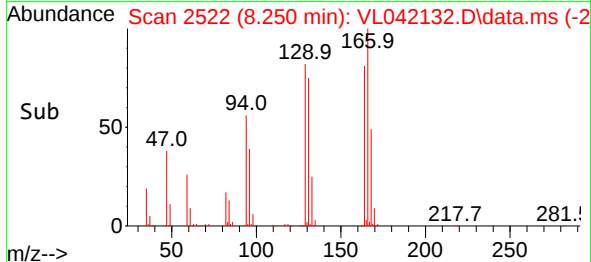
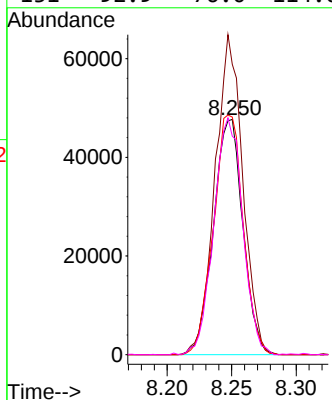
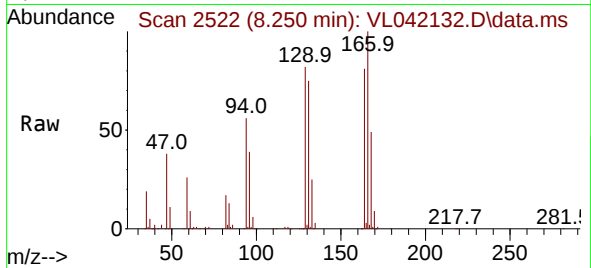




#52
Tetrachloroethene
Concen: 5.624 ppbv
RT: 8.250 min Scan# 2126
Delta R.T. 0.006 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

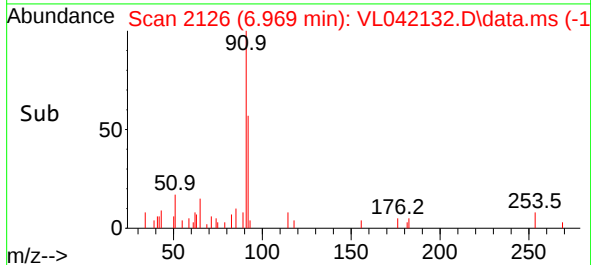
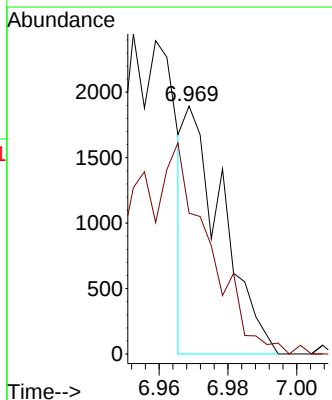
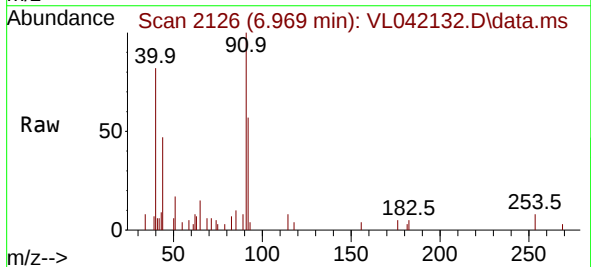
Instrument :
MSVOA_L
ClientSampleId :
IA1

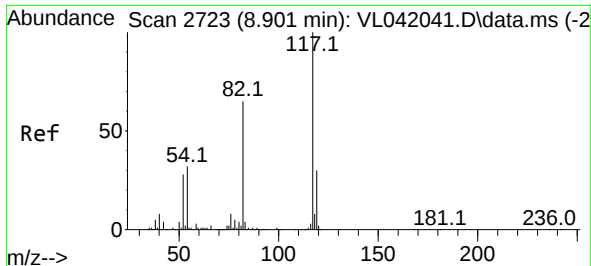
Tgt Ion:164 Resp: 75686
Ion Ratio Lower Upper
164 100
166 123.5 95.7 143.5
129 101.0 77.1 115.7
131 92.9 76.0 114.0



#53
Toluene
Concen: 0.033 ppbv
RT: 6.969 min Scan# 2126
Delta R.T. 0.010 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 91 Resp: 1449
Ion Ratio Lower Upper
91 100
92 189.0 49.0 73.6#

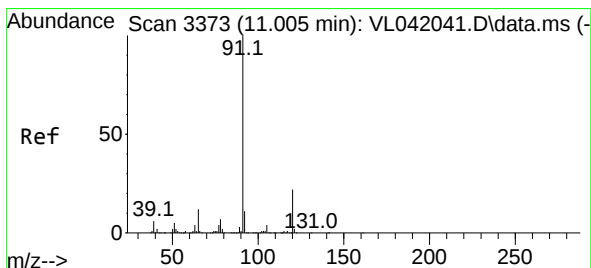
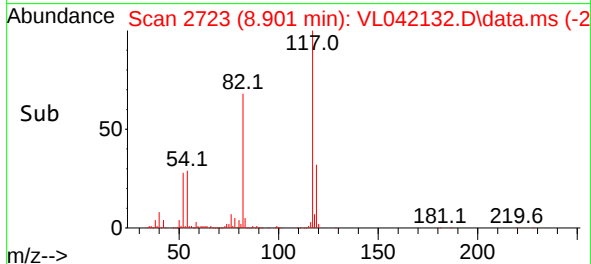
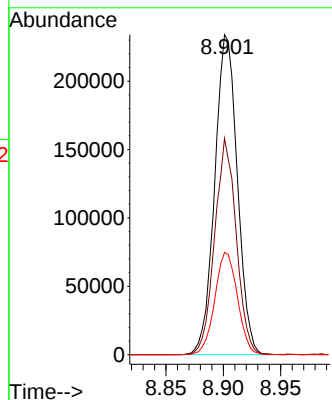
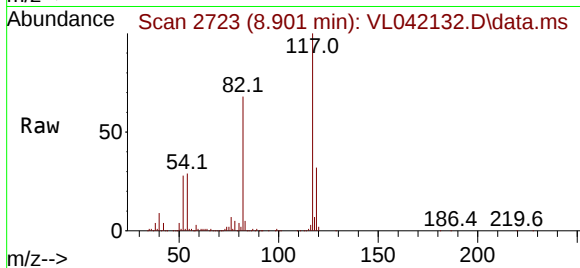




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.901 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

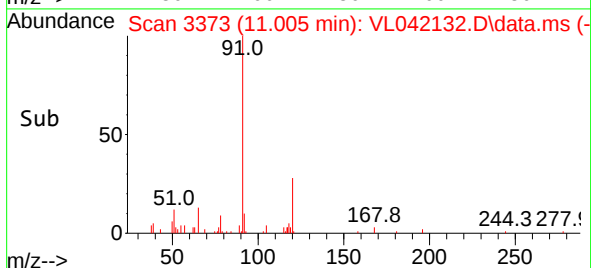
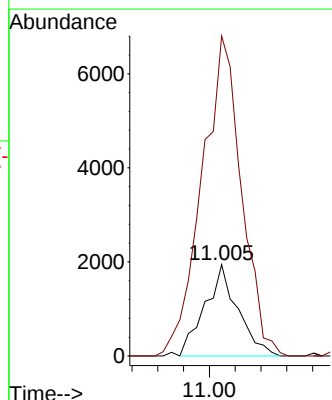
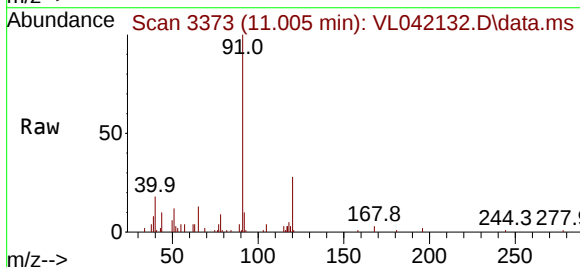
Instrument :
MSVOA_L
ClientSampleId :
IA1

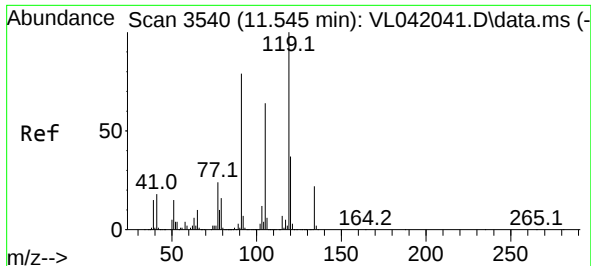
Tgt Ion:117 Resp: 321362
Ion Ratio Lower Upper
117 100
82 64.4 55.0 82.6
119 32.1 25.9 38.9



#64
n-propylbenzene
Concen: 0.093 ppbv
RT: 11.005 min Scan# 3373
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion:120 Resp: 1721
Ion Ratio Lower Upper
120 100
91 420.8 370.6 556.0

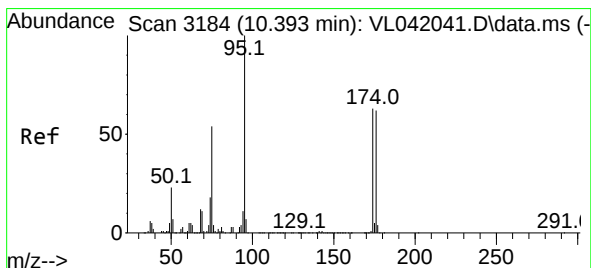
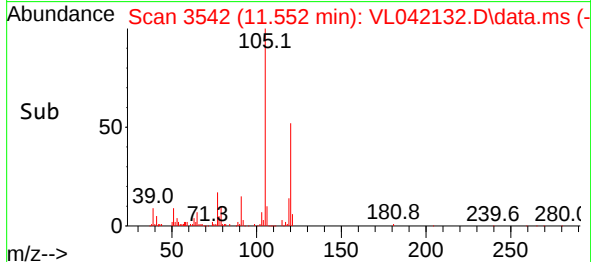
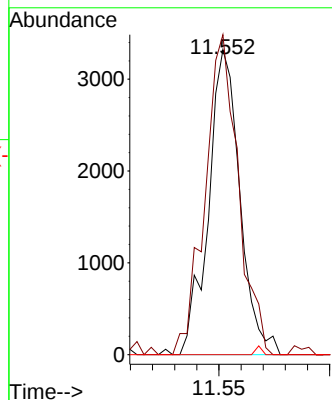
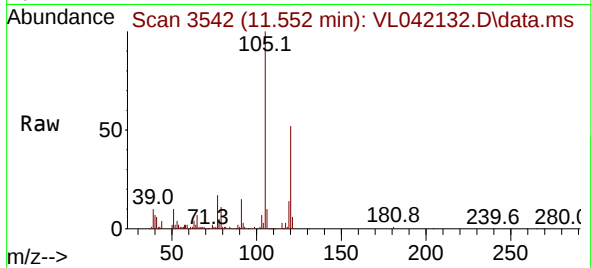




#65
tert-Butylbenzene
Concen: 0.051 ppbv
RT: 11.552 min Scan# 3184
Delta R.T. 0.006 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

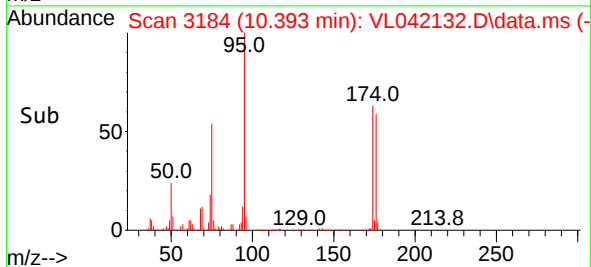
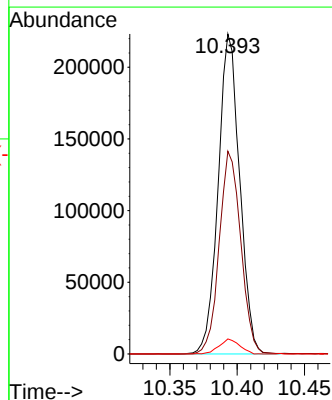
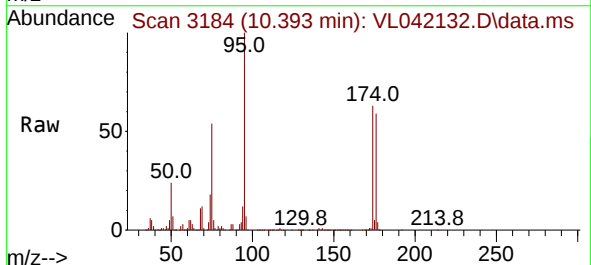
Instrument :
MSVOA_L
ClientSampleId :
IA1

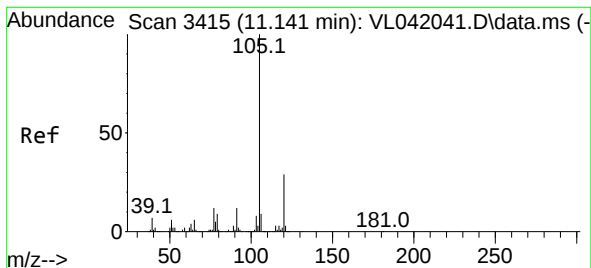
Tgt Ion:119 Resp: 3282
Ion Ratio Lower Upper
119 100
91 114.3 64.2 96.2#
134 0.6 17.4 26.2#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.009 ppbv
RT: 10.393 min Scan# 3184
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

Tgt Ion: 95 Resp: 247451
Ion Ratio Lower Upper
95 100
174 63.6 51.8 77.6
175 4.5 3.9 5.9

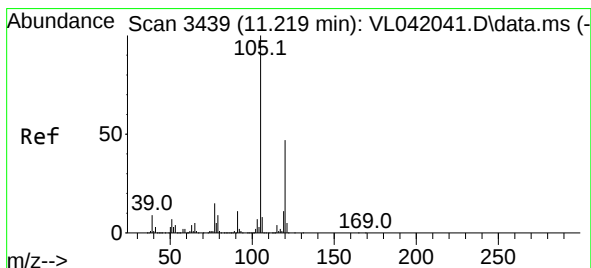
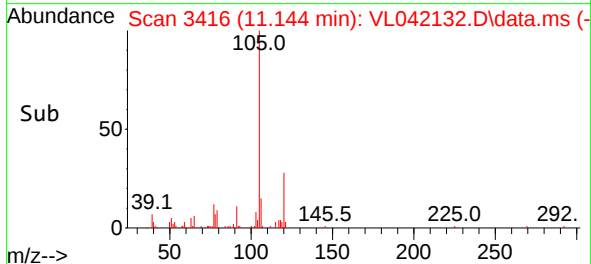
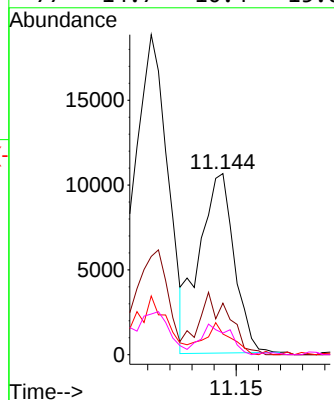
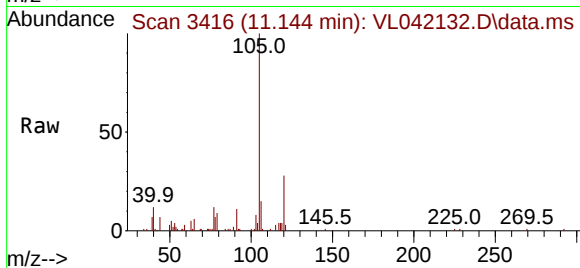




#72
4-Ethyltoluene
Concen: 0.200 ppbv
RT: 11.144 min Scan# 3415
Delta R.T. 0.003 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

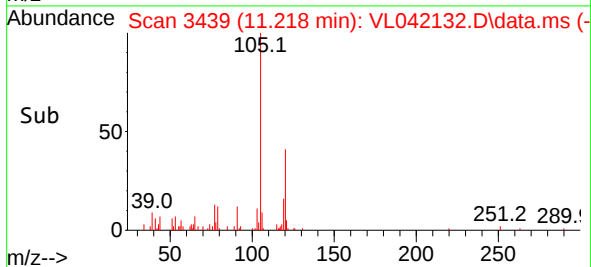
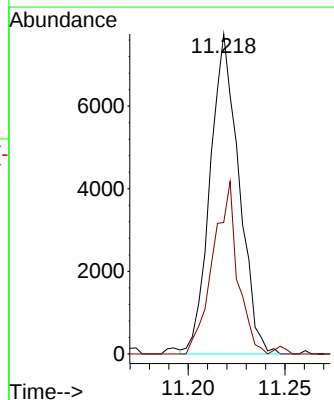
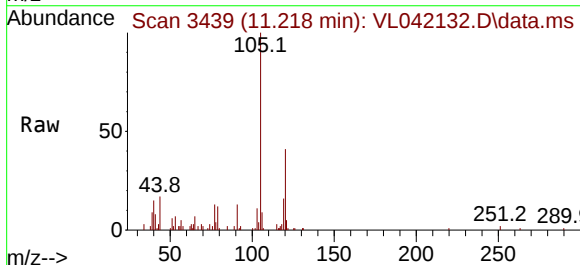
Instrument :
MSVOA_L
ClientSampleId :
IA1

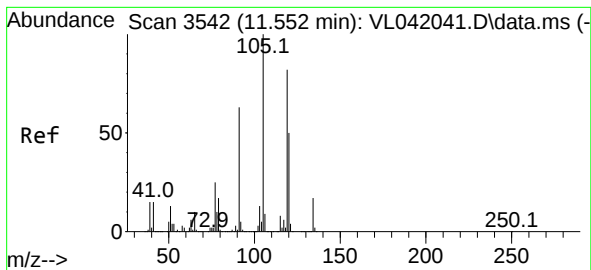
Tgt Ion:105 Resp: 11587
Ion Ratio Lower Upper
105 100
120 0.0 24.1 36.1#
91 0.0 10.2 15.4#
77 14.7 10.4 15.6



#73
1,3,5-Trimethylbenzene
Concen: 0.160 ppbv
RT: 11.218 min Scan# 3439
Delta R.T. -0.000 min
Lab File: VL042132.D
Acq: 10 Mar 2025 18:57

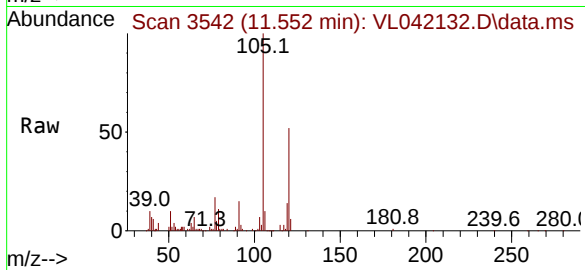
Tgt Ion:105 Resp: 8012
Ion Ratio Lower Upper
105 100
120 45.7 37.4 56.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.449 ppbv
 RT: 11.552 min Scan# 31
 Delta R.T. -0.000 min
 Lab File: VL042132.D
 Acq: 10 Mar 2025 18:57

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1



Tgt Ion:	105	Resp:	25333
Ion	Ratio	Lower	Upper
105	100		
120	51.5	40.2	60.2
91	14.6	51.4	77.2#
77	20.9	20.1	30.1

