

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040221\
 Data File : VL036647.D
 Acq On : 2 Apr 2021 16:26
 Operator : SY/AP
 Sample : M1841-06 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Apr 03 02:56:54 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 09:42:40 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1431008	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3702558	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3248089	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2583749	9.98	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.80%

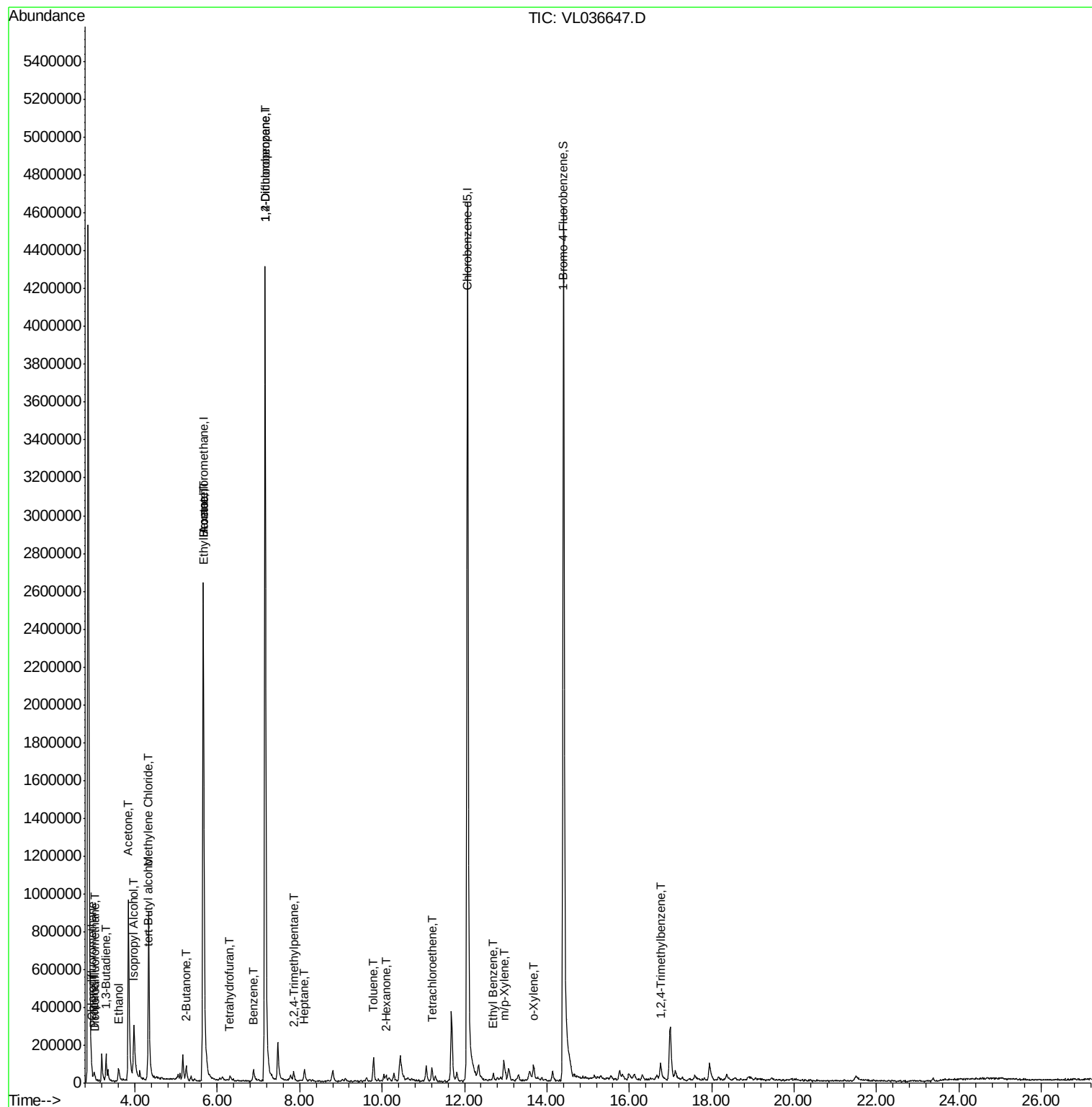
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	10030	0.043	ppbv 96
3) Chlorodifluoromethane	2.96	51	19917	0.074	ppbv # 69
9) Propene	3.01	41	5185	0.061	ppbv # 1
10) Heptane	8.10	43	12168	0.056	ppbv # 28
13) Ethanol	3.60	45	85585	8.432	ppbv 92
15) Acetone	3.84	43	1312404	9.318	ppbv 98
16) 1,3-Butadiene	3.30	39	41928	0.428	ppbv # 22
17) tert-Butyl alcohol	4.31	59	31515	0.257	ppbv # 60
19) Isopropyl Alcohol	3.97	45	451423	5.826	ppbv # 1
20) Methylene Chloride	4.33	84	332826	5.047	ppbv 90
25) Ethyl Acetate	5.67	43	197159	0.589	ppbv # 80
26) Hexane	5.67	57	263768	1.697	ppbv # 48
34) 2-Butanone	5.24	43	101176	0.560	ppbv 93
36) Benzene	6.88	78	33763	0.099	ppbv 96
39) 1,2-Dichloropropane	7.16	63	965514	6.970	ppbv # 23
41) Tetrahydrofuran	6.29	42	1874	0.022	ppbv # 53
44) 2,2,4-Trimethylpentane	7.85	57	12073	0.020	ppbv # 40
51) 2-Hexanone	10.12	43	3795	0.029	ppbv # 30
52) Tetrachloroethene	11.20	164	9894	0.079	ppbv # 83
53) Toluene	9.80	91	87719	0.241	ppbv 96
58) Ethyl Benzene	12.70	91	24005	0.051	ppbv 99
59) m/p-Xylene	12.98	91	13748	0.033	ppbv # 32
60) o-Xylene	13.68	91	27961	0.070	ppbv # 25
74) 1,2,4-Trimethylbenzene	16.76	105	32050	0.073	ppbv # 63

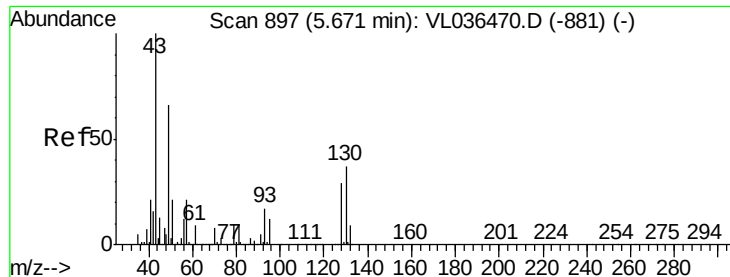
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

ClientSampled :

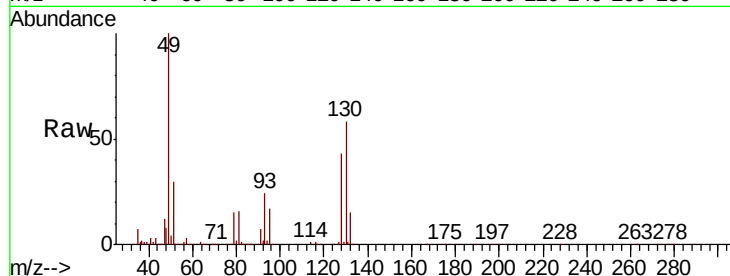
Tot Ion: 49 Resp: 1431008

Ion Ratio Lower Upper

49 100

128 48.0 23.5 70.6

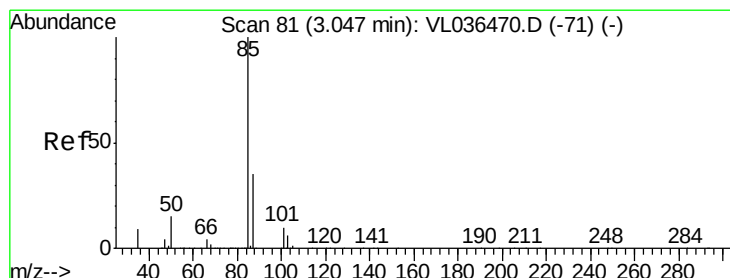
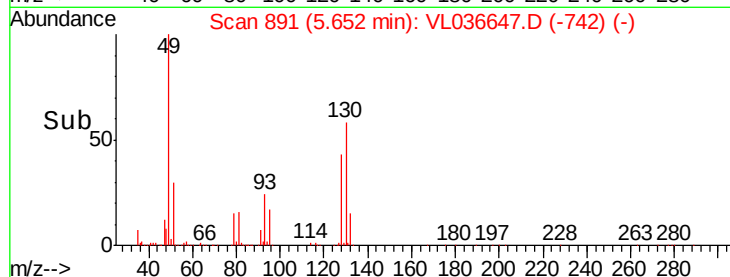
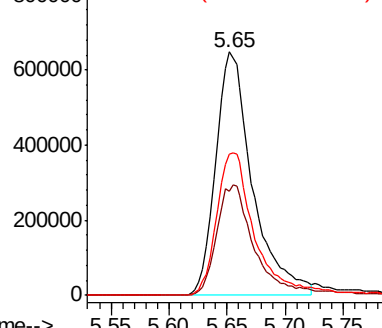
130 63.0 29.1 87.4



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.043 ppbv

RT: 3.03 min Scan# 77

Delta R.T. -0.01 min

Lab File: VL036647.D

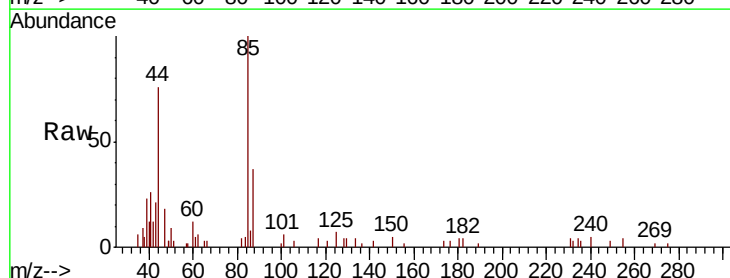
Acq: 2 Apr 2021 16:26

Tgt Ion: 85 Resp: 10030

Ion Ratio Lower Upper

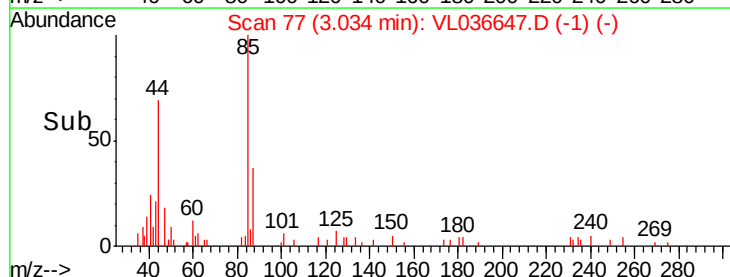
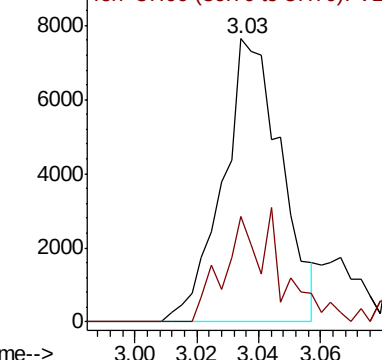
85 100

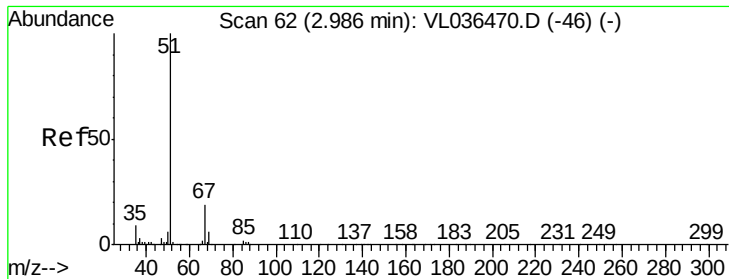
87 37.2 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

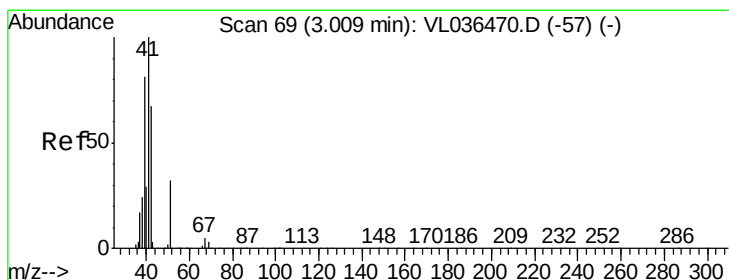
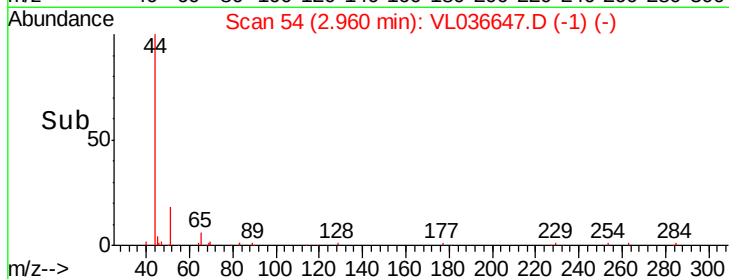
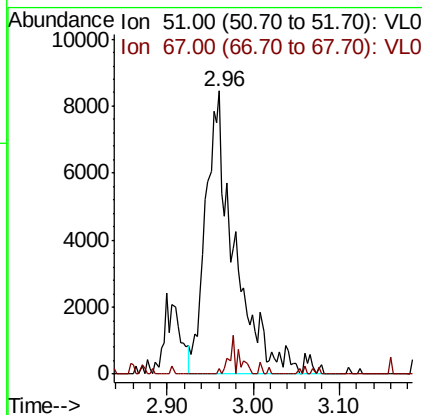
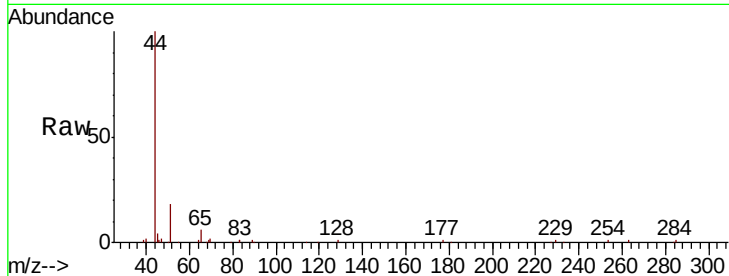




#3
Chlorodifluoromethane
Concen: 0.074 ppbv
RT: 2.96 min Scan# 54
Delta R.T. -0.03 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

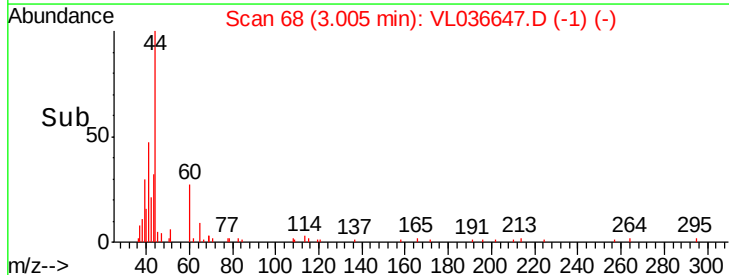
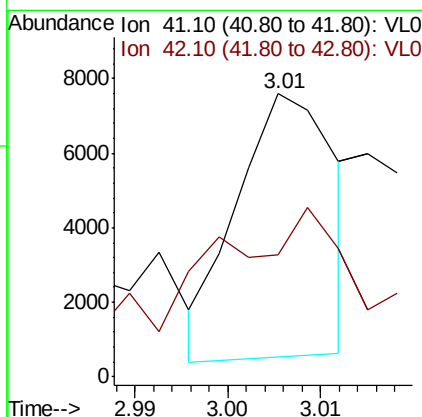
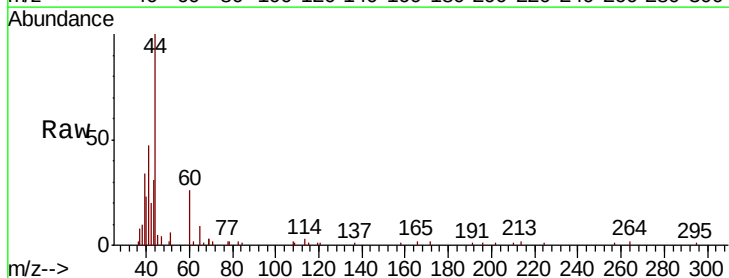
Instrument :
MSVOA_L
ClientSampleId :

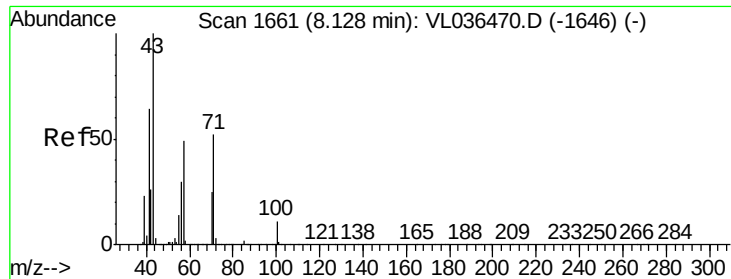
Tot Ion: 51 Resp: 19917
Ion Ratio Lower Upper
51 100
67 4.4 14.7 22.1#



#9
Propene
Concen: 0.061 ppbv
RT: 3.01 min Scan# 68
Delta R.T. -0.00 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Tgt Ion: 41 Resp: 5185
Ion Ratio Lower Upper
41 100
42 153.4 57.0 85.4#

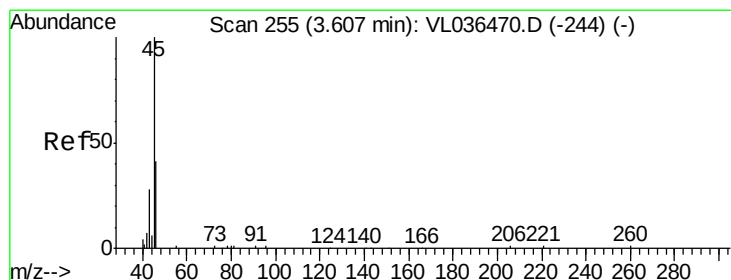
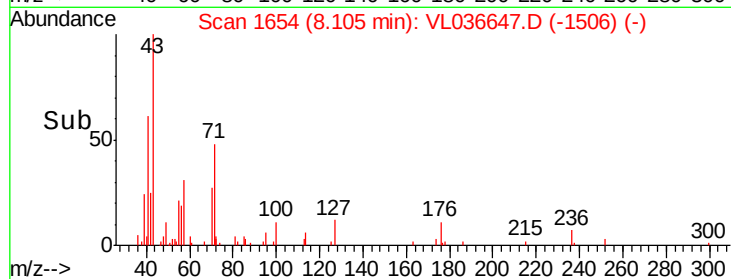
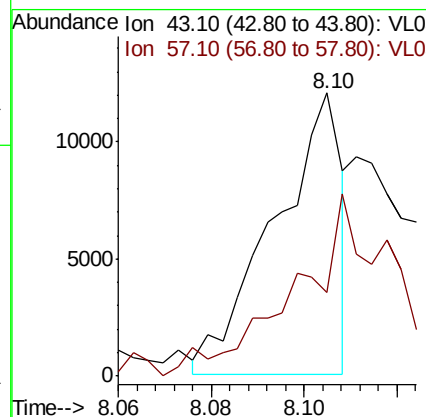
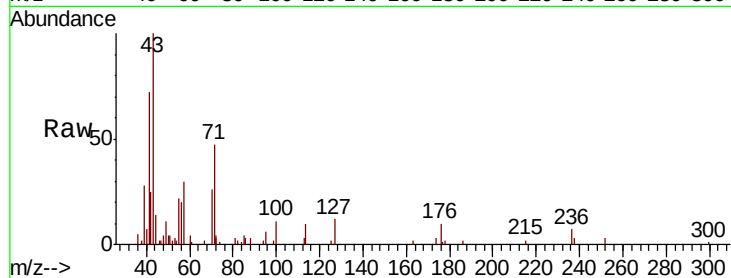




#10
Heptane
Concen: 0.056 ppbv
RT: 8.10 min Scan# 1654
Delta R.T. -0.02 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

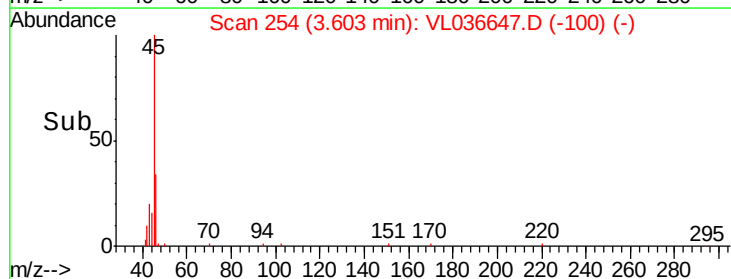
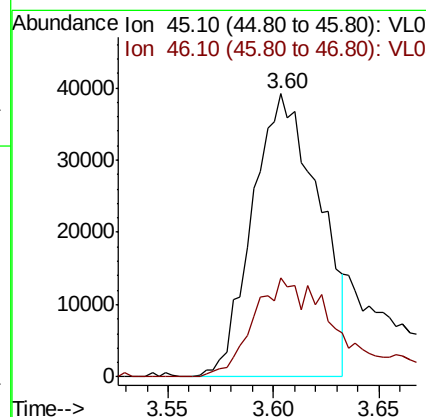
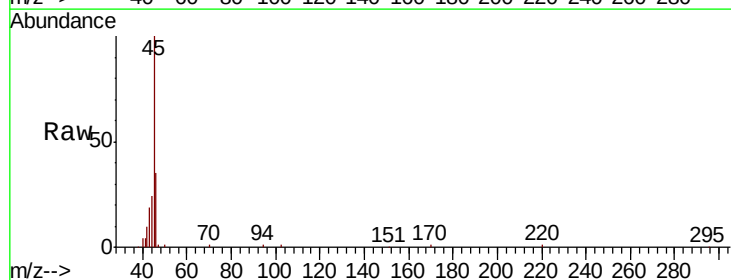
Instrument :
MSVOA_L
ClientSampleId :

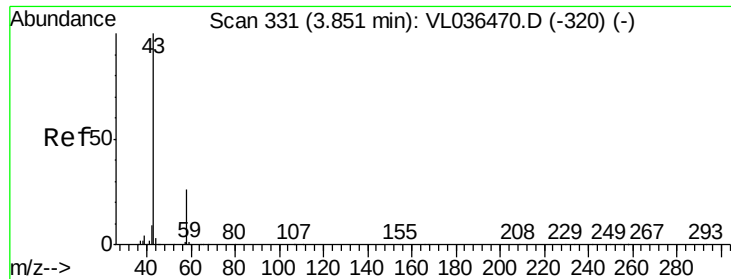
Tot Ion: 43 Resp: 12168
Ion Ratio Lower Upper
43 100
57 0.0 39.0 58.6#



#13
Ethanol
Concen: 8.432 ppbv
RT: 3.60 min Scan# 254
Delta R.T. -0.00 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Tgt Ion: 45 Resp: 85585
Ion Ratio Lower Upper
45 100
46 46.3 16.6 66.2

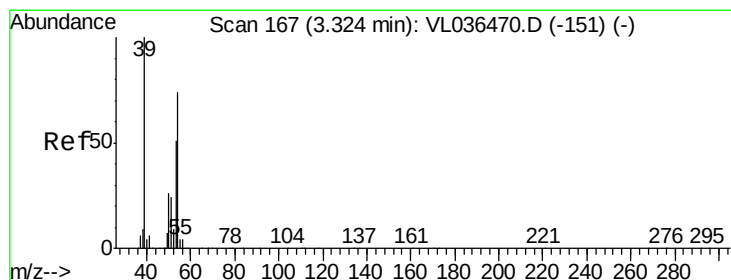
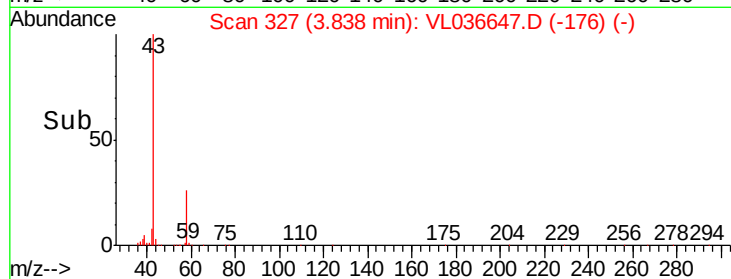
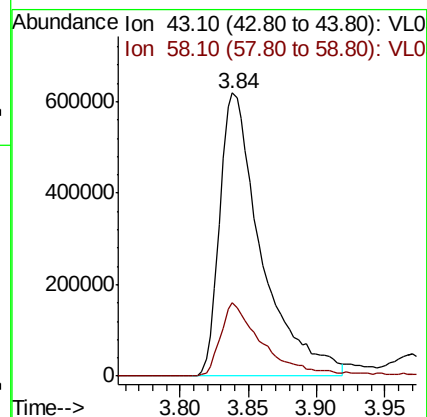
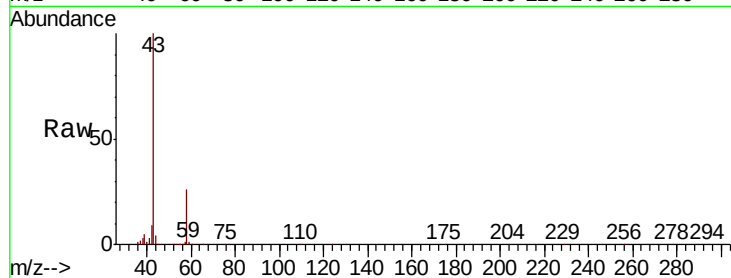




#15
Acetone
Concen: 9.318 ppbv
RT: 3.84 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

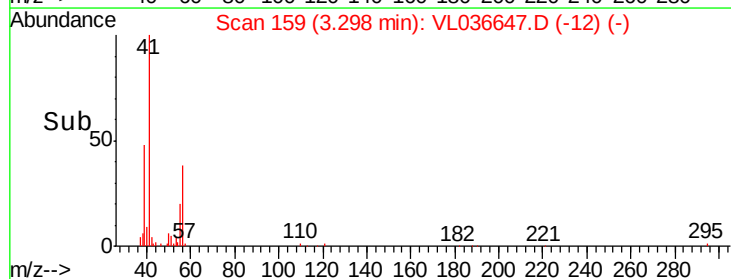
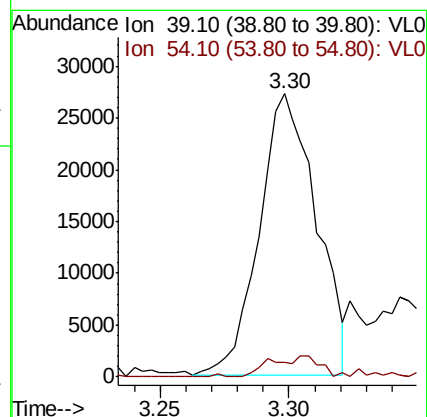
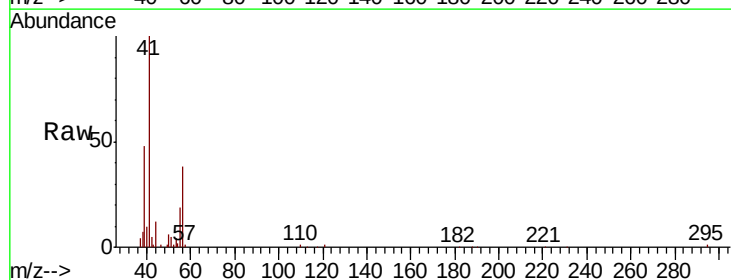
Instrument :
MSVOA_L
ClientSampleId :

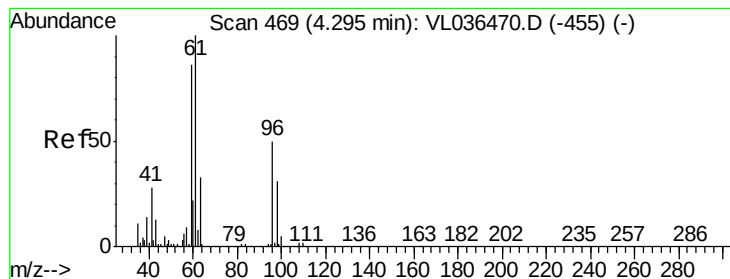
Tot Ion: 43 Resp: 1312404
Ion Ratio Lower Upper
43 100
58 27.7 21.2 31.8



#16
1,3-Butadiene
Concen: 0.428 ppbv
RT: 3.30 min Scan# 159
Delta R.T. -0.03 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Tgt Ion: 39 Resp: 41928
Ion Ratio Lower Upper
39 100
54 7.6 58.8 88.2#



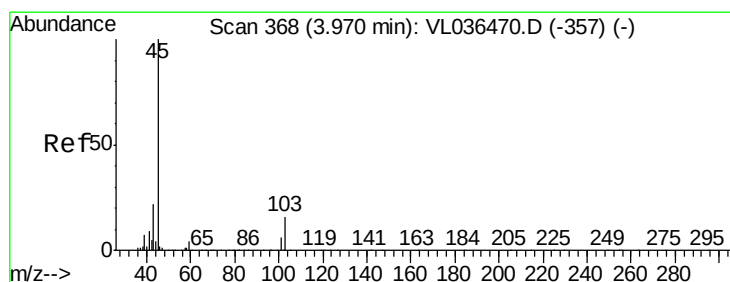
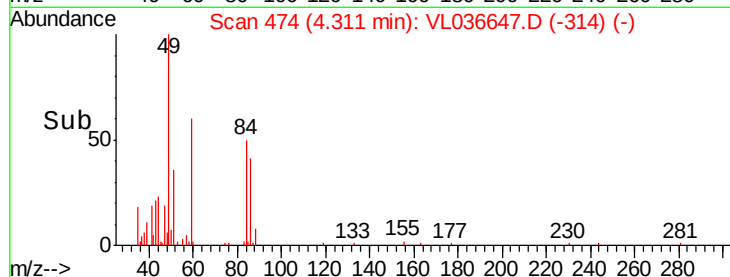
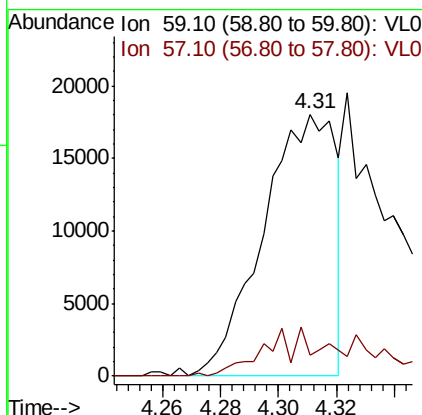
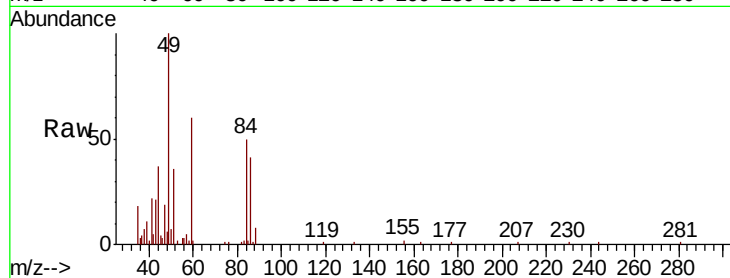


#17

tert-Butyl alcohol
 Concen: 0.257 ppbv
 RT: 4.31 min Scan# 474
 Delta R.T. 0.02 min
 Lab File: VL036647.D
 Acq: 2 Apr 2021 16:26

Instrument :
 MSVOA_L
 ClientSampled :

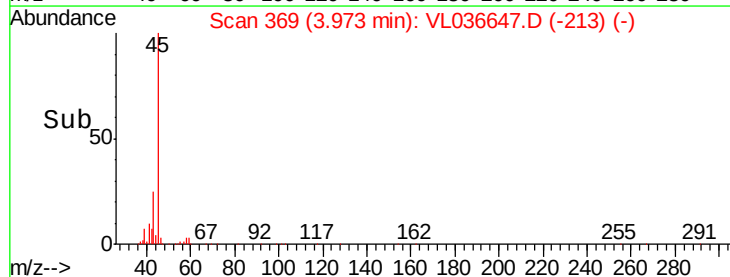
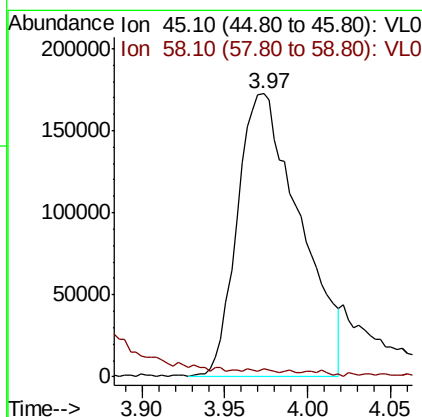
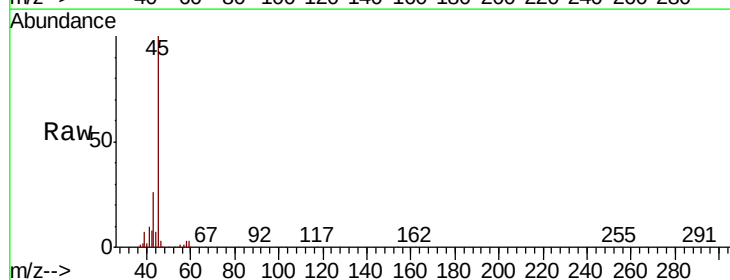
Tot Ion: 59 Resp: 31515
 Ion Ratio Lower Upper
 59 100
 57 25.9 8.6 12.8#

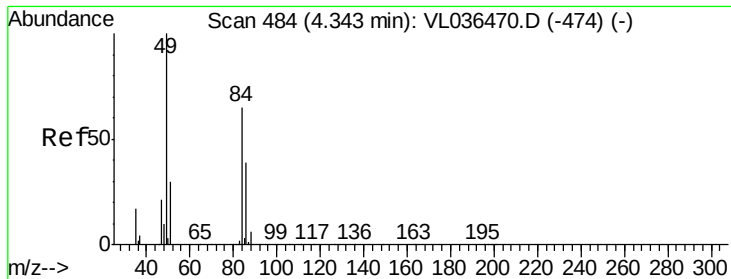


#19

Isopropyl Alcohol
 Concen: 5.826 ppbv
 RT: 3.97 min Scan# 369
 Delta R.T. 0.00 min
 Lab File: VL036647.D
 Acq: 2 Apr 2021 16:26

Tgt Ion: 45 Resp: 451423
 Ion Ratio Lower Upper
 45 100
 58 79.1 2.9 4.3#

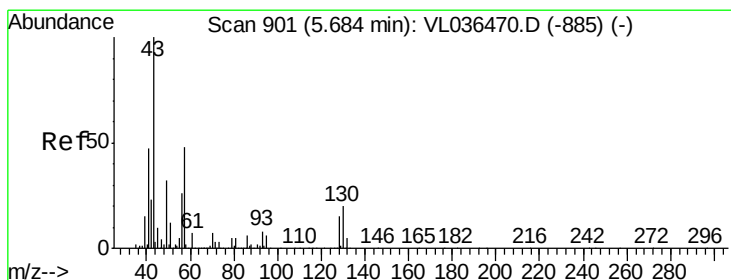
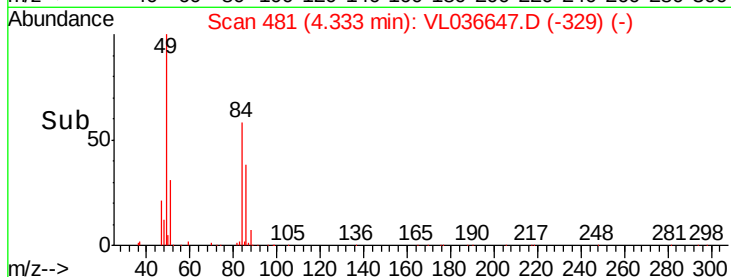
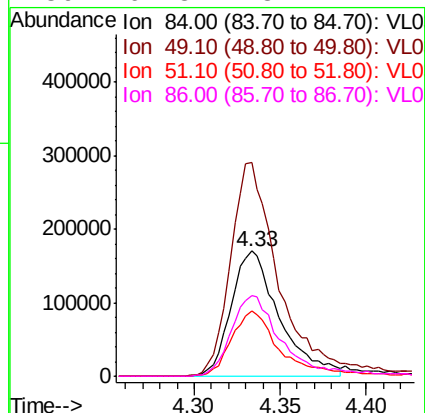
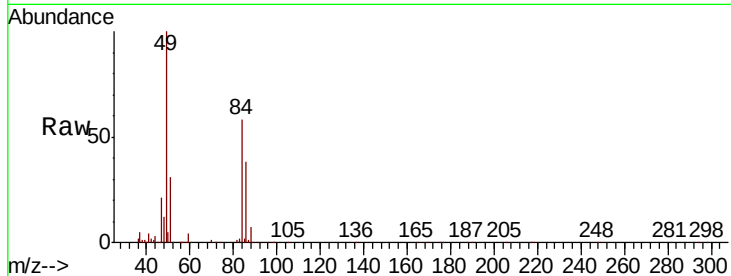




#20
Methylene Chloride
Concen: 5.047 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

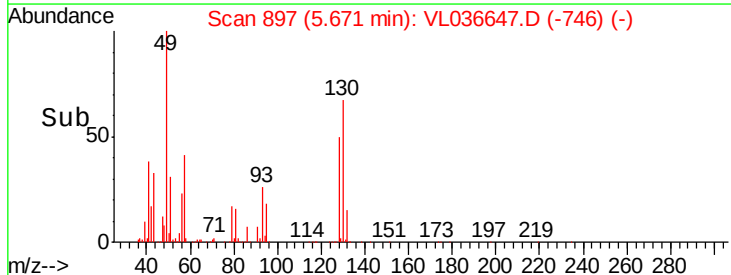
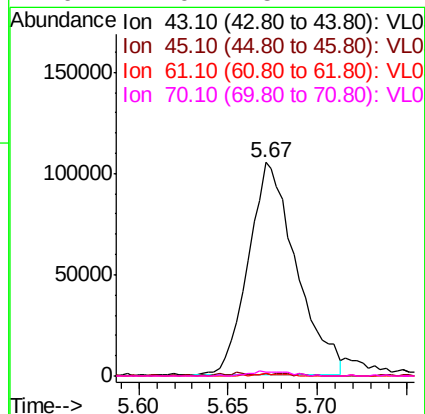
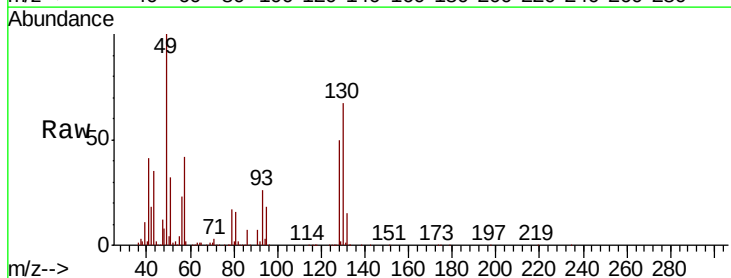
Instrument :
MSVOA_L
ClientSampled :

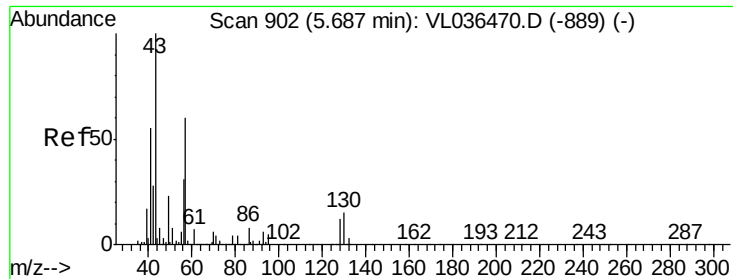
Tot Ion: 84 Resp: 332826
Ion Ratio Lower Upper
84 100
49 170.3 122.9 184.3
51 52.1 36.9 55.3
86 64.3 48.2 72.4



#25
Ethyl Acetate
Concen: 0.589 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Tgt Ion: 43 Resp: 197159
Ion Ratio Lower Upper
43 100
45 2.1 7.9 11.9#
61 0.7 7.4 11.2#
70 2.0 5.1 7.7#

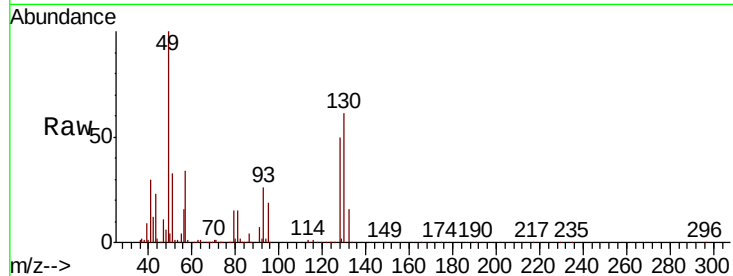




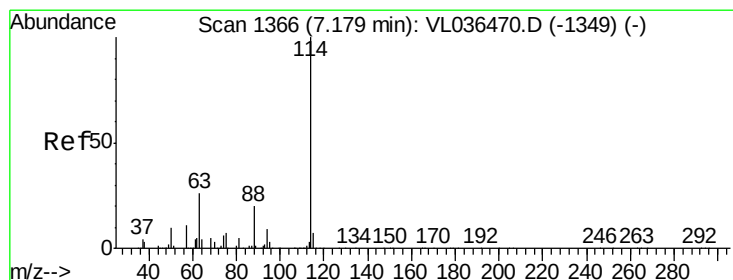
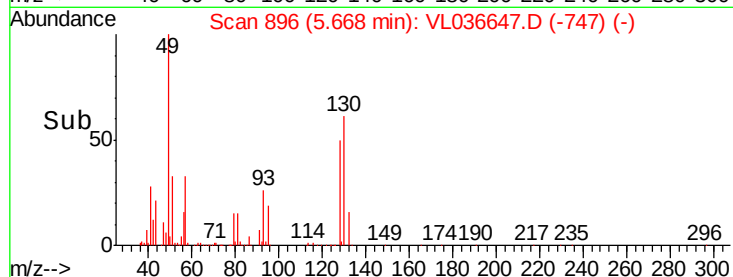
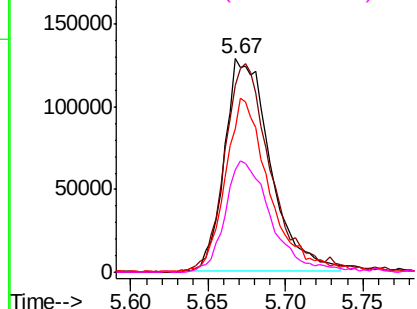
#26
Hexane
Concen: 1.697 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.02 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 57 Resp: 263768
Ion Ratio Lower Upper
57 100
41 101.5 77.2 115.8
43 79.9 173.8 260.6#
56 52.9 43.8 65.6

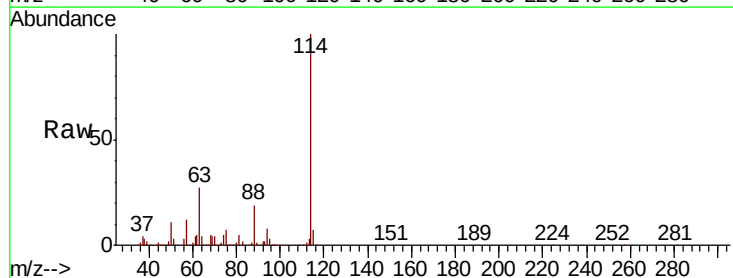


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

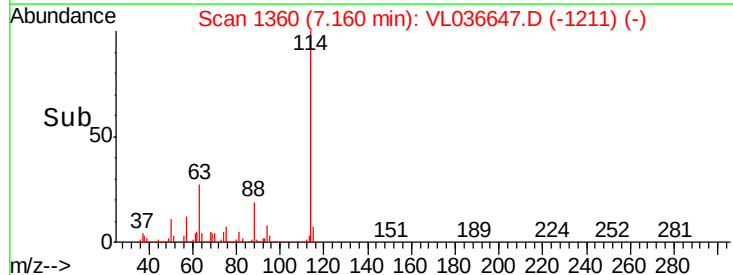
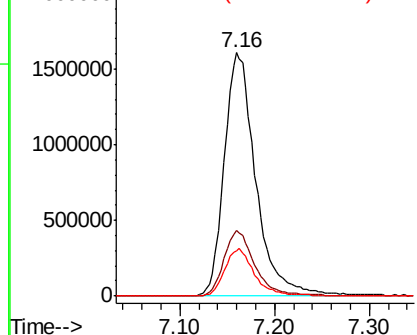


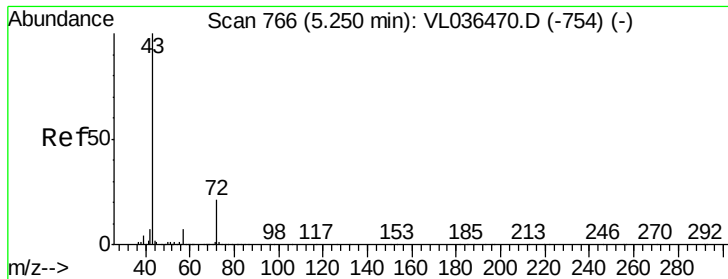
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1360
Delta R.T. -0.02 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Tgt Ion: 114 Resp: 3702558
Ion Ratio Lower Upper
114 100
63 26.8 22.4 33.6
88 18.8 15.4 23.0



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.560 ppbv

RT: 5.24 min Scan# 764

Delta R.T. -0.01 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

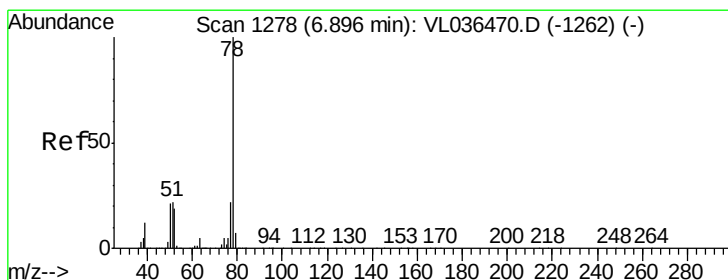
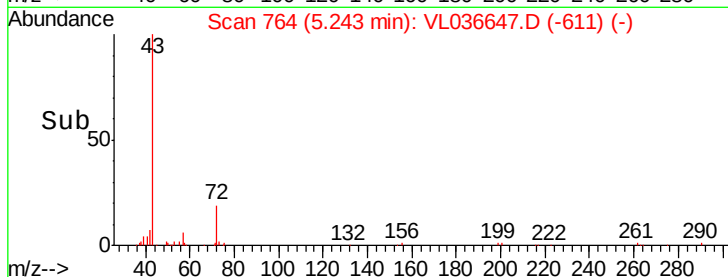
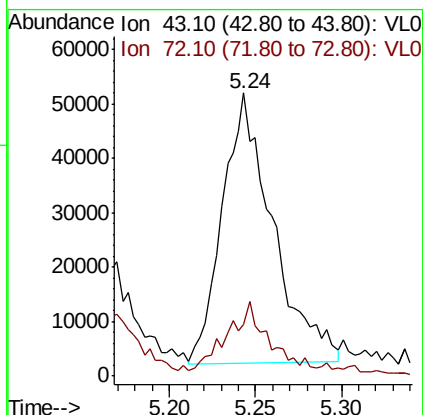
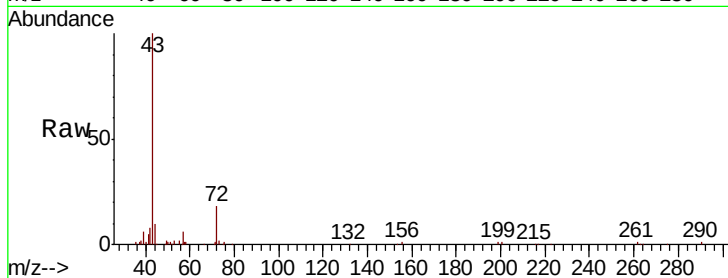
ClientSampled :

Tot Ion: 43 Resp: 101176

Ion Ratio Lower Upper

43 100

72 24.8 17.0 25.6



#36

Benzene

Concen: 0.099 ppbv

RT: 6.88 min Scan# 1272

Delta R.T. -0.02 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

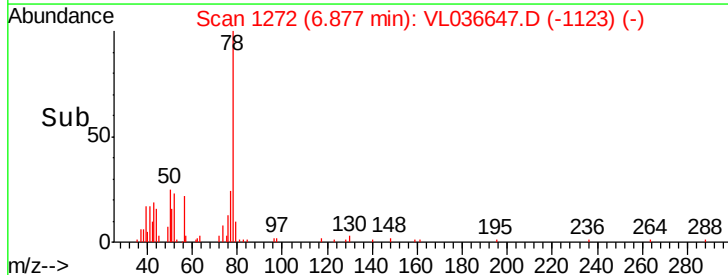
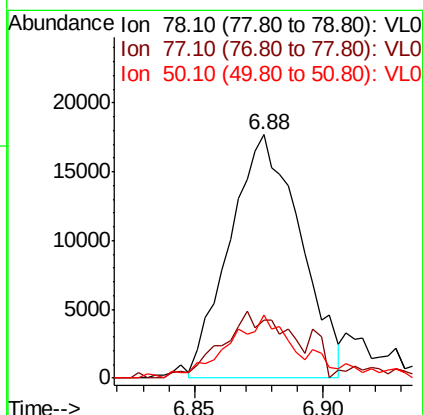
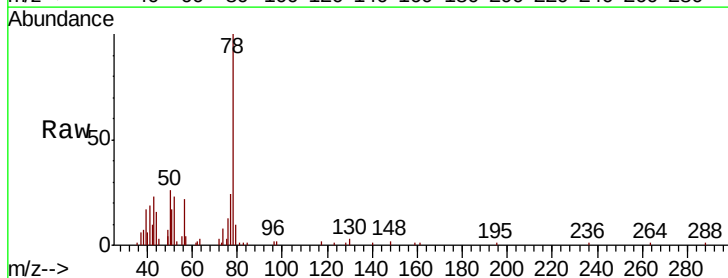
Tgt Ion: 78 Resp: 33763

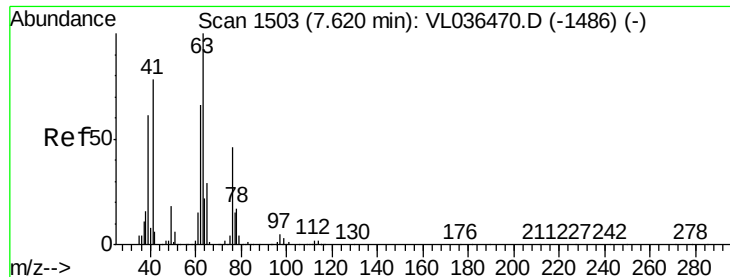
Ion Ratio Lower Upper

78 100

77 22.5 18.0 27.0

50 24.1 16.5 24.7





#39

1,2-Dichloropropane

Concen: 6.970 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.46 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

ClientSampled :

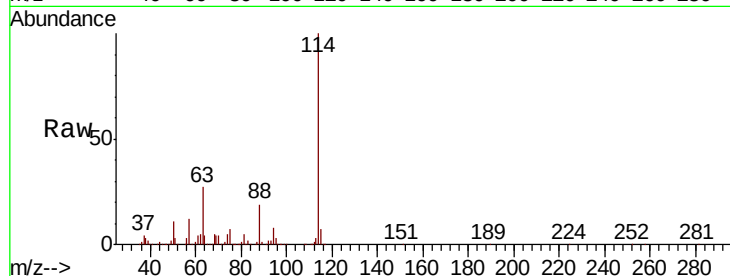
Tot Ion: 63 Resp: 965514

Ion Ratio Lower Upper

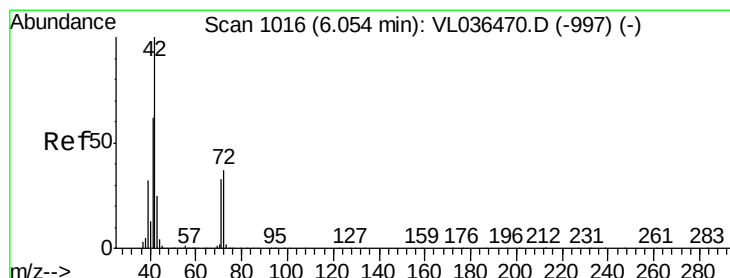
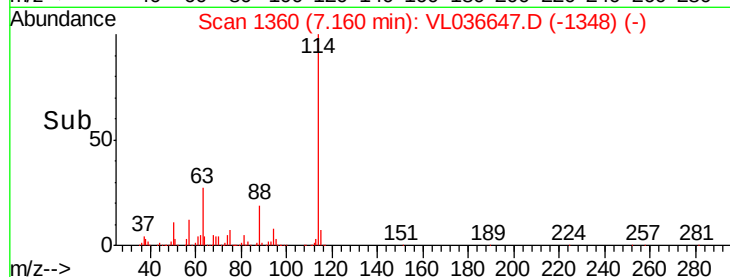
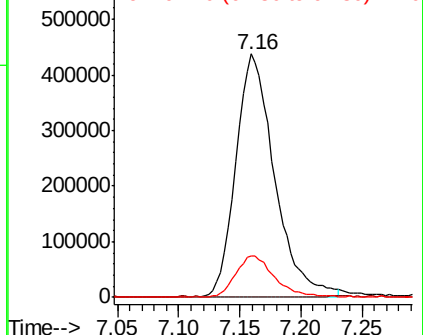
63 100

41 0.0 62.4 93.6#

62 17.2 52.8 79.2#



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0



#41

Tetrahydrofuran

Concen: 0.022 ppbv

RT: 6.29 min Scan# 1091

Delta R.T. 0.24 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

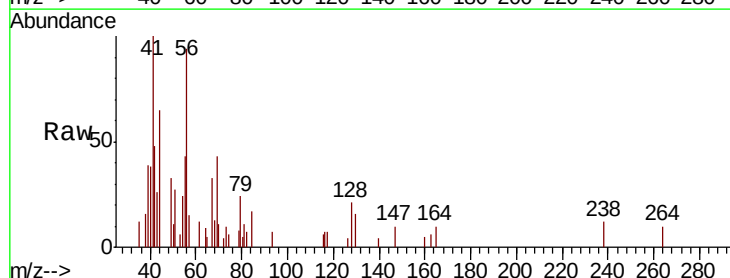
Tgt Ion: 42 Resp: 1874

Ion Ratio Lower Upper

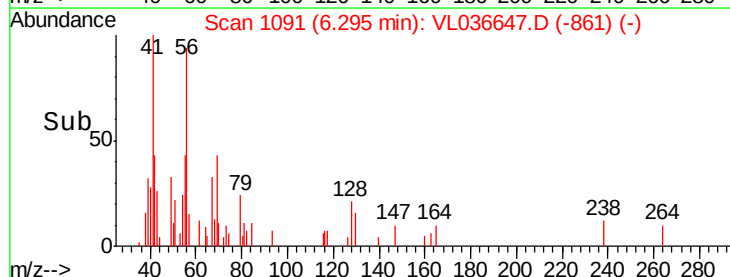
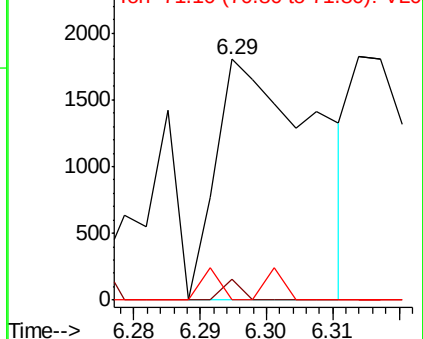
42 100

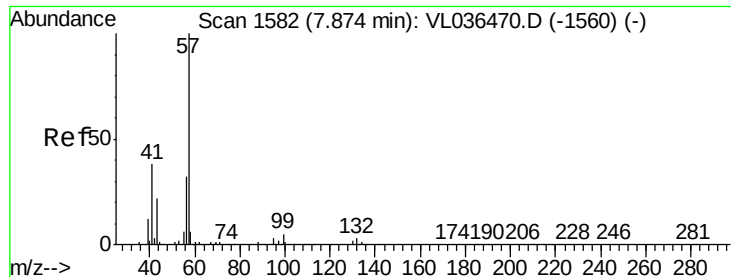
72 16.1 27.6 41.4#

71 69.8 27.0 40.4#



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.020 ppbv

RT: 7.85 min Scan# 1575

Delta R.T. -0.02 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

ClientSampled :

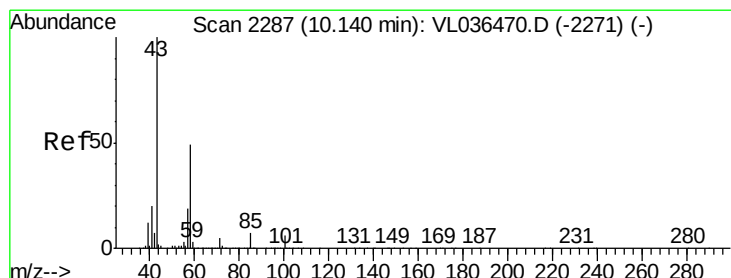
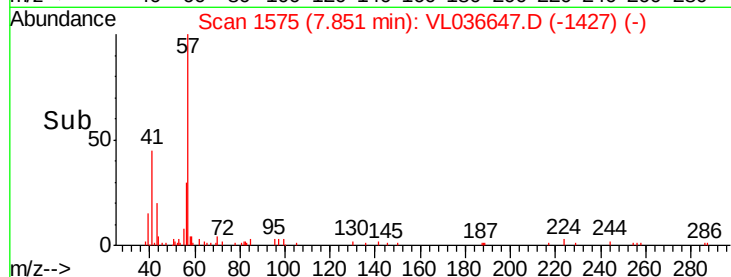
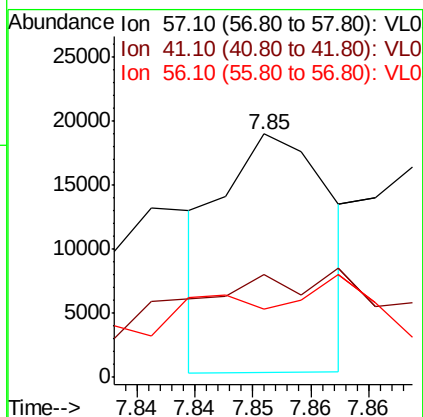
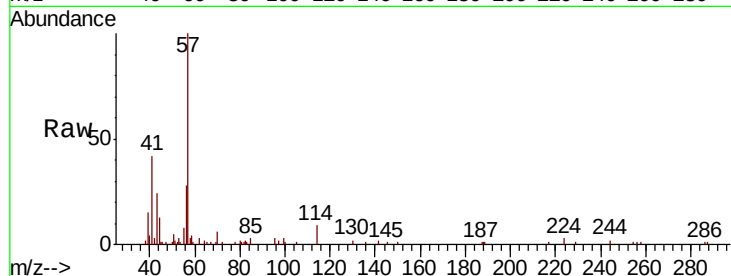
Tot Ion: 57 Resp: 12073

Ion Ratio Lower Upper

57 100

41 0.0 28.8 43.2#

56 0.0 26.1 39.1#



#51

2-Hexanone

Concen: 0.029 ppbv

RT: 10.12 min Scan# 2280

Delta R.T. -0.02 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

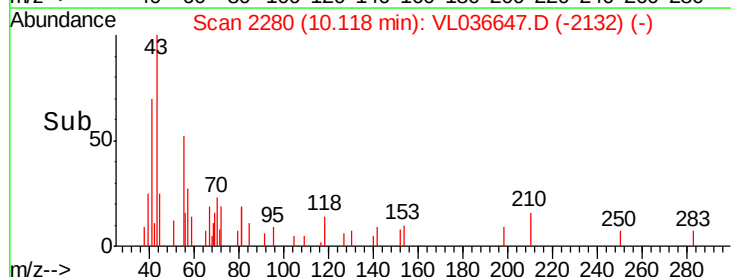
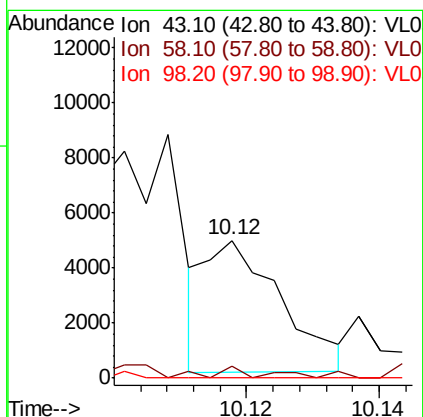
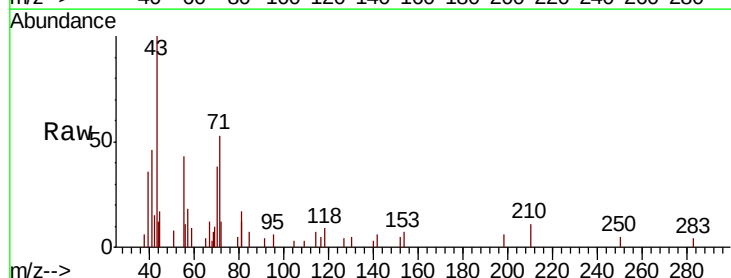
Tgt Ion: 43 Resp: 3795

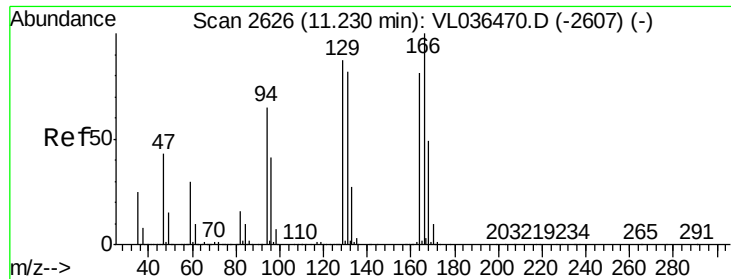
Ion Ratio Lower Upper

43 100

58 0.0 37.7 56.5#

98 0.0 0.2 0.2#





#52

Tetrachloroethene

Concen: 0.079 ppbv

RT: 11.20 min Scan# 2618

Delta R.T. -0.03 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:164 Resp: 9894

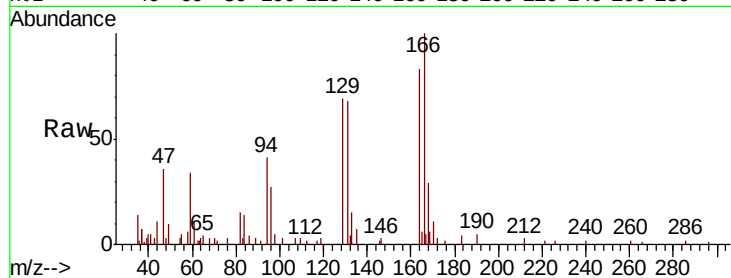
Ion Ratio Lower Upper

164 100

166 117.2 98.3 147.5

129 73.9 85.8 128.8#

131 85.3 80.9 121.3

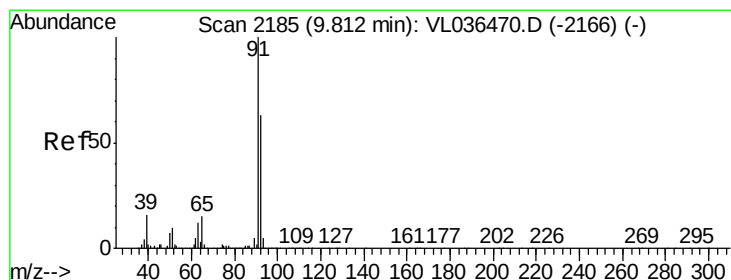
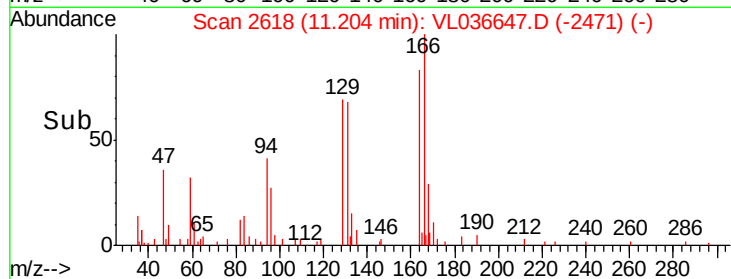
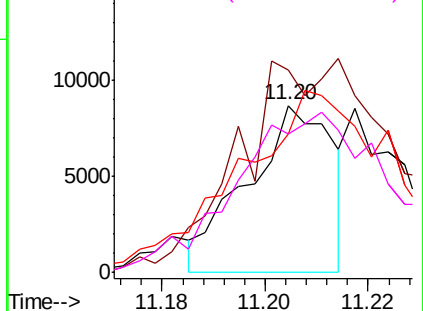


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.241 ppbv

RT: 9.80 min Scan# 2180

Delta R.T. -0.02 min

Lab File: VL036647.D

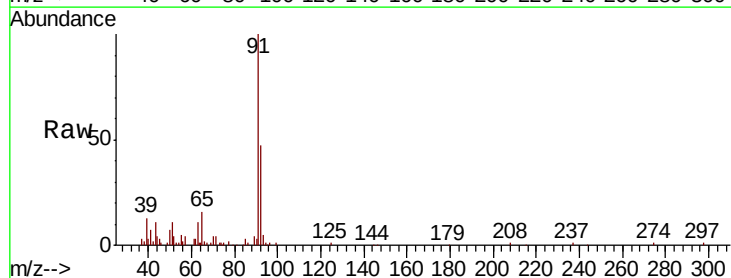
Acq: 2 Apr 2021 16:26

Tgt Ion: 91 Resp: 87719

Ion Ratio Lower Upper

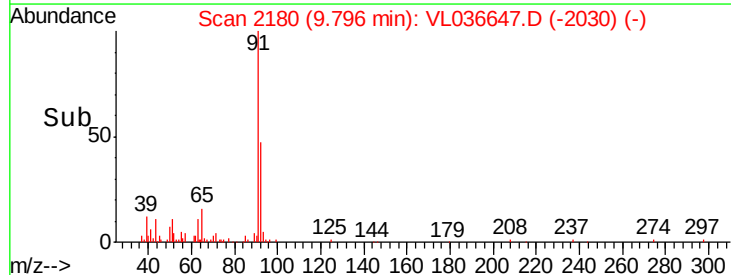
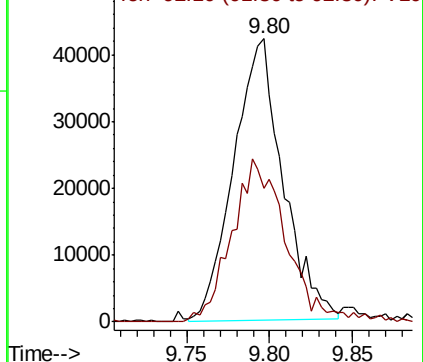
91 100

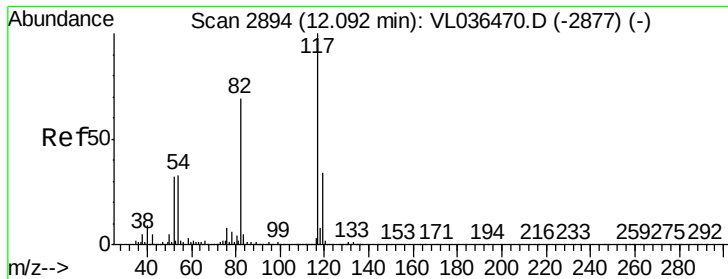
92 64.3 48.8 73.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2888

Delta R.T. -0.02 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

ClientSampleId :

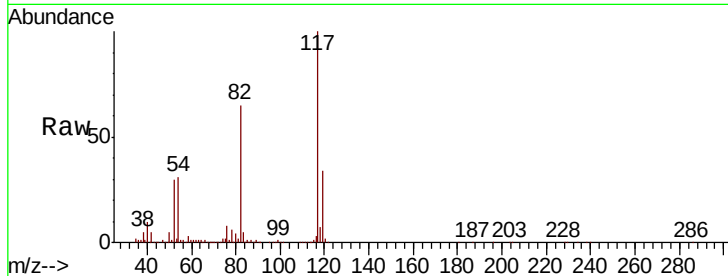
Tot Ion:117 Resp: 3248089

Ion Ratio Lower Upper

117 100

82 68.9 57.4 86.0

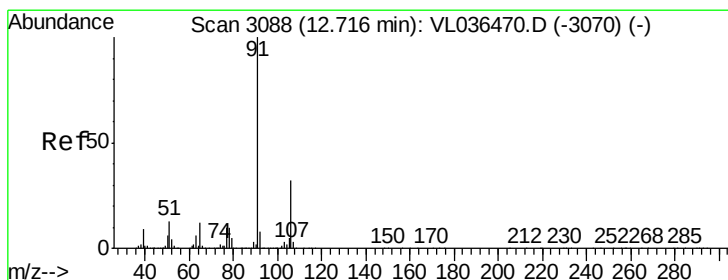
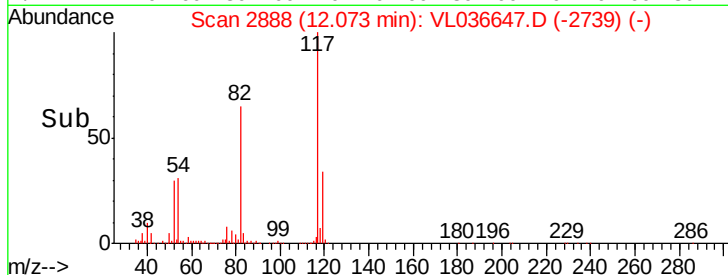
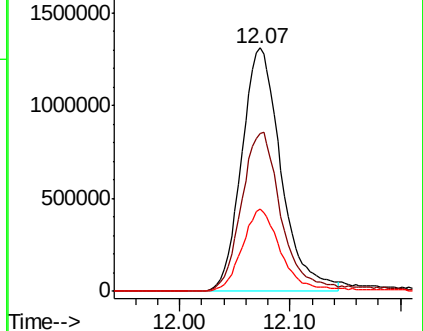
119 33.8 47.4 71.0#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.051 ppbv

RT: 12.70 min Scan# 3083

Delta R.T. -0.02 min

Lab File: VL036647.D

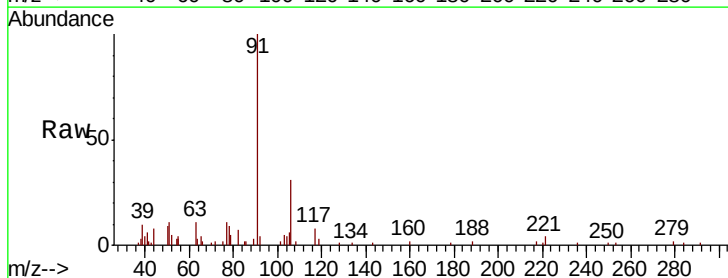
Acq: 2 Apr 2021 16:26

Tgt Ion: 91 Resp: 24005

Ion Ratio Lower Upper

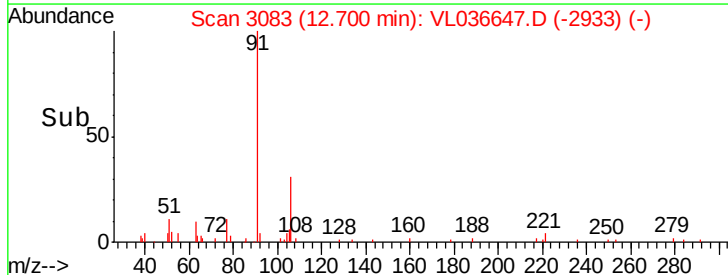
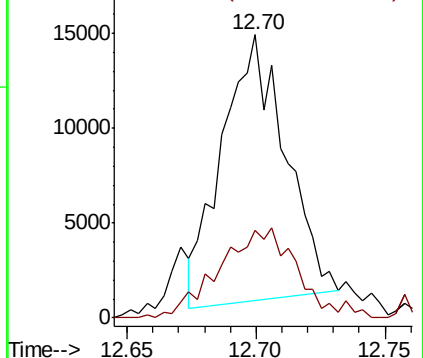
91 100

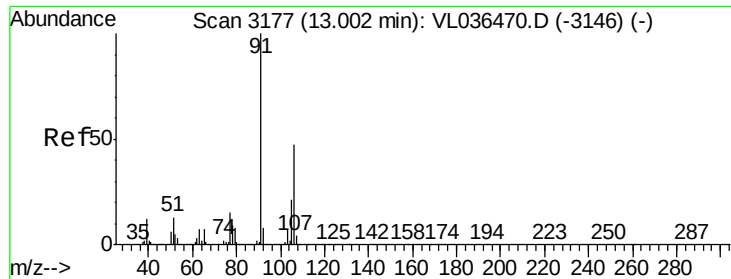
106 32.3 25.3 37.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

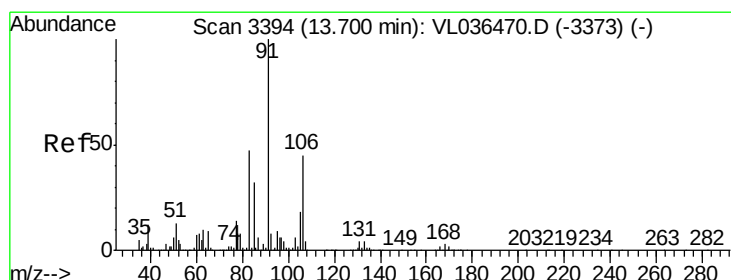
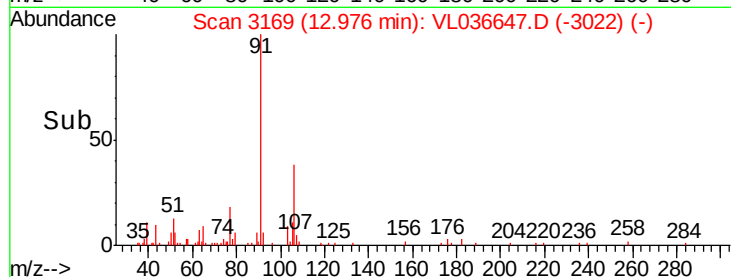
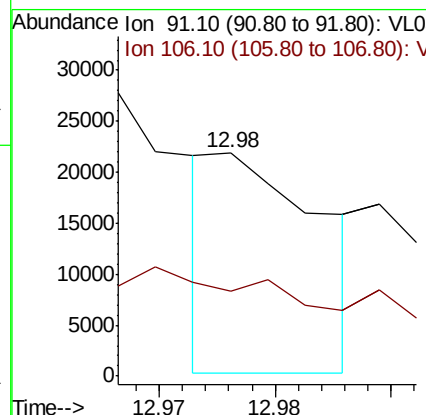
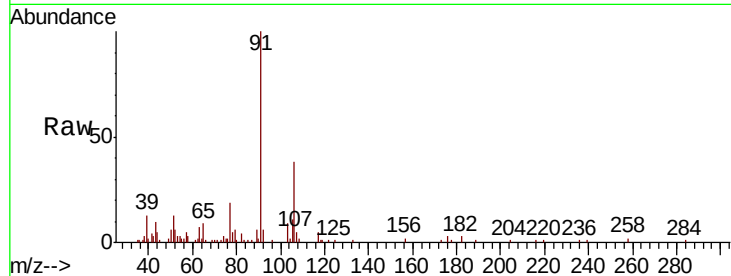




#59
m/p-Xylene
Concen: 0.033 ppbv
RT: 12.98 min Scan# 3169
Delta R.T. -0.03 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

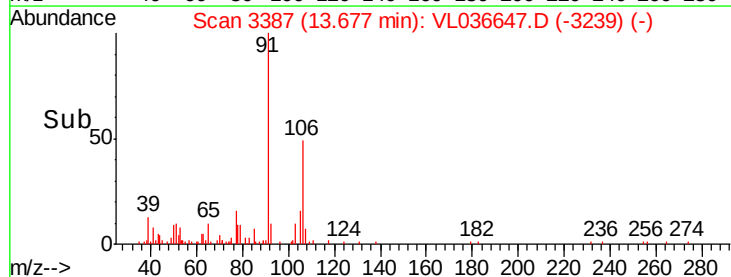
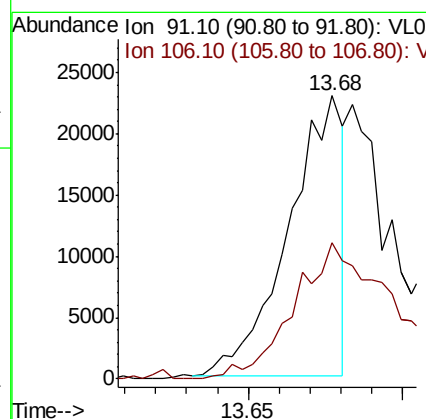
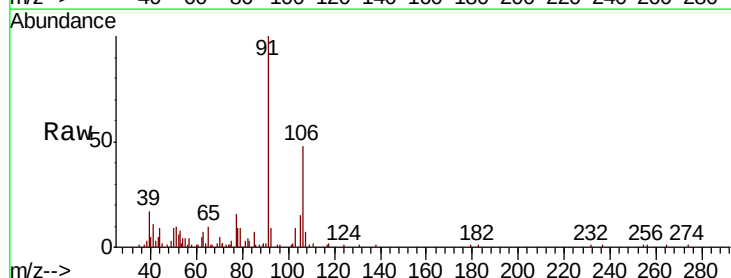
Instrument :
MSVOA_L
ClientSampleId :

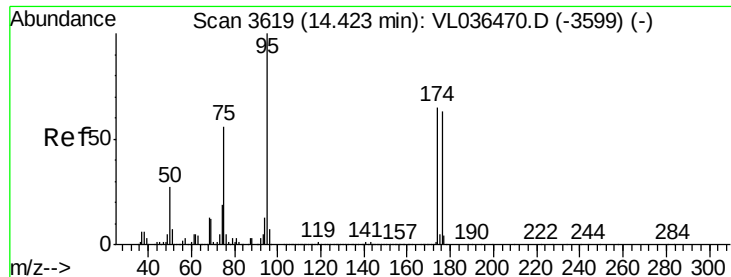
Tot Ion: 91 Resp: 13748
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#



#60
o-Xylene
Concen: 0.070 ppbv
RT: 13.68 min Scan# 3387
Delta R.T. -0.02 min
Lab File: VL036647.D
Acq: 2 Apr 2021 16:26

Tgt Ion: 91 Resp: 27961
Ion Ratio Lower Upper
91 100
106 93.2 22.3 66.9#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.981 ppbv

RT: 14.40 min Scan# 3613

Delta R.T. -0.02 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Instrument :

MSVOA_L

ClientSampleId :

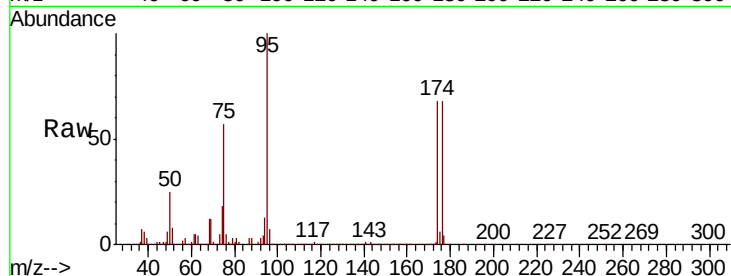
Tot Ion: 95 Resp: 2583749

Ion Ratio Lower Upper

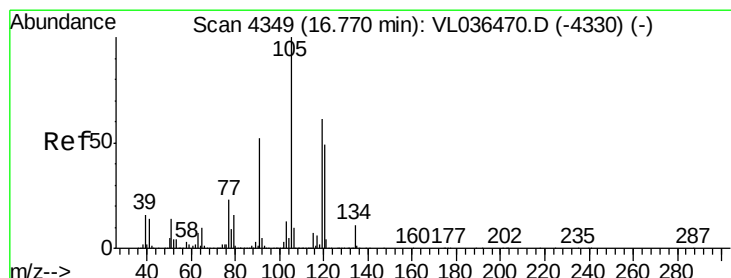
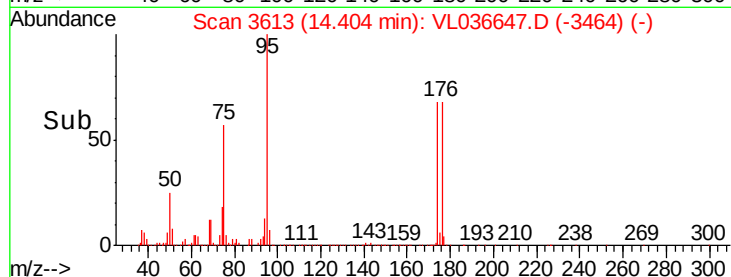
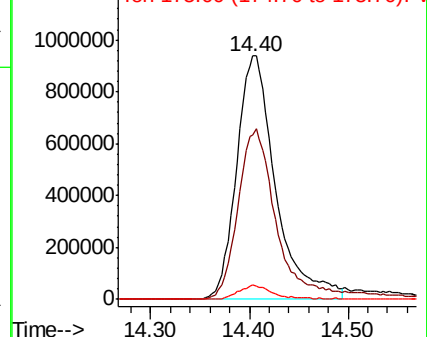
95 100

174 72.6 51.0 76.6

175 5.6 3.9 5.9



Abundance Ion 95.10 (94.80 to 95.80): VL0
Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V



#74

1,2,4-Trimethylbenzene

Concen: 0.073 ppbv

RT: 16.76 min Scan# 4345

Delta R.T. -0.01 min

Lab File: VL036647.D

Acq: 2 Apr 2021 16:26

Tgt Ion:105 Resp: 32050

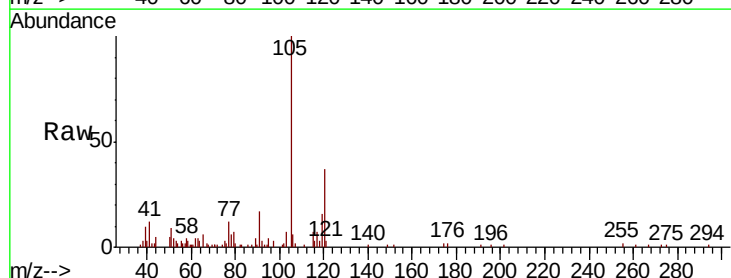
Ion Ratio Lower Upper

105 100

120 36.1 39.2 58.8#

91 15.2 42.6 64.0#

77 5.4 18.6 28.0#



Abundance Ion 105.10 (104.80 to 105.80): V
Ion 120.20 (119.90 to 120.90): V
Ion 91.10 (90.80 to 91.80): VL0
Ion 77.10 (76.80 to 77.80): VL0

