

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\
 Data File : VL037471.D
 Acq On : 16 Aug 2021 21:21
 Operator : SY/AP
 Sample : L3510-01DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 17 02:23:09 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Aug 17 02:13:47 2021
 QLast Update : Tue Aug 17 02:13:47 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1435802	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4201333	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3832609	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	3016571	11.08	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.80%

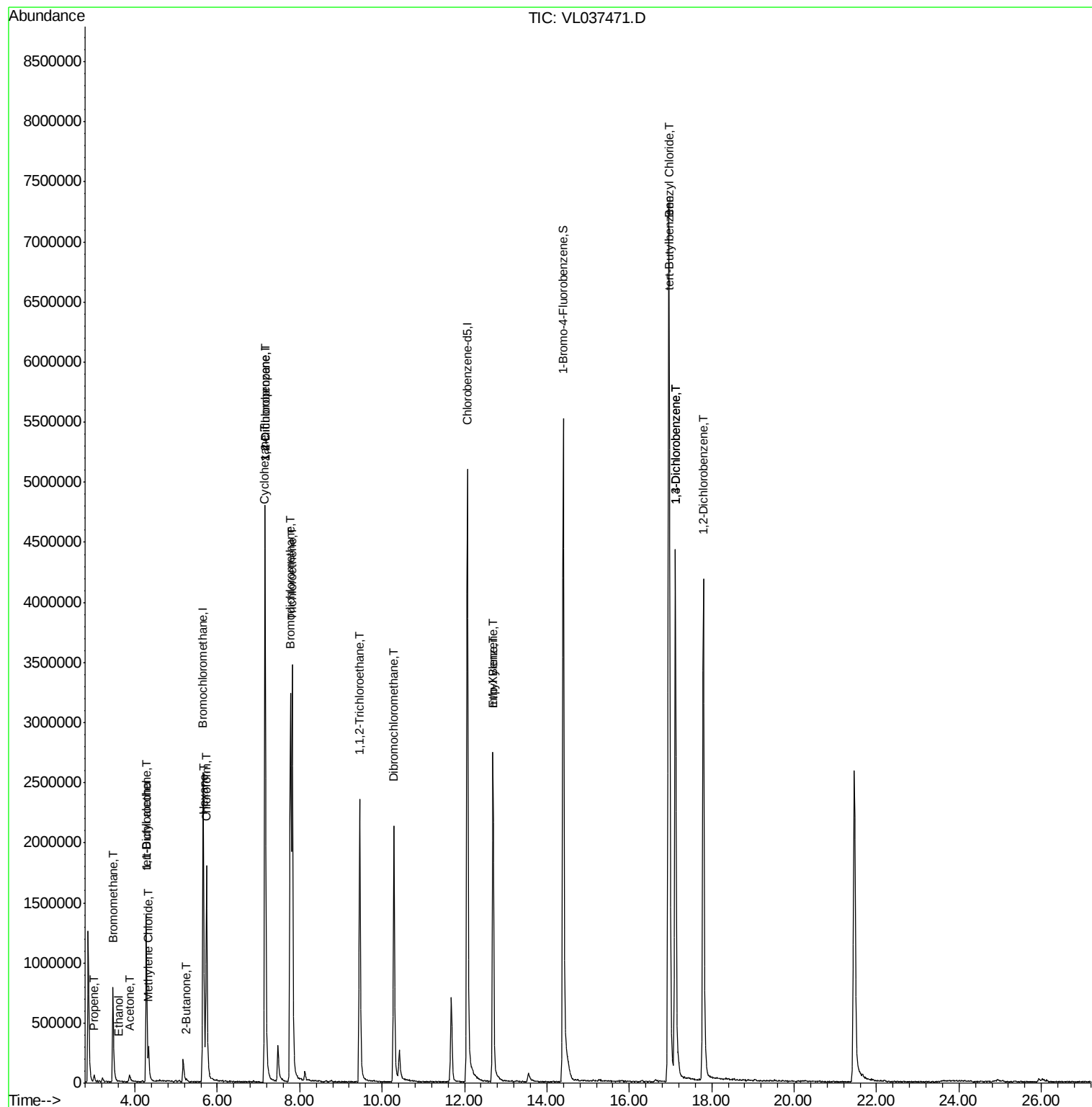
Target Compounds					Ovalue
6) Bromomethane	3.47	94	509208	9.235	ppbv 100
9) Propene	3.02	41	7893	0.080	ppbv 83
13) Ethanol	3.61	45	2196	0.229	ppbv # 39
15) Acetone	3.86	43	24434	0.167	ppbv # 44
17) tert-Butyl alcohol	4.28	59	16229	0.122	ppbv # 72
18) 1,1-Dichloroethene	4.28	96	492594	6.834	ppbv 99
20) Methylene Chloride	4.34	84	71110	0.972	ppbv 93
26) Hexane	5.67	57	54086	0.298	ppbv # 45
29) Chloroform	5.74	83	1360568	5.293	ppbv 99
30) Cyclohexane	7.14	84	5287	0.035	ppbv # 1
34) 2-Butanone	5.25	43	6738	0.039	ppbv # 54
38) Trichloroethene	7.82	130	1233385	8.512	ppbv 94
39) 1,2-Dichloropropane	7.16	63	983056	7.244	ppbv # 28
42) Bromodichloromethane	7.77	83	2533797	9.905	ppbv 96
47) 1,1,2-Trichloroethane	9.46	97	931910	6.355	ppbv 99
48) Dibromochloromethane	10.28	129	1458559	6.912	ppbv 99
58) Ethyl Benzene	12.69	91	2693315	5.064	ppbv 99
59) m/p-Xylene	12.69	91	2693315	5.841	ppbv # 79
65) tert-Butylbenzene	16.95	119	49011	0.089	ppbv # 30
66) Benzyl Chloride	16.98	91	1389	0.056	ppbv # 1
75) 1,3-Dichlorobenzene	17.12	146	2554313	8.381	ppbv 99
76) 1,4-Dichlorobenzene	17.12	146	2554313	8.320	ppbv 97
77) 1,2-Dichlorobenzene	17.80	146	2516613	8.386	ppbv 98

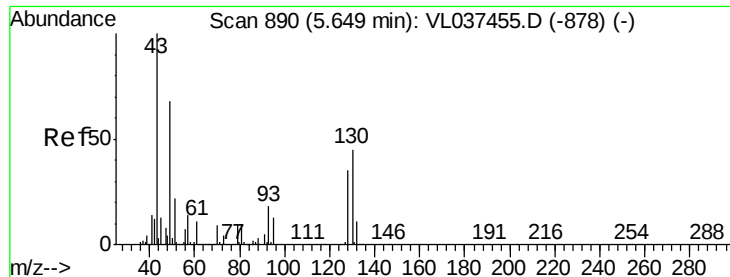
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. 0.00 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :
MSVOA_L
ClientSampleId :

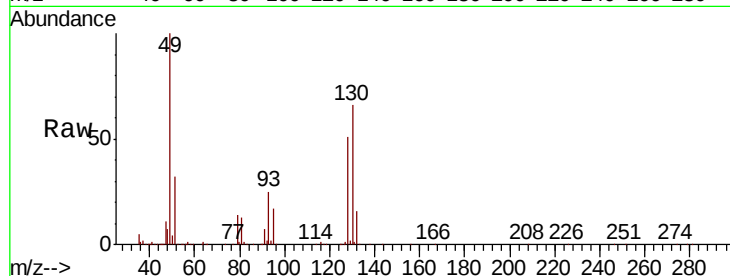
Tot Ion: 49 Resp: 1435802

Ion Ratio Lower Upper

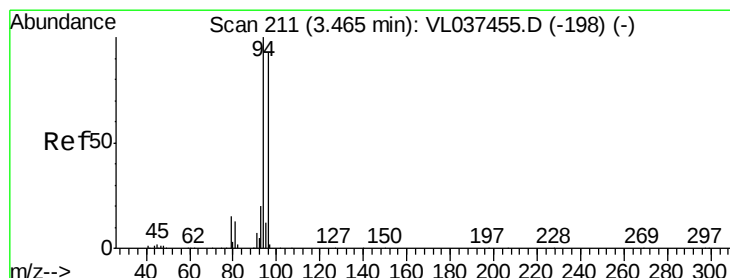
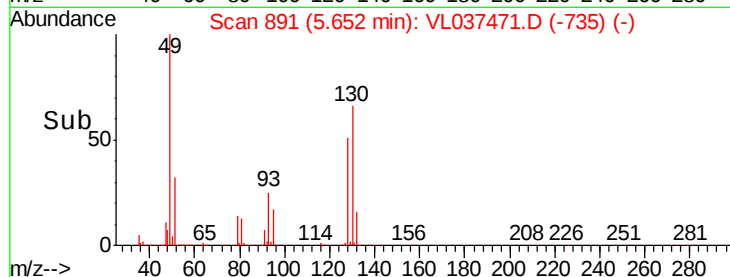
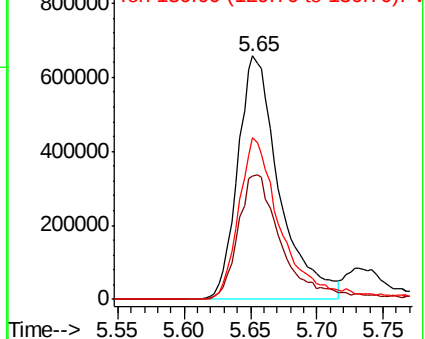
49 100

128 55.8 27.5 82.4

130 70.3 34.0 101.8



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



#6

Bromomethane

Concen: 9.235 ppbv

RT: 3.47 min Scan# 211

Delta R.T. -0.00 min

Lab File: VL037471.D

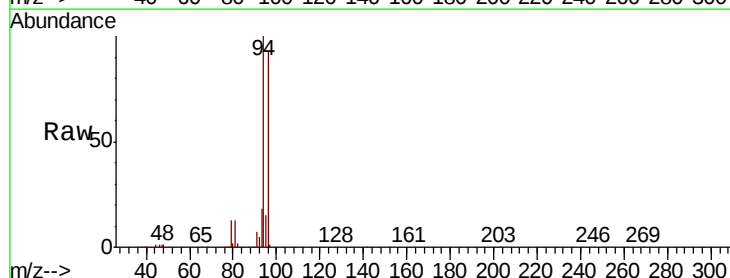
Acq: 16 Aug 2021 21:21

Tgt Ion: 94 Resp: 509208

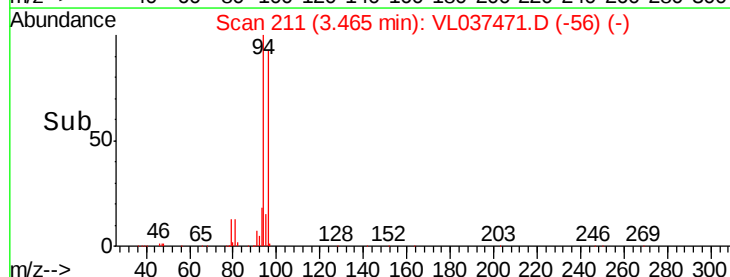
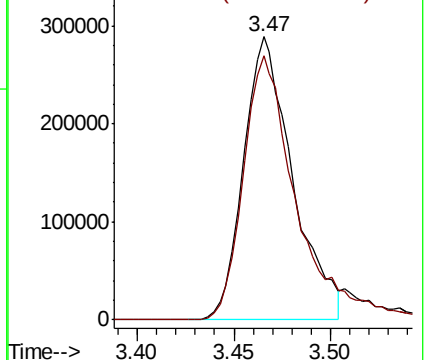
Ion Ratio Lower Upper

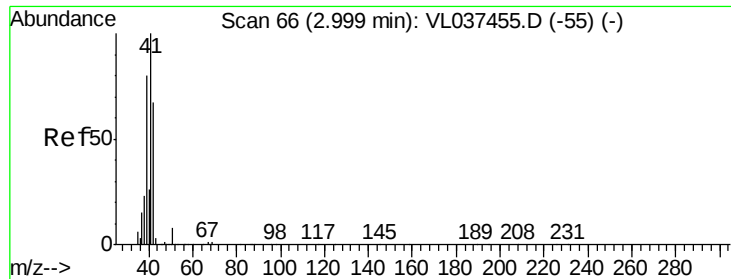
94 100

96 93.3 74.5 111.7



Abundance Ion 94.00 (93.70 to 94.70): VL0
Ion 96.00 (95.70 to 96.70): VL0





#9

Propene

Concen: 0.080 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.02 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :

MSVOA_L

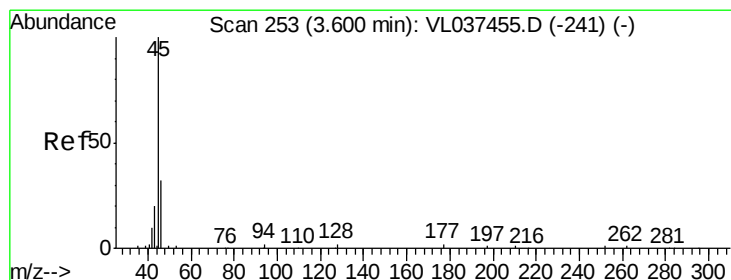
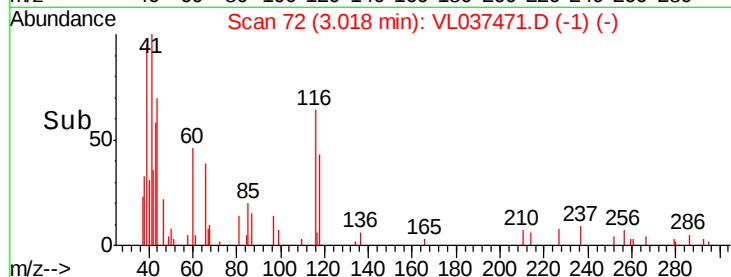
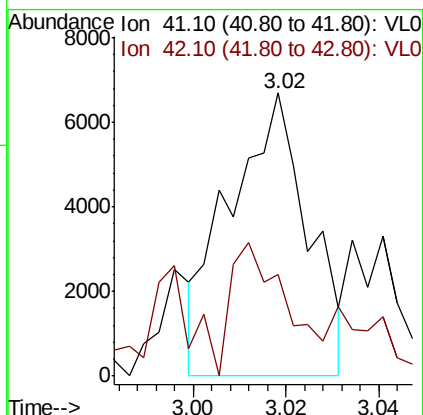
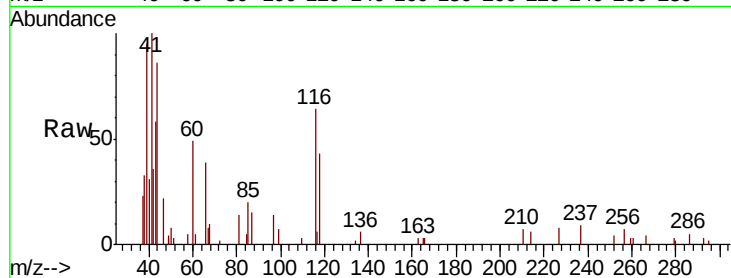
ClientSampleId :

Tot Ion: 41 Resp: 7893

Ion Ratio Lower Upper

41 100

42 80.4 53.7 80.5



#13

Ethanol

Concen: 0.229 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.01 min

Lab File: VL037471.D

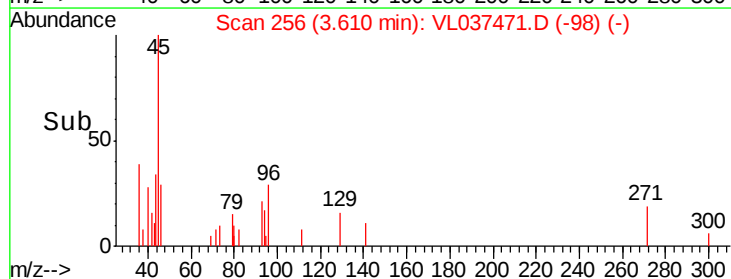
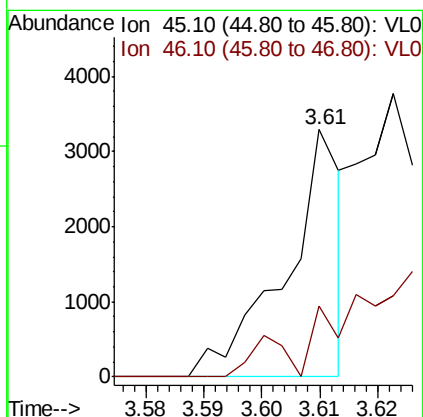
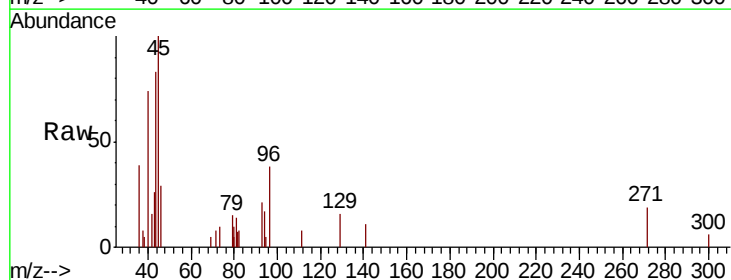
Acq: 16 Aug 2021 21:21

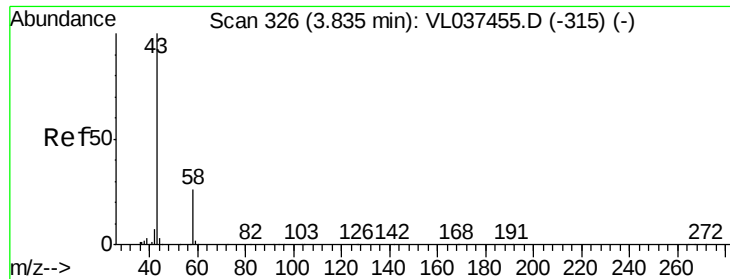
Tgt Ion: 45 Resp: 2196

Ion Ratio Lower Upper

45 100

46 0.0 14.1 56.5#

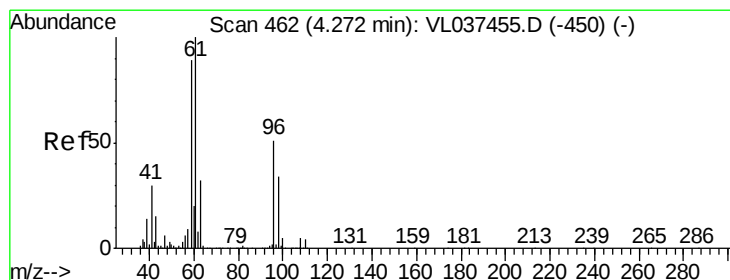
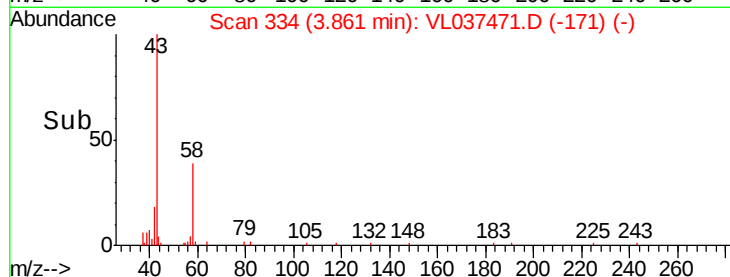
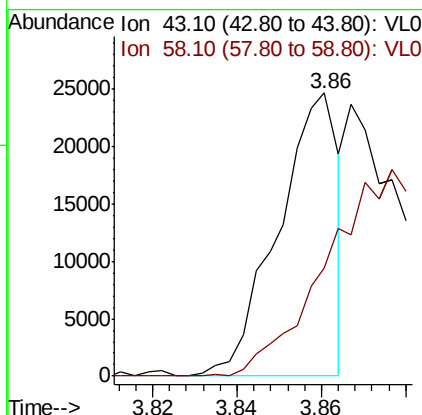
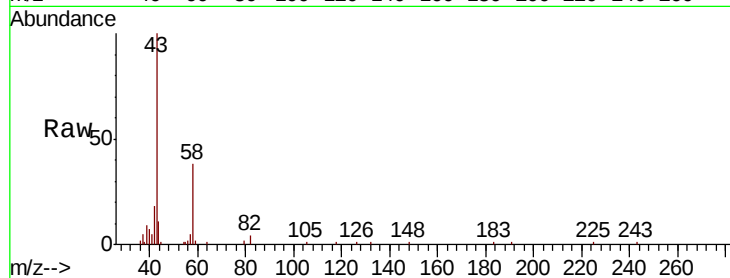




#15
Acetone
Concen: 0.167 ppbv
RT: 3.86 min Scan# 334
Delta R.T. 0.03 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

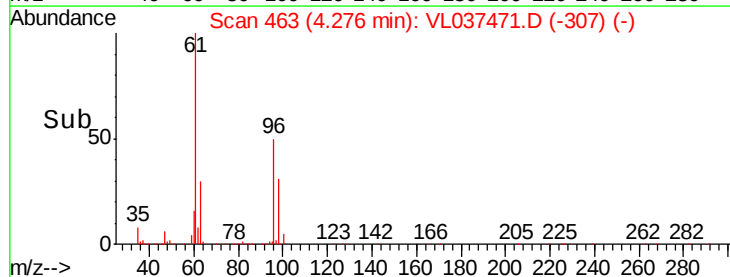
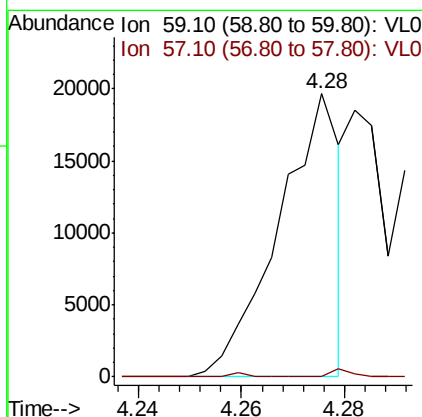
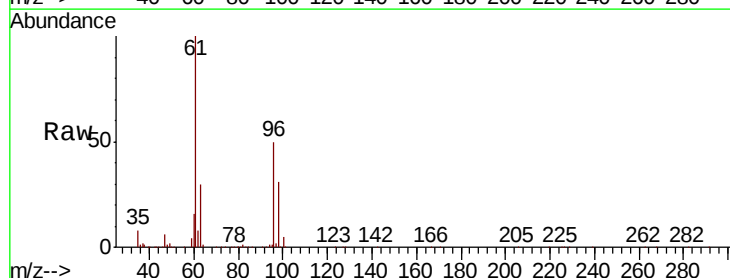
Instrument :
MSVOA_L
ClientSampleId :

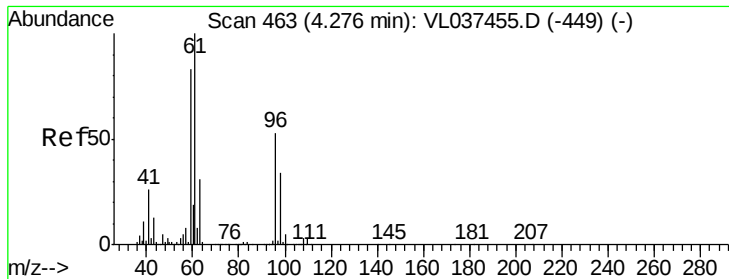
Tot Ion: 43 Resp: 24434
Ion Ratio Lower Upper
43 100
58 0.0 24.8 37.2#



#17
tert-Butyl alcohol
Concen: 0.122 ppbv
RT: 4.28 min Scan# 463
Delta R.T. 0.00 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Tgt Ion: 59 Resp: 16229
Ion Ratio Lower Upper
59 100
57 0.0 8.3 12.5#





#18

1,1-Dichloroethene

Concen: 6.834 ppbv

RT: 4.28 min Scan# 464

Delta R.T. 0.00 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :

MSVOA_L

ClientSampleId :

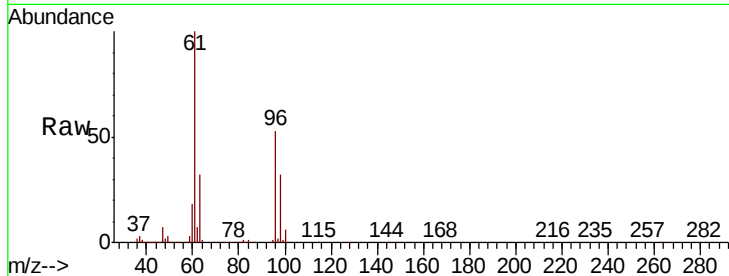
Tot Ion: 96 Resp: 492594

Ion Ratio Lower Upper

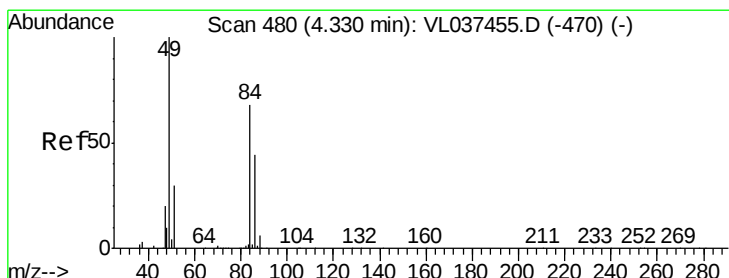
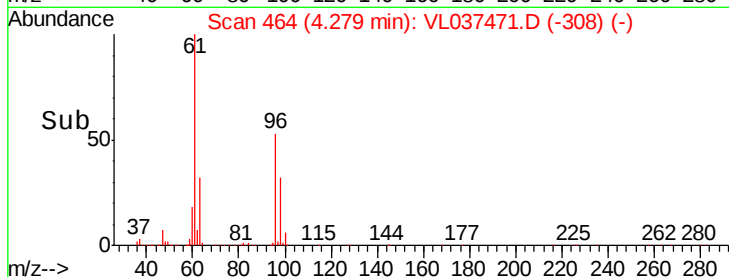
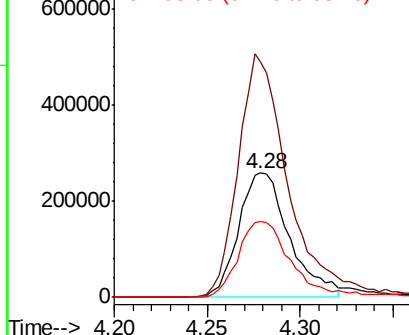
96 100

61 189.1 151.1 226.7

98 61.1 51.8 77.8



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0



#20

Methylene Chloride

Concen: 0.972 ppbv

RT: 4.34 min Scan# 482

Delta R.T. 0.01 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Tgt Ion: 84 Resp: 71110

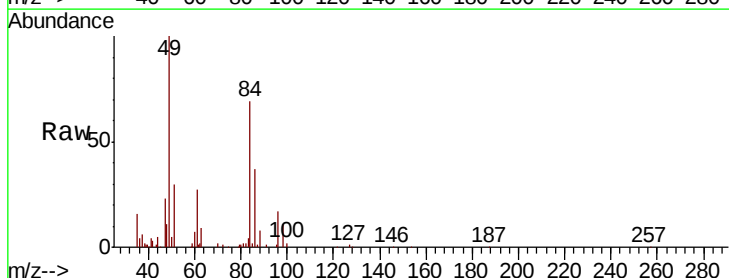
Ion Ratio Lower Upper

84 100

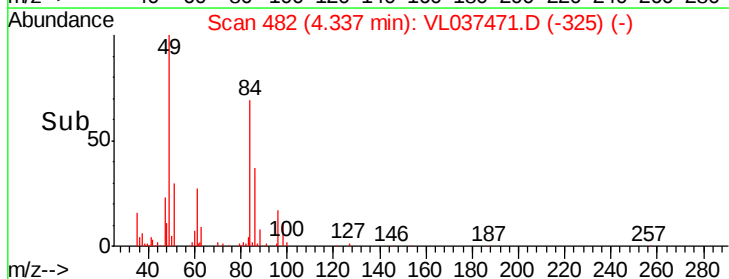
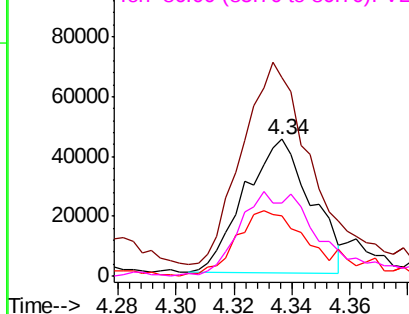
49 141.1 118.2 177.2

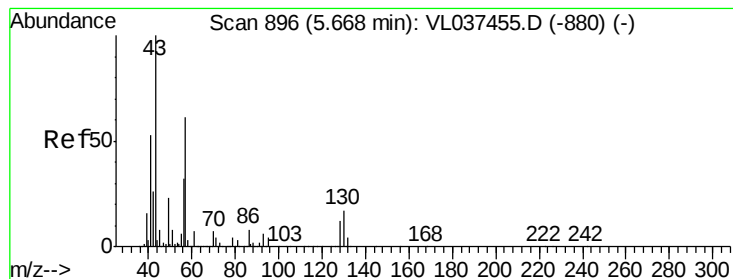
51 42.9 36.6 55.0

86 53.2 51.8 77.6



Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0





#26

Hexane

Concen: 0.298 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.01 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 57 Resp: 54086

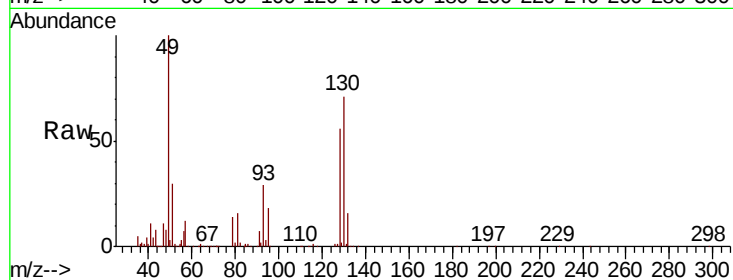
Ion Ratio Lower Upper

57 100

41 92.8 72.3 108.5

43 74.5 172.3 258.5#

56 56.6 42.8 64.2

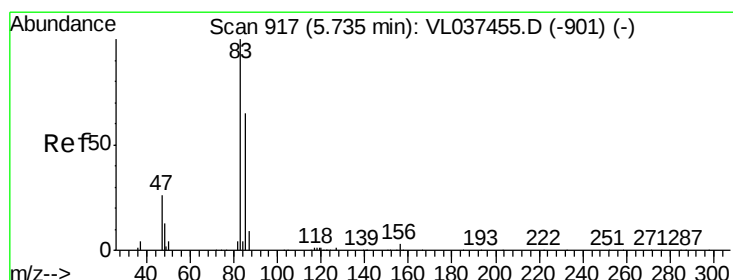
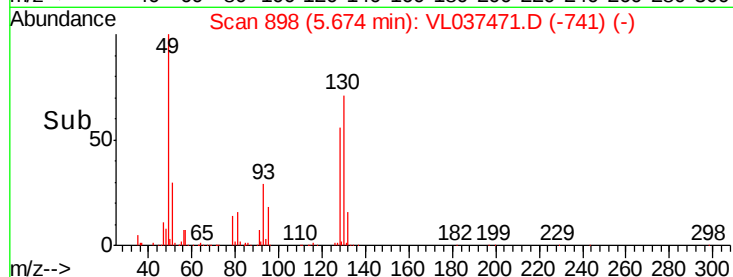
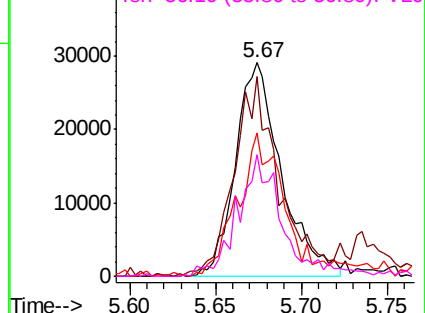


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 5.293 ppbv

RT: 5.74 min Scan# 917

Delta R.T. -0.00 min

Lab File: VL037471.D

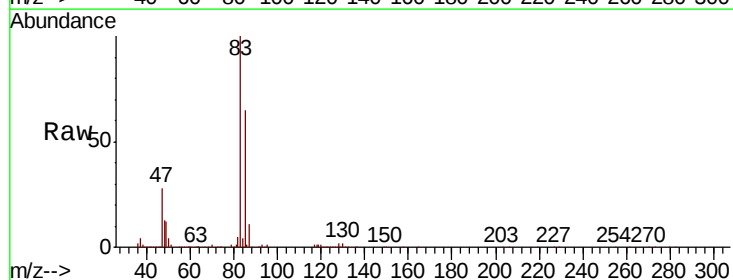
Acq: 16 Aug 2021 21:21

Tgt Ion: 83 Resp: 1360568

Ion Ratio Lower Upper

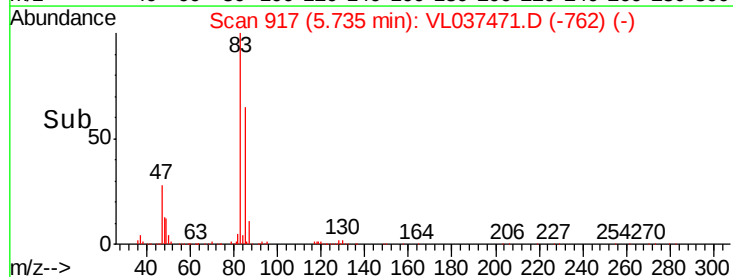
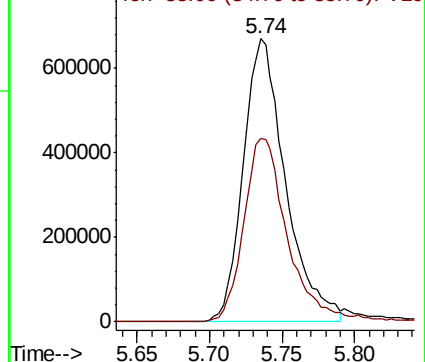
83 100

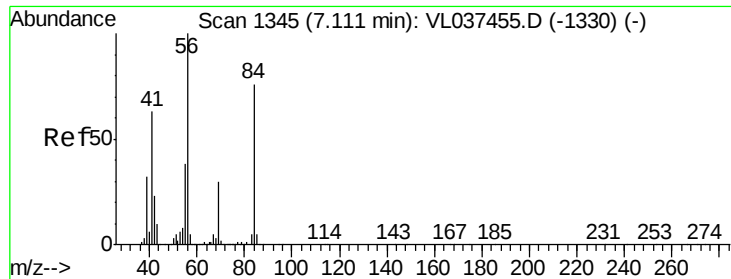
85 64.7 52.3 78.5



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

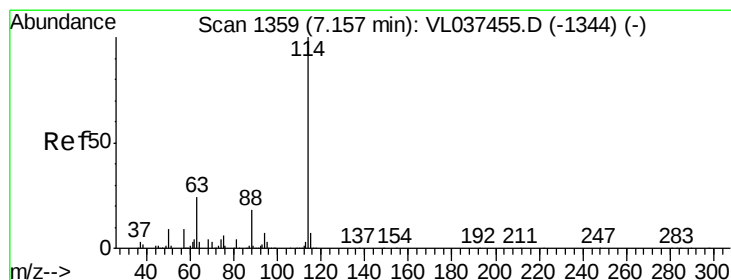
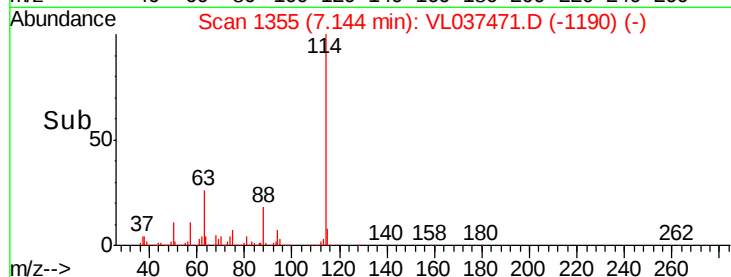
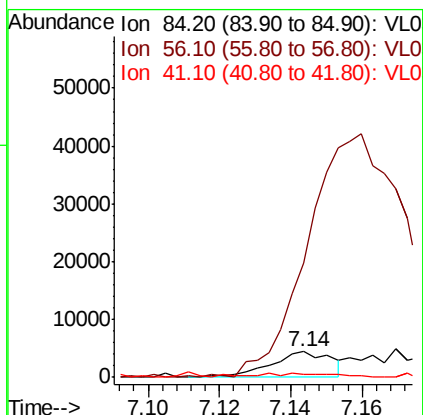
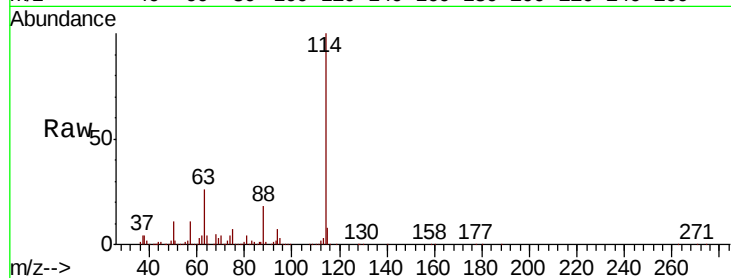




#30
Cvclohexane
Concen: 0.035 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. 0.03 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

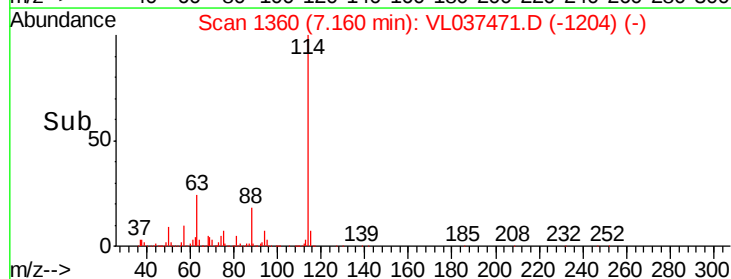
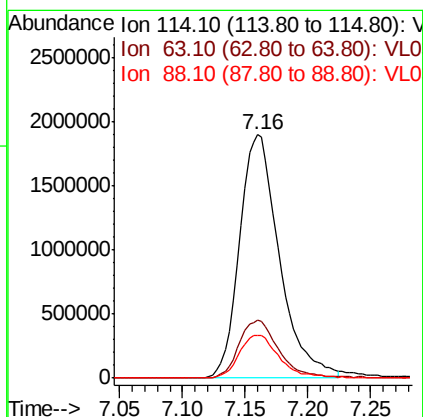
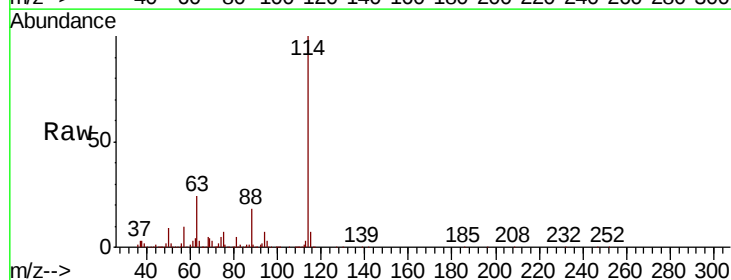
Instrument :
MSVOA_L
ClientSampled :

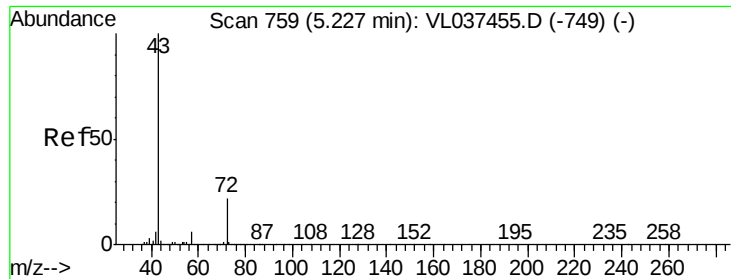
Tot Ion: 84 Resp: 5287
Ion Ratio Lower Upper
84 100
56 0.0 110.6 165.8#
41 0.0 67.0 100.6#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1360
Delta R.T. 0.00 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Tgt Ion: 114 Resp: 4201333
Ion Ratio Lower Upper
114 100
63 24.3 19.3 28.9
88 18.2 14.2 21.4

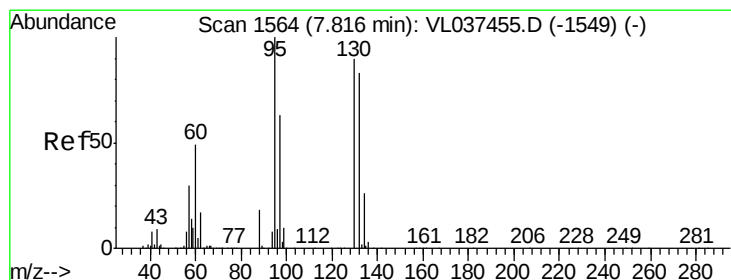
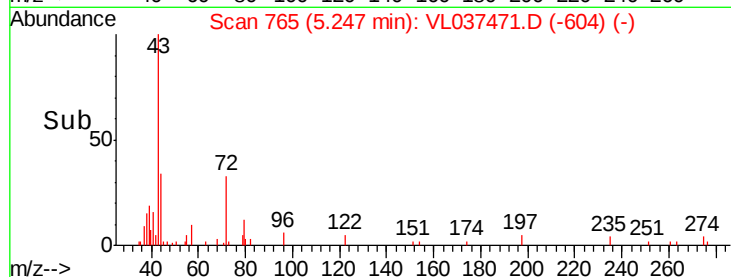
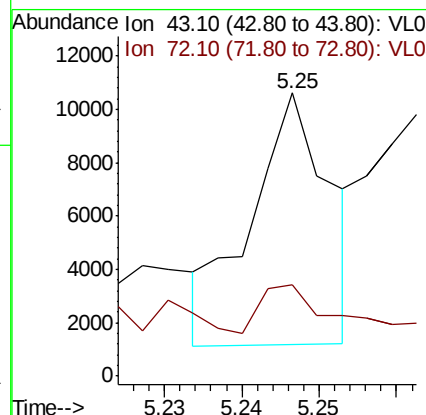
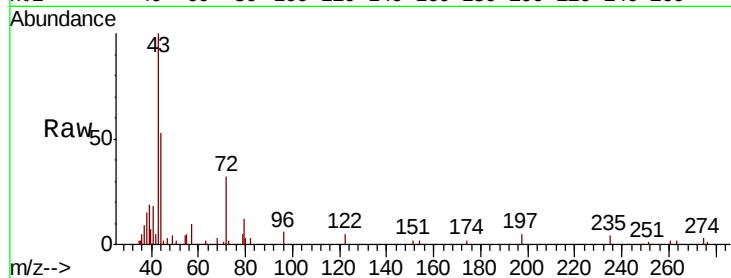




#34
2-Butanone
Concen: 0.039 ppbv
RT: 5.25 min Scan# 765
Delta R.T. 0.02 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

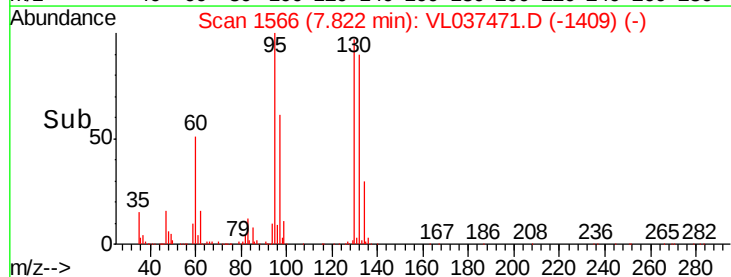
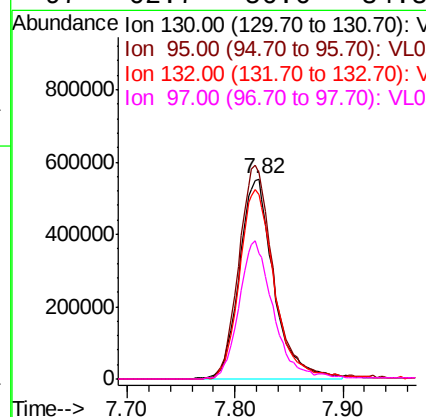
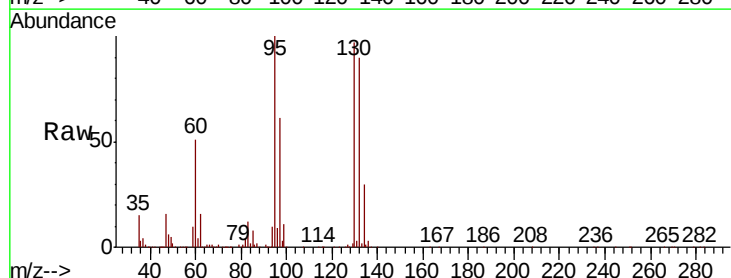
Instrument :
MSVOA_L
ClientSampleId :

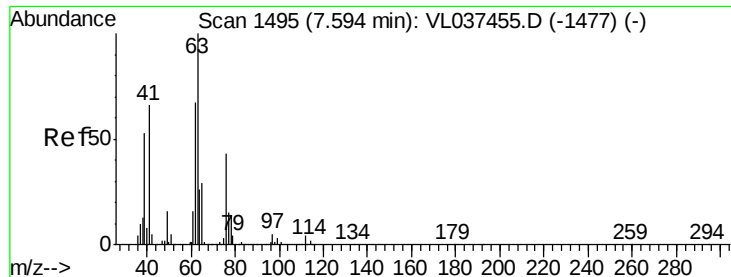
Tot Ion: 43 Resp: 6738
Ion Ratio Lower Upper
43 100
72 0.0 17.4 26.0#



#38
Trichloroethene
Concen: 8.512 ppbv
RT: 7.82 min Scan# 1566
Delta R.T. 0.01 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Tgt Ion:130 Resp: 1233385
Ion Ratio Lower Upper
130 100
95 103.0 89.2 133.8
132 92.4 74.0 111.0
97 62.7 56.6 84.8

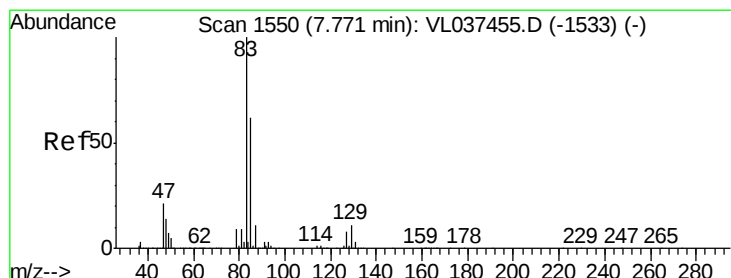
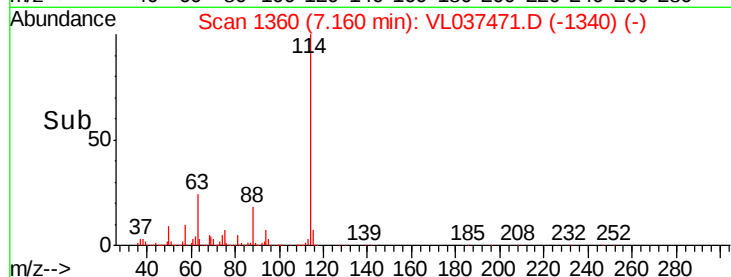
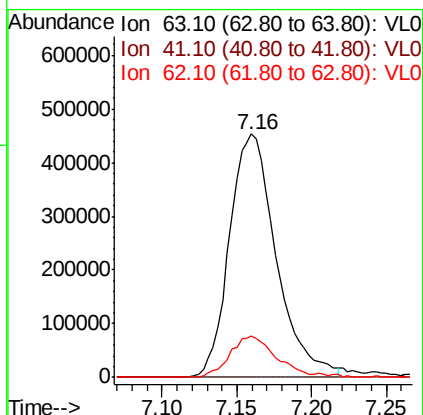
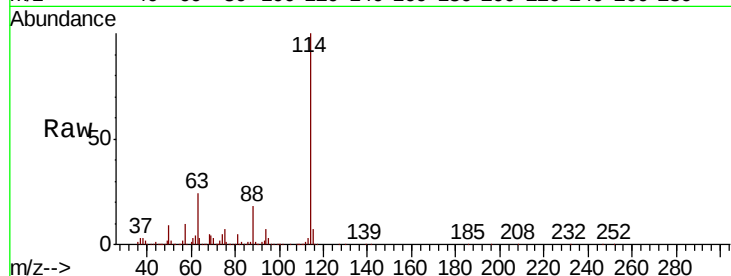




#39
 1,2-Dichloropropane
 Concen: 7.244 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. -0.43 min
 Lab File: VL037471.D
 Acq: 16 Aug 2021 21:21

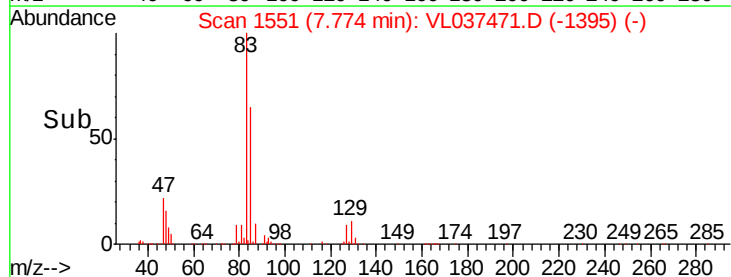
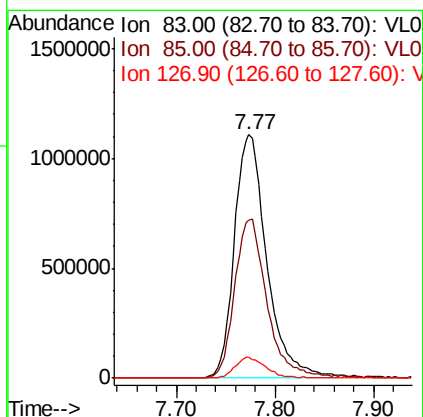
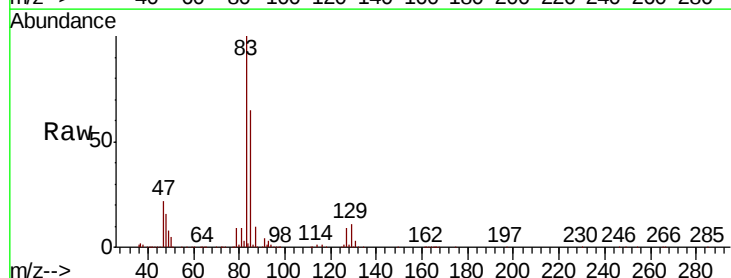
Instrument :
 MSVOA_L
 ClientSampleId :

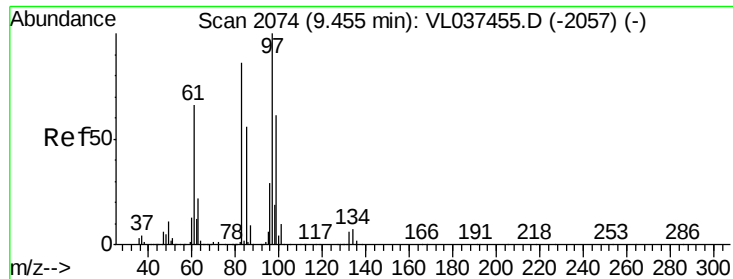
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.1	52.4	78.6#
62	16.9	53.6	80.4#



#42
 Bromodichloromethane
 Concen: 9.905 ppbv
 RT: 7.77 min Scan# 1551
 Delta R.T. 0.00 min
 Lab File: VL037471.D
 Acq: 16 Aug 2021 21:21

Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.7	49.5	74.3
127	8.8	6.3	9.5

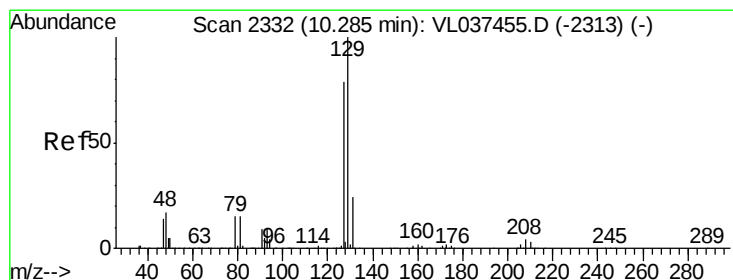
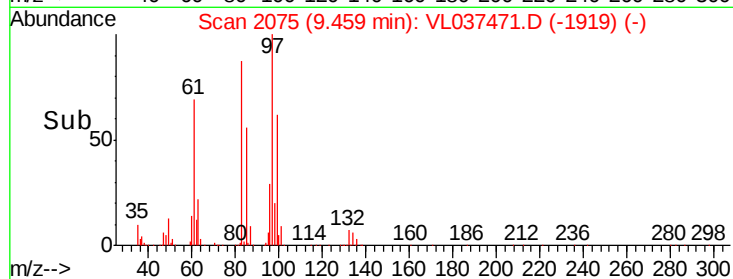
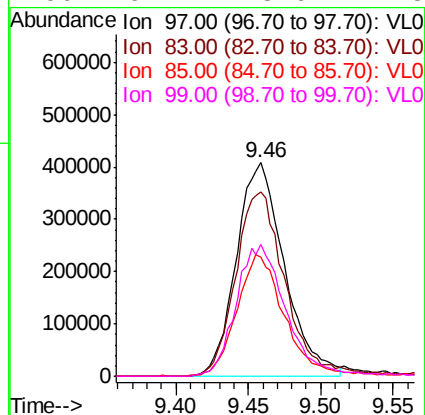
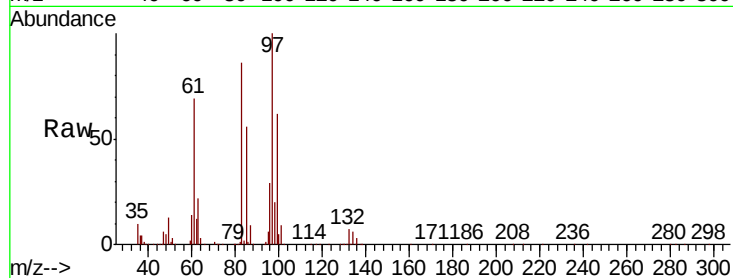




#47
 1,1,2-Trichloroethane
 Concen: 6.355 ppbv
 RT: 9.46 min Scan# 2075
 Delta R.T. 0.00 min
 Lab File: VL037471.D
 Acq: 16 Aug 2021 21:21

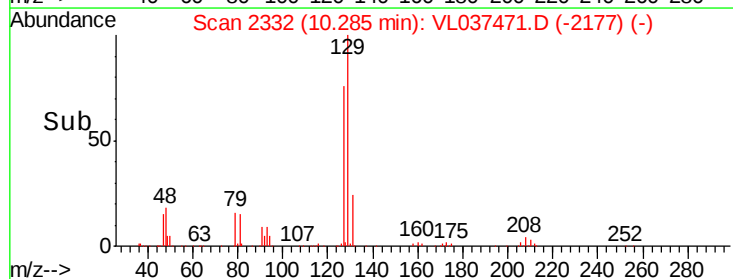
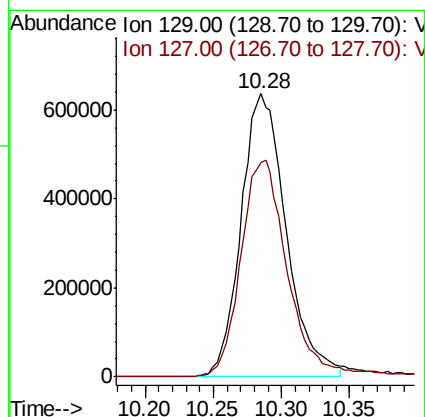
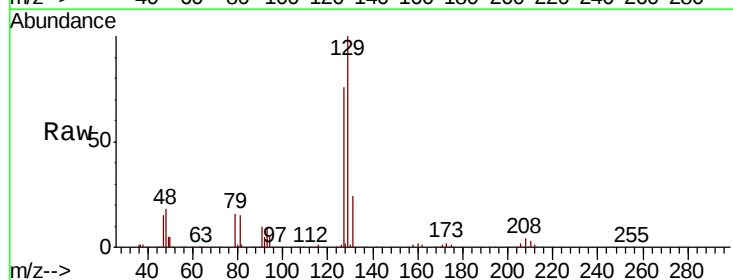
Instrument :
 MSVOA_L
 ClientSampleId :

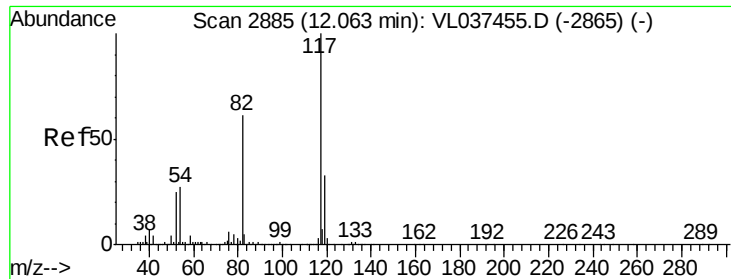
Tot Ion	97	Resp	931910
Ion Ratio	100	Lower	Upper
83	86.4	68.7	103.1
85	55.7	44.7	67.1
99	61.7	48.6	72.8



#48
 Dibromochloromethane
 Concen: 6.912 ppbv
 RT: 10.28 min Scan# 2332
 Delta R.T. -0.00 min
 Lab File: VL037471.D
 Acq: 16 Aug 2021 21:21

Tgt Ion	129	Resp	1458559
Ion Ratio	100	Lower	Upper
127	81.0	40.0	120.0

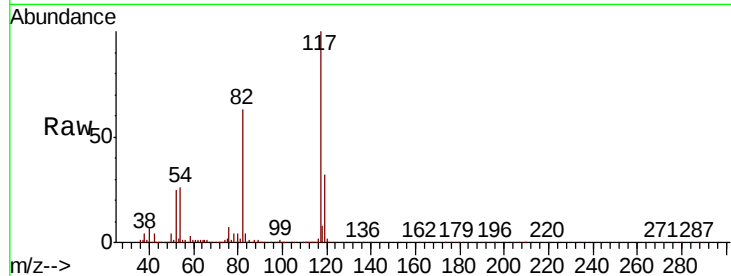




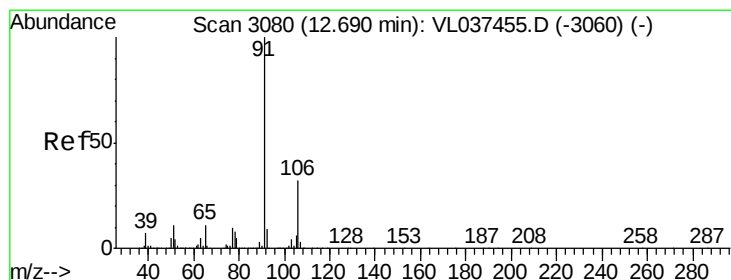
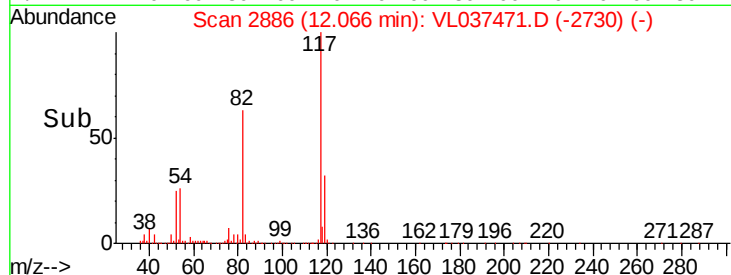
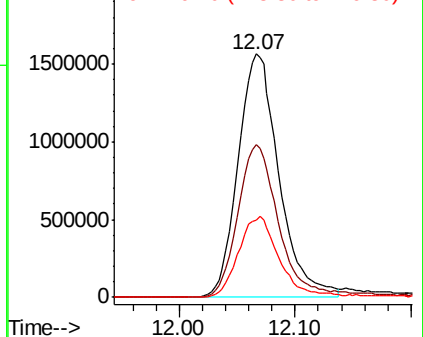
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. 0.00 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 3832609
Ion Ratio Lower Upper
117 100
82 65.0 52.9 79.3
119 34.0 24.8 37.2

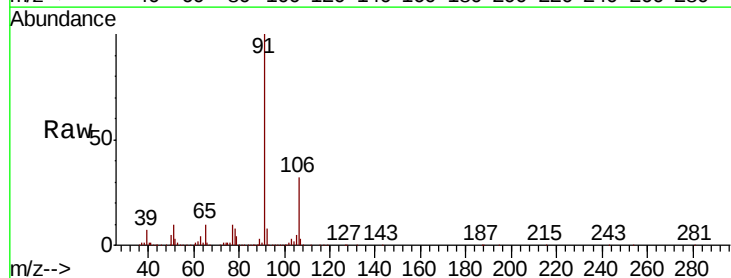


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

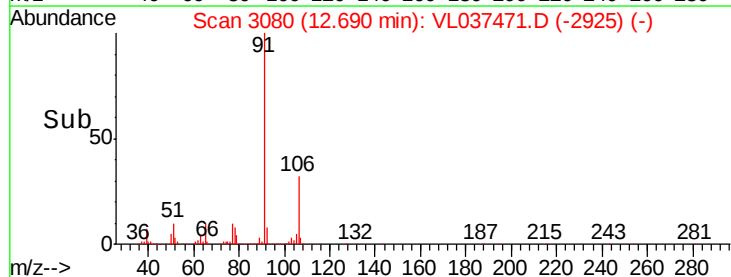
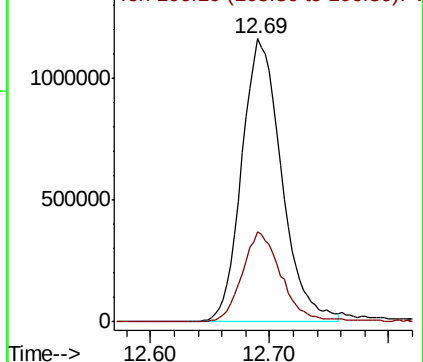


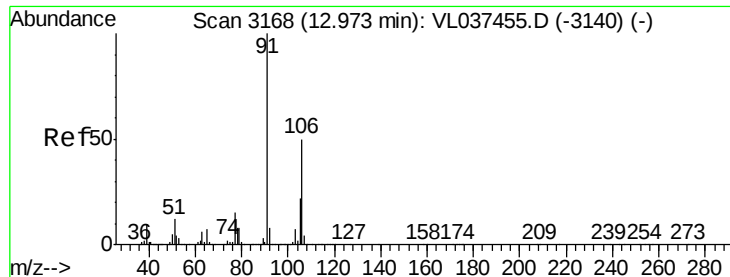
#58
Ethyl Benzene
Concen: 5.064 ppbv
RT: 12.69 min Scan# 3080
Delta R.T. -0.00 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Tgt Ion: 91 Resp: 2693315
Ion Ratio Lower Upper
91 100
106 31.7 25.7 38.5



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 5.841 ppbv

RT: 12.69 min Scan# 3080

Delta R.T. -0.28 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :

MSVOA_L

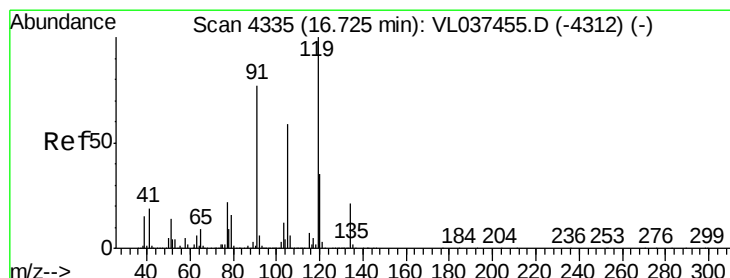
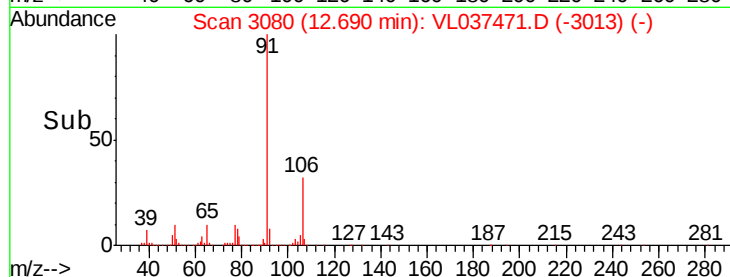
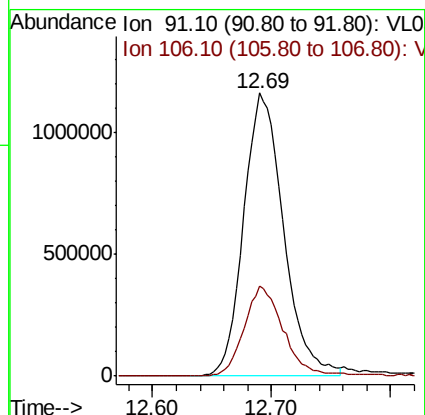
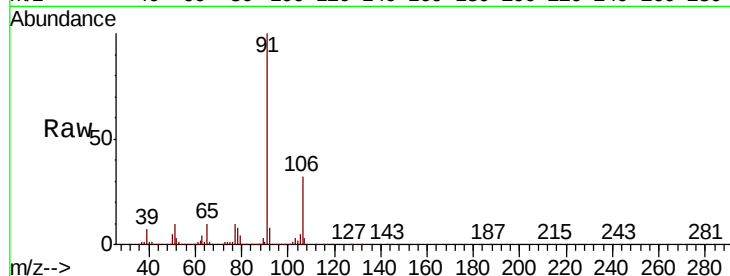
ClientSampled :

Tot Ion: 91 Resp: 2693315

Ion Ratio Lower Upper

91 100

106 31.9 36.9 55.3#



#65

tert-Butylbenzene

Concen: 0.089 ppbv

RT: 16.95 min Scan# 4405

Delta R.T. 0.22 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

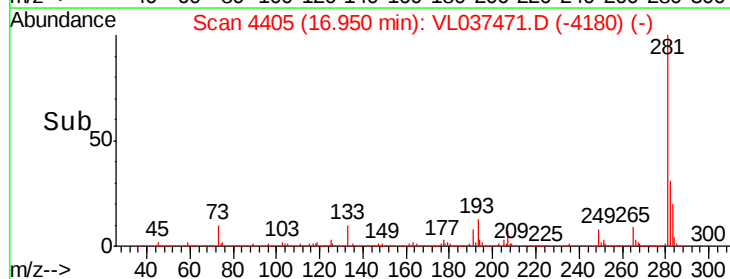
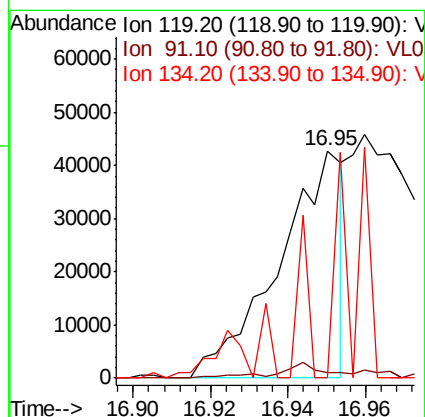
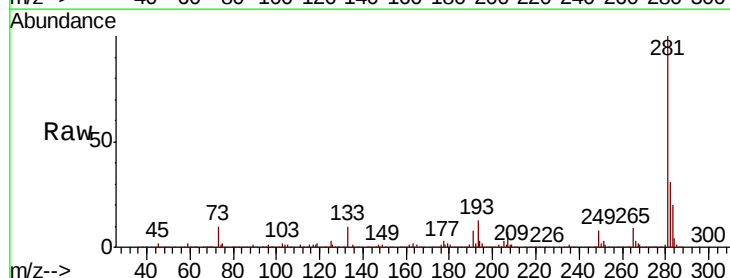
Tgt Ion: 119 Resp: 49011

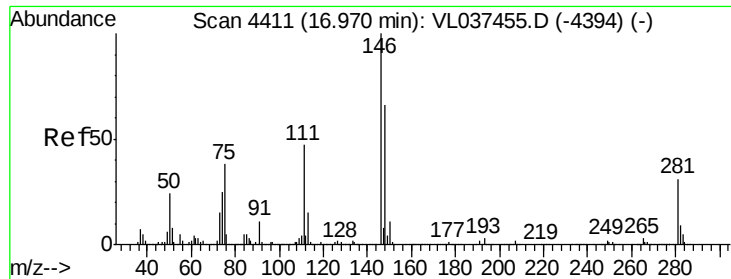
Ion Ratio Lower Upper

119 100

91 11.4 62.9 94.3#

134 0.0 16.4 24.6#

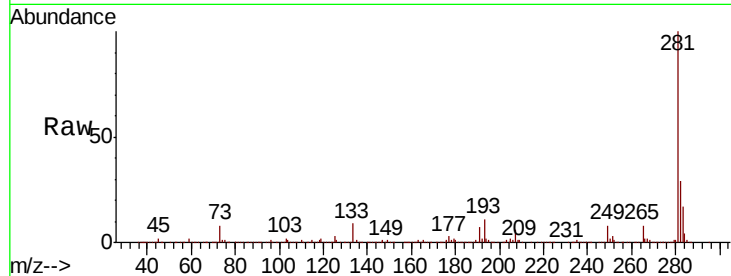




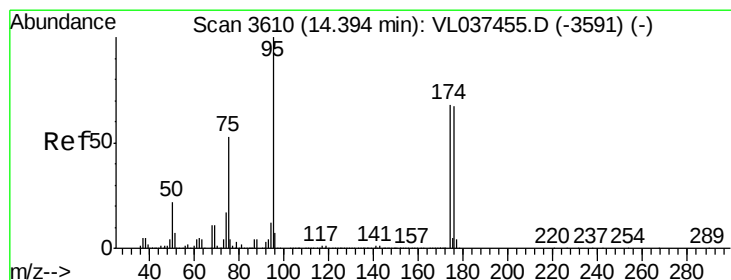
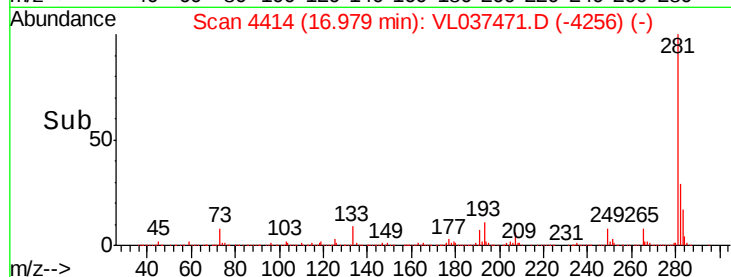
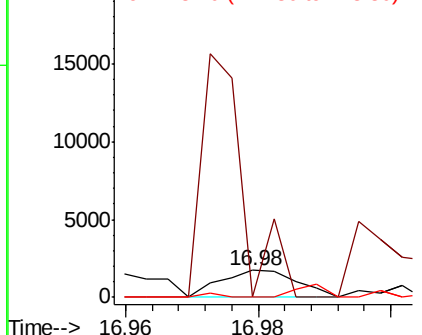
#66
Benzyl Chloride
Concen: 0.056 ppbv
RT: 16.98 min Scan# 4414
Delta R.T. 0.01 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 91 Resp: 1389
Ion Ratio Lower Upper
91 100
126 892.2 15.9 23.9#
128 0.0 5.4 8.0#

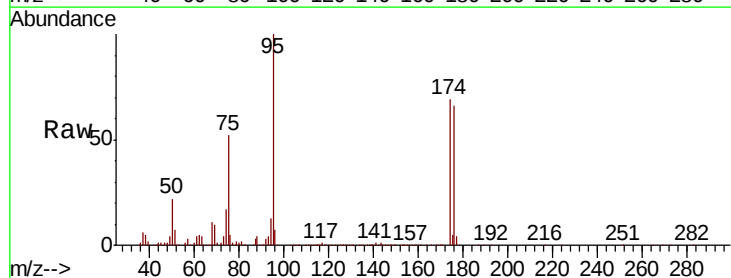


Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 126.10 (125.80 to 126.80): V
Ion 128.10 (127.80 to 128.80): V

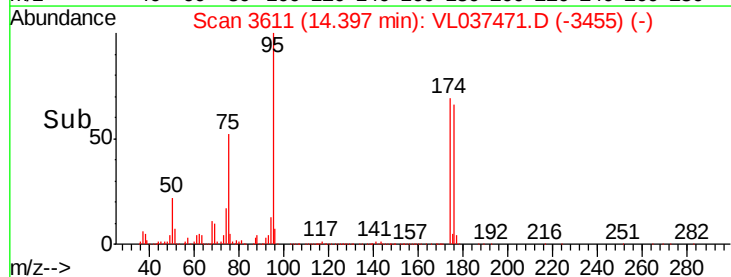
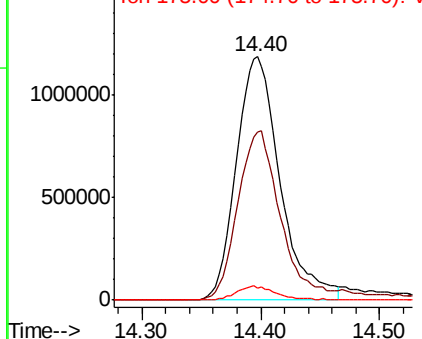


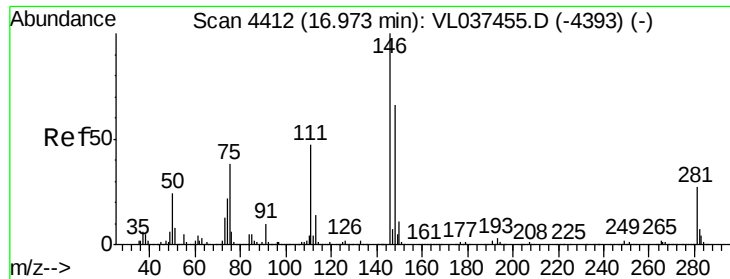
#68
1-Bromo-4-Fluorobenzene
Concen: 11.079 ppbv
RT: 14.40 min Scan# 3611
Delta R.T. 0.00 min
Lab File: VL037471.D
Acq: 16 Aug 2021 21:21

Tgt Ion: 95 Resp: 3016571
Ion Ratio Lower Upper
95 100
174 73.5 59.6 89.4
175 5.6 4.6 7.0



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





#75

1,3-Dichlorobenzene

Concen: 8.381 ppbv

RT: 17.12 min Scan# 4457

Delta R.T. 0.14 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :

MSVOA_L

ClientSampleId :

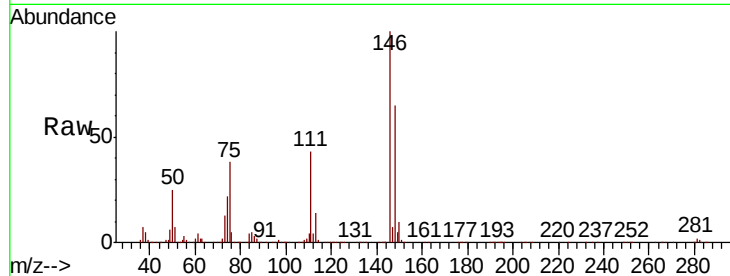
Tot Ion:146 Resp: 2554313

Ion Ratio Lower Upper

146 100

111 45.8 23.4 70.0

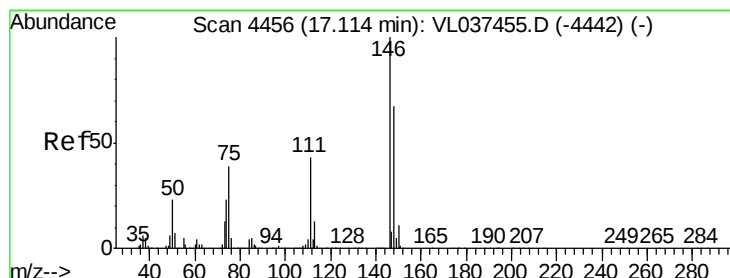
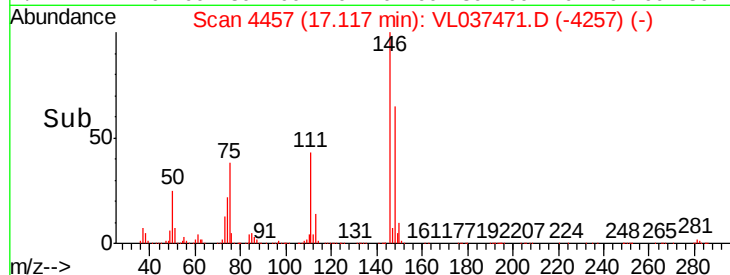
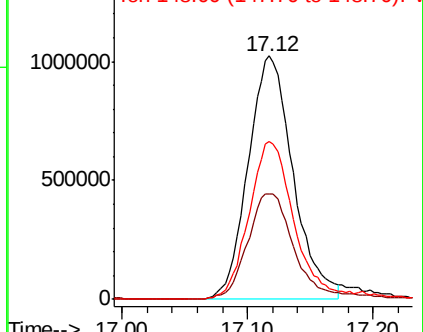
148 67.1 33.1 99.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 8.320 ppbv

RT: 17.12 min Scan# 4457

Delta R.T. 0.00 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

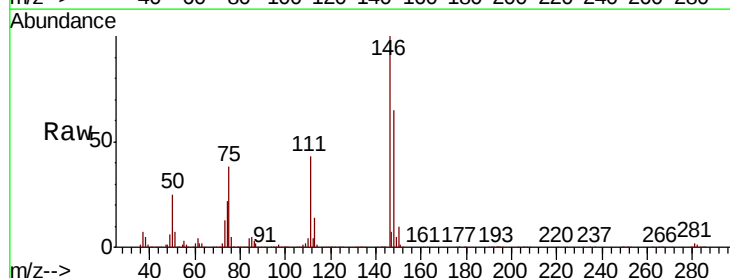
Tgt Ion:146 Resp: 2554313

Ion Ratio Lower Upper

146 100

111 45.9 22.1 66.5

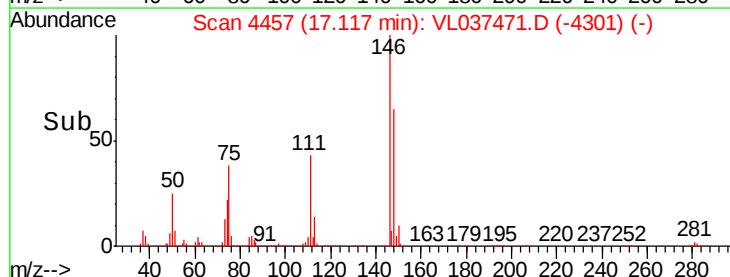
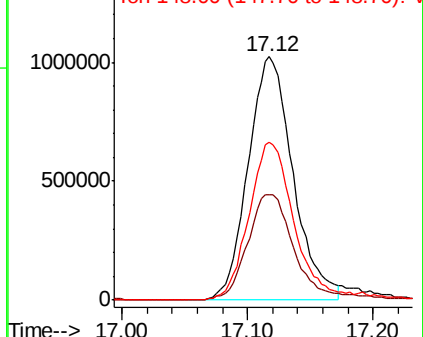
148 67.0 32.4 97.0

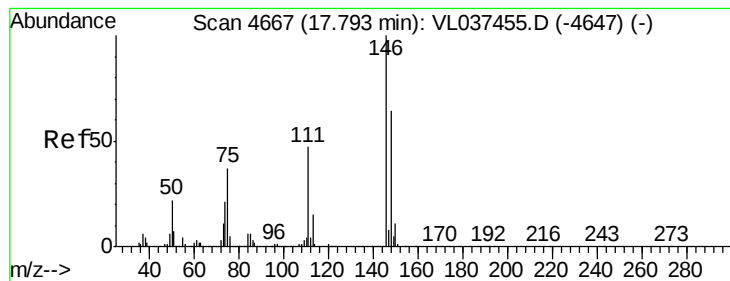


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 8.386 ppbv

RT: 17.80 min Scan# 4668

Delta R.T. 0.00 min

Lab File: VL037471.D

Acq: 16 Aug 2021 21:21

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion:146 Resp: 2516613

Ion Ratio Lower Upper

146 100

111 48.9 23.4 70.3

148 65.3 32.5 97.5

