

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX060718\  
 Data File : VX002375.D  
 Acq On : 07 Jun 2018 14:07  
 Operator : JC/MD  
 Sample : J3340-08  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF5-TB-2018-1

Quant Time: Jun 07 15:14:00 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 05 03:22:35 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 238992   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 354583   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 316456   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 168325   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 190918   | 56.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 112.60% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 140740   | 50.47 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.94% |          |
| 50) Toluene-d8              | 8.72  | 98   | 565407   | 52.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.80% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 192516   | 46.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.42%  |          |

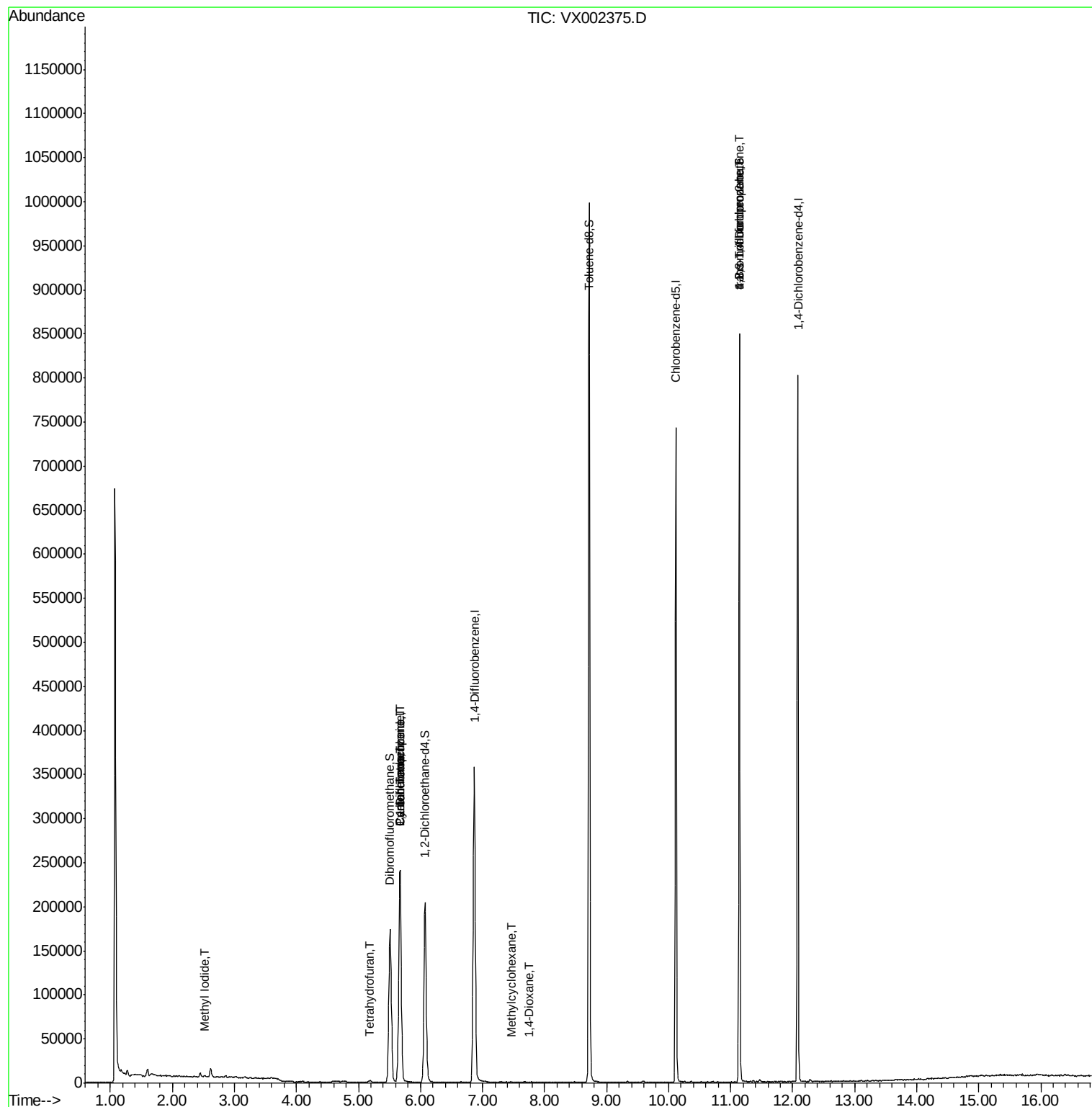
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 423      | Below Cal | #      | 79     |
| 5) Bromomethane                | 1.66  | 94   | 1324     | Below Cal |        | 83     |
| 8) Diethyl Ether               | 2.41  | 74   | 44       | Below Cal |        | 87     |
| 10) Methyl Iodide              | 2.52  | 142  | 1533     | 0.423     | ug/l # | 84     |
| 11) Tert butyl alcohol         | 3.04  | 59   | 743      | Below Cal | #      | 52     |
| 13) Acrolein                   | 2.30  | 56   | 200      | Below Cal | #      | 14     |
| 15) Acrylonitrile              | 3.16  | 53   | 406      | Below Cal | #      | 33     |
| 16) Acetone                    | 2.45  | 43   | 5303     | Below Cal | #      | 89     |
| 18) Methyl Acetate             | 2.78  | 43   | 555      | Below Cal |        | 98     |
| 19) Methyl tert-butyl Ether    | 3.23  | 73   | 19       | Below Cal | #      | 54     |
| 20) Methylene Chloride         | 2.86  | 84   | 899      | Below Cal | #      | 76     |
| 22) Diisopropyl ether          | 3.92  | 45   | 136      | Below Cal | #      | 68     |
| 28) Bromochloromethane         | 5.03  | 49   | 44       | Below Cal | #      | 13     |
| 29) Tetrahydrofuran            | 5.18  | 42   | 1863     | 1.233     | ug/l   | 95     |
| 31) Cyclohexane                | 5.67  | 56   | 5100     | 1.182     | ug/l # | 19     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 17095    | 4.586     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 22626    | 5.802     | ug/l # | 16     |
| 39) Methylcyclohexane          | 7.47  | 83   | 31       | 0.269     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.75  | 88   | 20       | 0.280     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 103768   | 28.095    | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 103768   | 98.482    | ug/l # | 6      |

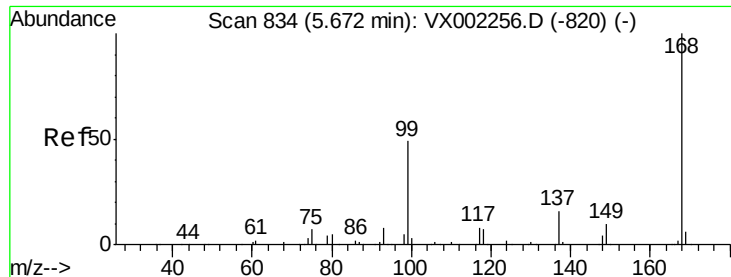
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX060718\  
Data File : VX002375.D  
Acq On : 07 Jun 2018 14:07  
Operator : JC/MD  
Sample : J3340-08  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
LF5-TB-2018-1

Quant Time: Jun 07 15:14:00 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X060418W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jun 05 03:22:35 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.00 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampleId :

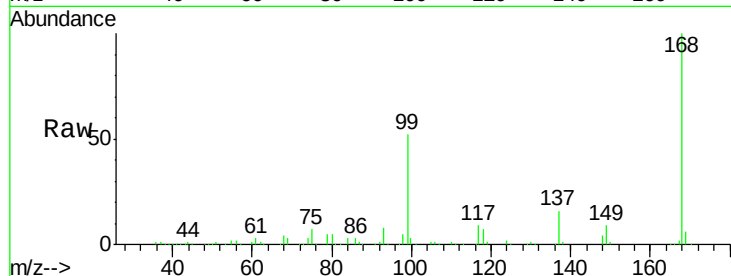
LF5-TB-2018-1

Tot Ion:168 Resp: 238992

Ion Ratio Lower Upper

168 100

99 51.8 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

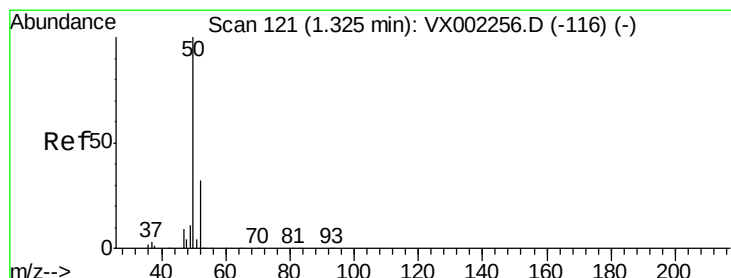
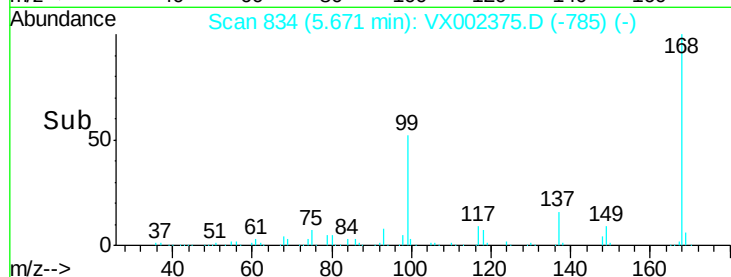
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX002375.D

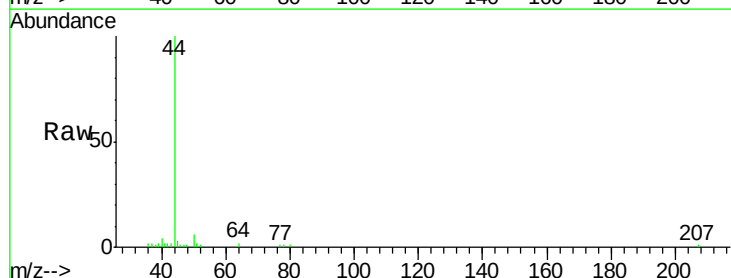
Acq: 07 Jun 2018 14:07

Tgt Ion: 50 Resp: 423

Ion Ratio Lower Upper

50 100

52 20.2 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

400

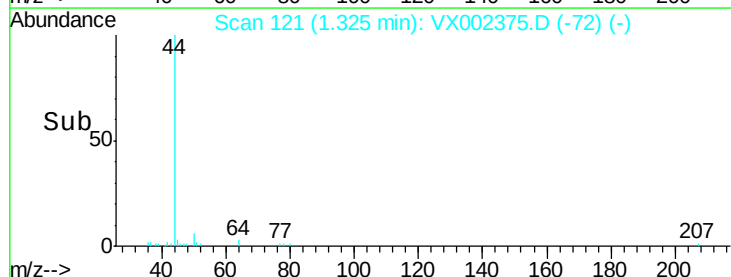
300

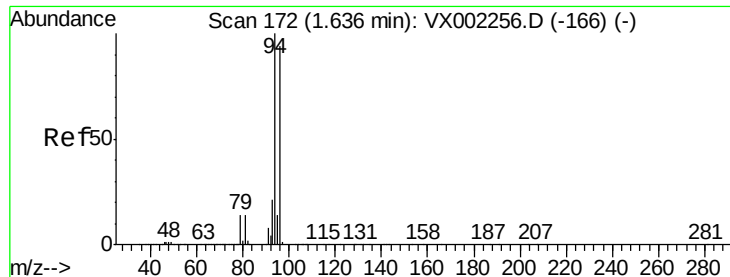
200

100

0

Time--> 1.30 1.32 1.34 1.36





#5

Bromomethane

Concen: Below Cal

RT: 1.66 min Scan# 176

Delta R.T. 0.02 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampleId :

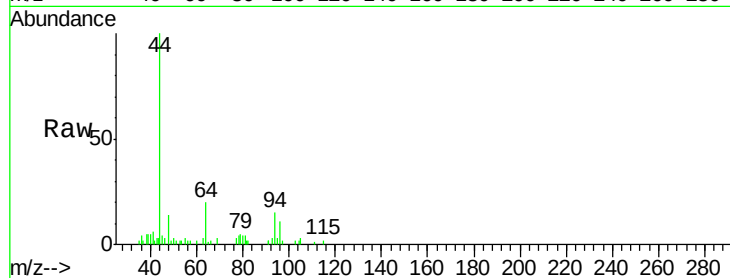
LF5-TB-2018-1

Tot Ion: 94 Resp: 1324

Ion Ratio Lower Upper

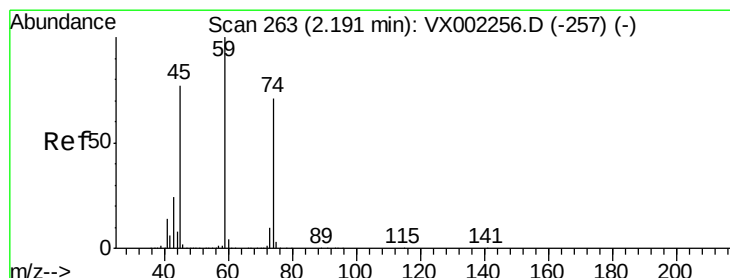
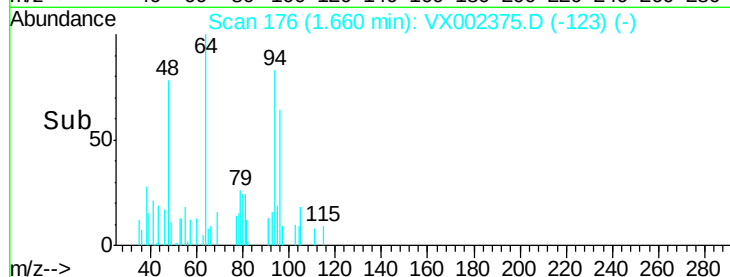
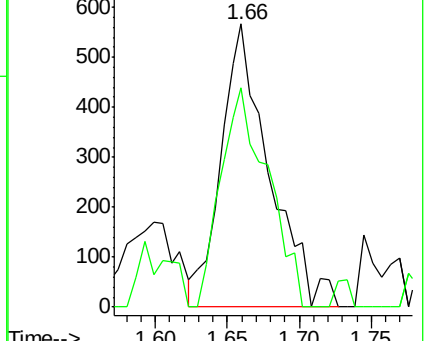
94 100

96 77.2 74.9 112.3



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#8

Diethyl Ether

Concen: Below Cal

RT: 2.41 min Scan# 299

Delta R.T. 0.22 min

Lab File: VX002375.D

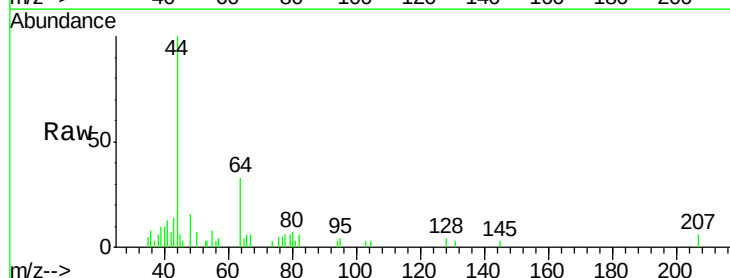
Acq: 07 Jun 2018 14:07

Tgt Ion: 74 Resp: 44

Ion Ratio Lower Upper

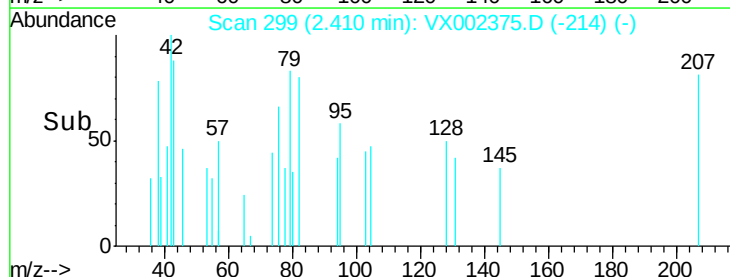
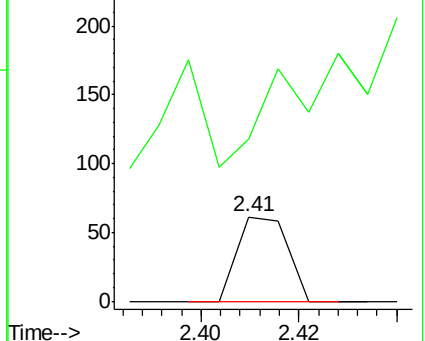
74 100

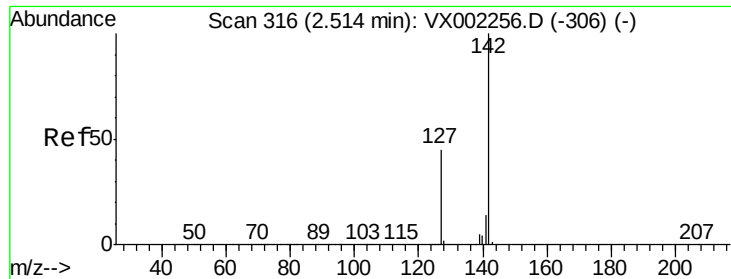
45 93.2 53.1 159.4



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

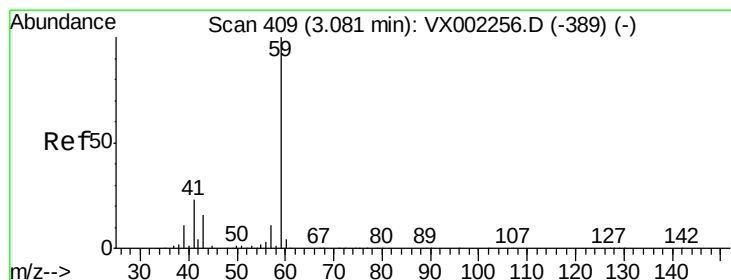
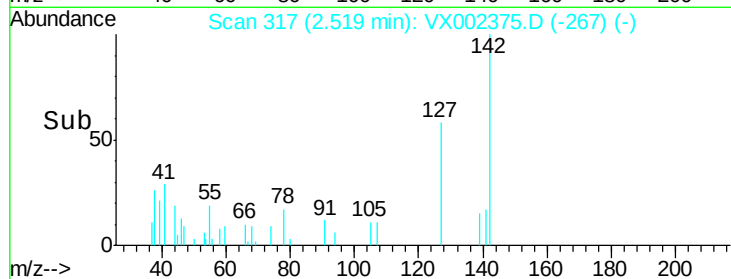
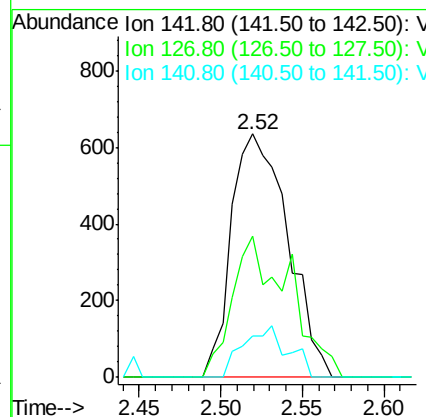
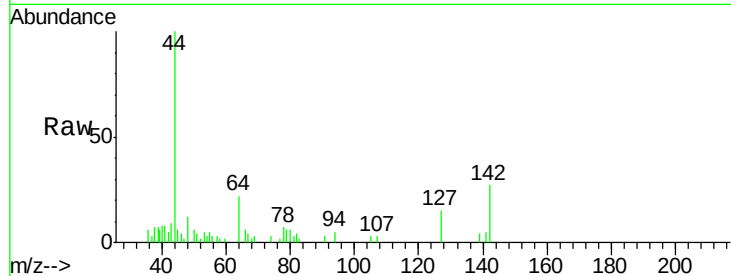




#10  
Methvl Iodide  
Concen: 0.423 ug/l  
RT: 2.52 min Scan# 317  
Delta R.T. 0.01 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

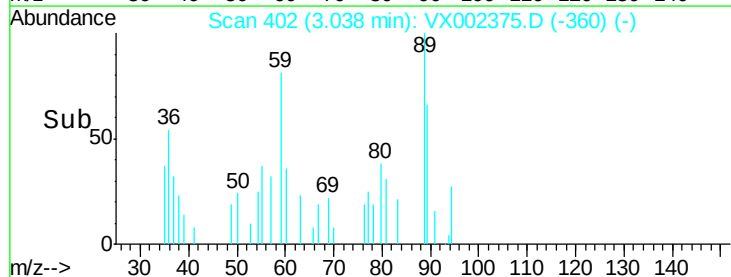
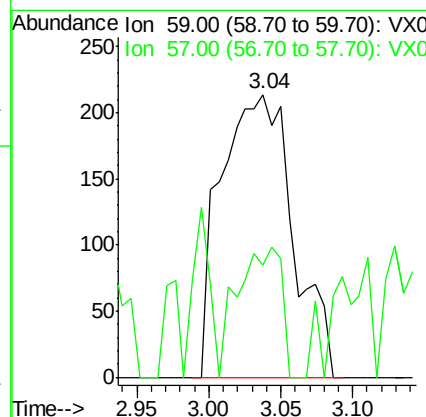
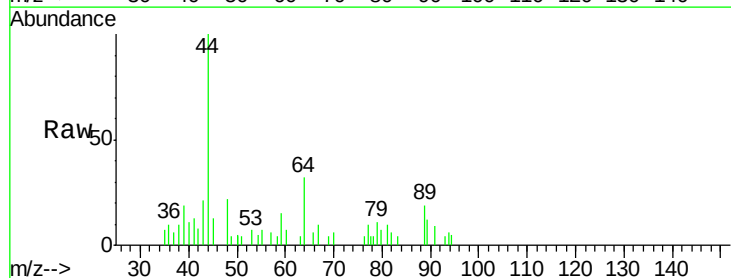
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF5-TB-2018-1

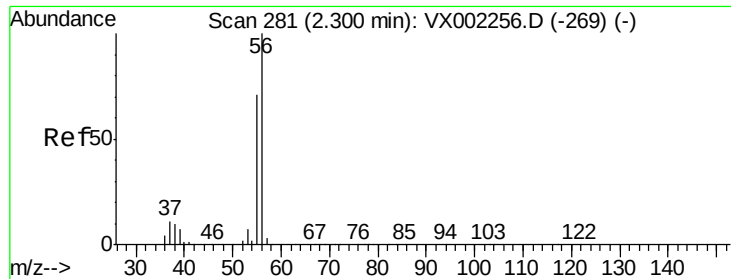
Tot Ion:142 Resp: 1533  
Ion Ratio Lower Upper  
142 100  
127 58.2 36.6 55.0#  
141 16.6 11.3 16.9



#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 3.04 min Scan# 402  
Delta R.T. -0.04 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

Tgt Ion: 59 Resp: 743  
Ion Ratio Lower Upper  
59 100  
57 28.0 8.2 12.2#





#13

Acrolein

Concen: Below Cal

RT: 2.30 min Scan# 281

Delta R.T. -0.00 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampled :

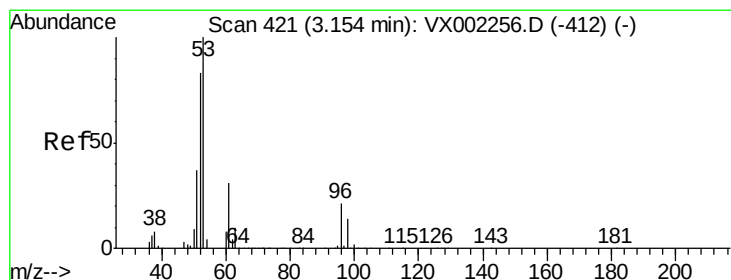
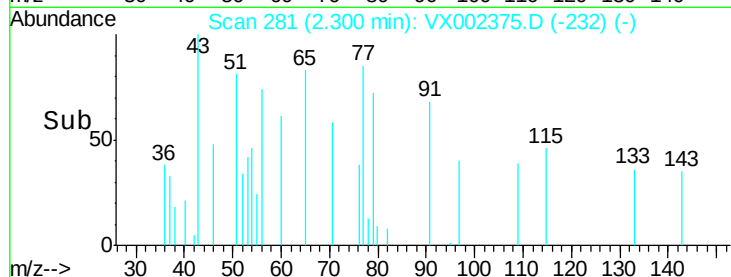
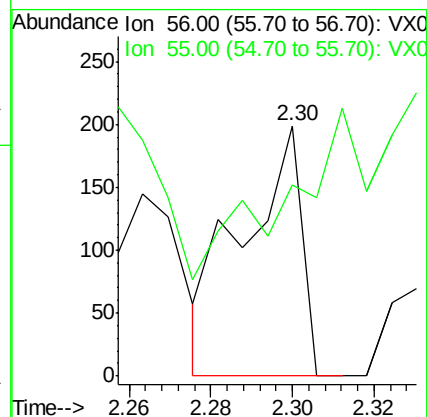
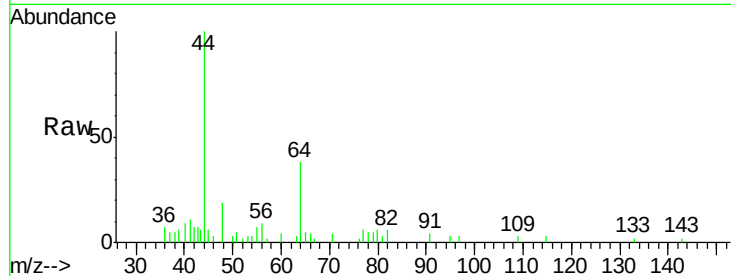
LF5-TB-2018-1

Tot Ion: 56 Resp: 200

Ion Ratio Lower Upper

56 100

55 0.0 57.0 85.4#



#15

Acrylonitrile

Concen: Below Cal

RT: 3.16 min Scan# 422

Delta R.T. 0.01 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

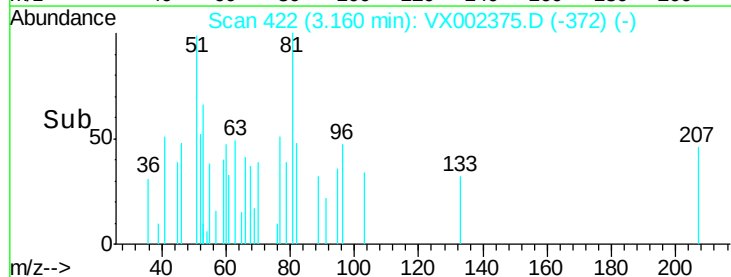
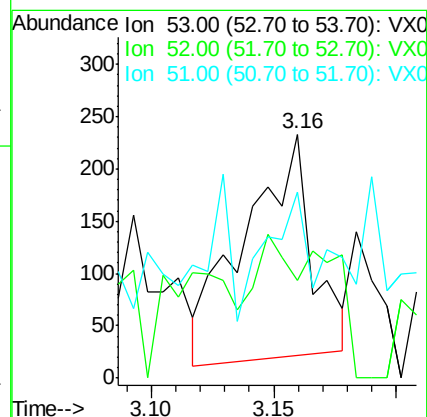
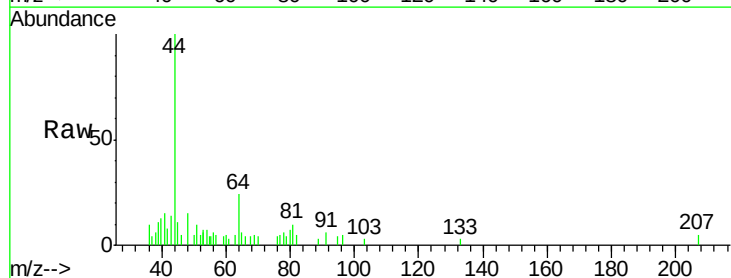
Tgt Ion: 53 Resp: 406

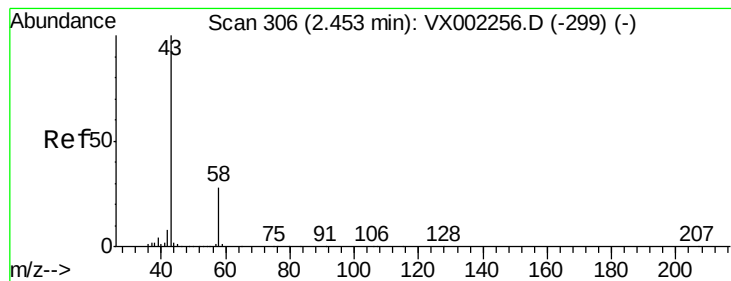
Ion Ratio Lower Upper

53 100

52 15.5 66.7 100.1#

51 9.1 29.9 44.9#





#16

Acetone

Concen: Below Cal

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampleId :

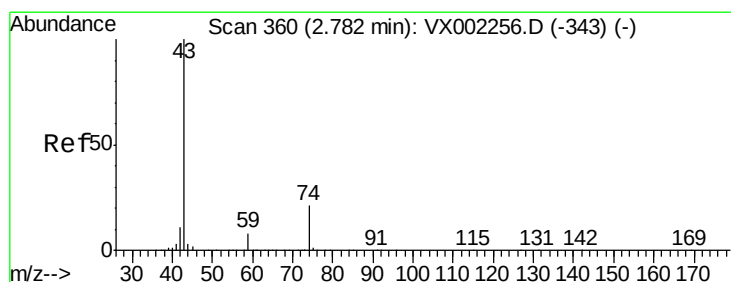
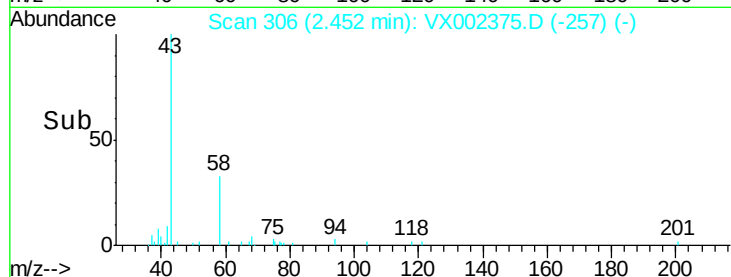
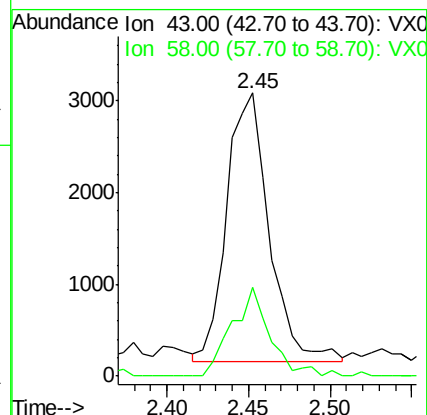
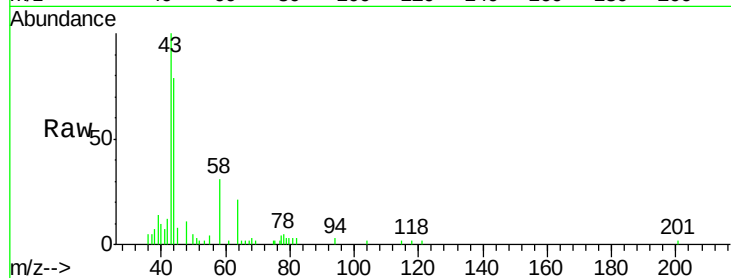
LF5-TB-2018-1

Tot Ion: 43 Resp: 5303

Ion Ratio Lower Upper

43 100

58 33.4 22.1 33.1#



#18

Methyl Acetate

Concen: Below Cal

RT: 2.78 min Scan# 360

Delta R.T. -0.00 min

Lab File: VX002375.D

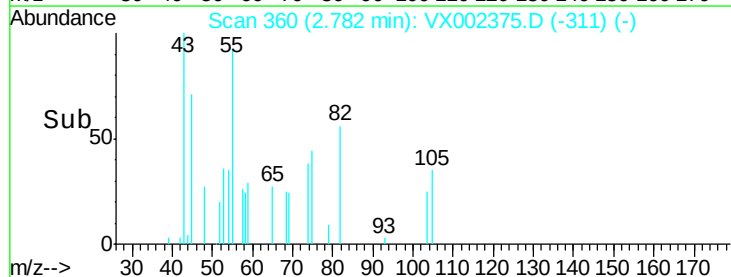
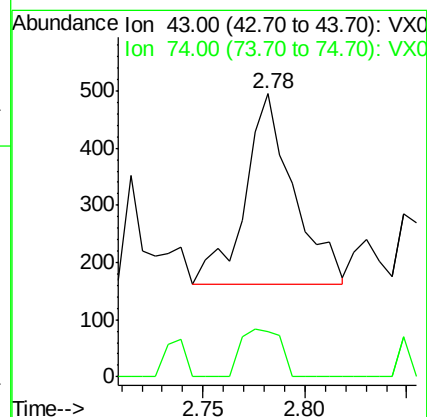
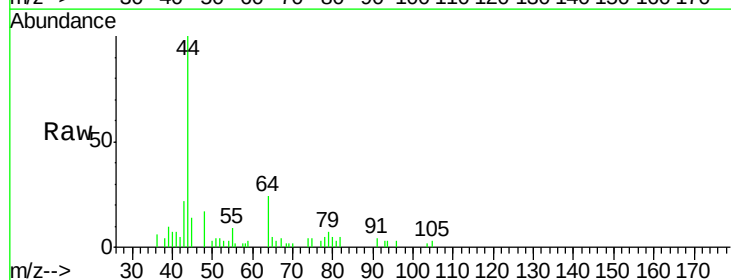
Acq: 07 Jun 2018 14:07

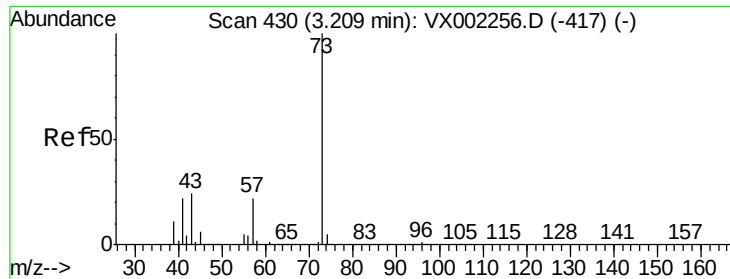
Tgt Ion: 43 Resp: 555

Ion Ratio Lower Upper

43 100

74 20.2 16.7 25.1





#19

Methyl tert-butyl Ether

Concen: Below Cal

RT: 3.23 min Scan# 433

Delta R.T. 0.02 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampleId :

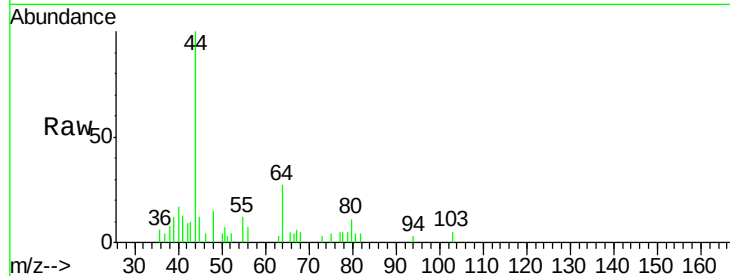
LF5-TB-2018-1

Tot Ion: 73 Resp: 19

Ion Ratio Lower Upper

73 100

57 0.0 17.7 26.5#



Abundance Ion 73.00 (72.70 to 73.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

120

100

80

60

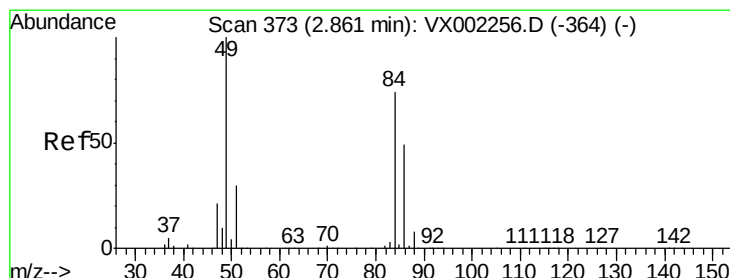
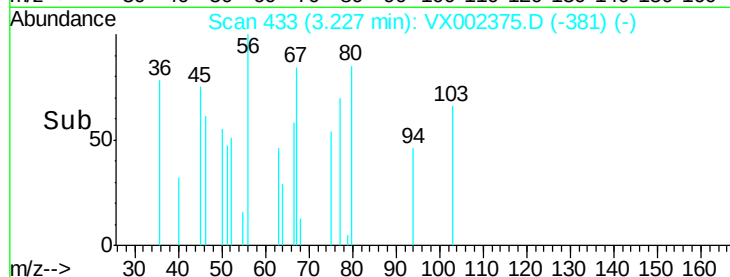
40

20

0

3.21 3.22 3.23 3.24

Time-->



#20

Methylene Chloride

Concen: Below Cal

RT: 2.86 min Scan# 373

Delta R.T. -0.00 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Tgt Ion: 84 Resp: 899

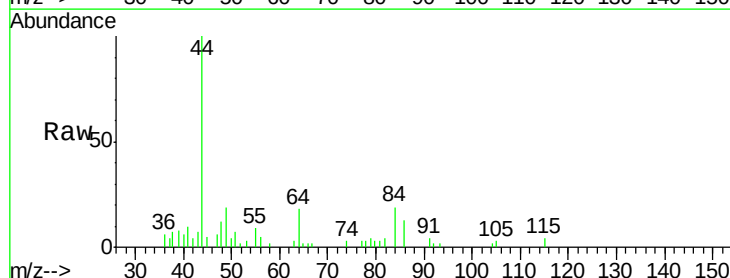
Ion Ratio Lower Upper

84 100

49 97.3 107.8 161.6#

51 20.4 32.8 49.2#

86 67.9 52.5 78.7



Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0

600

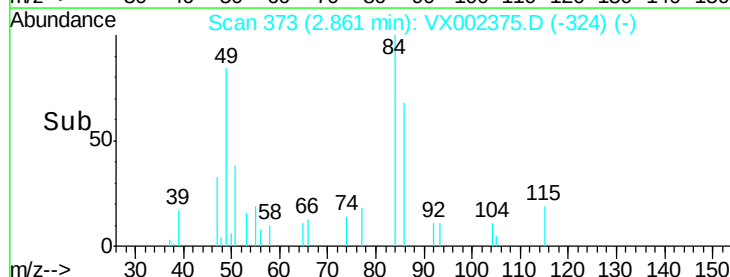
400

200

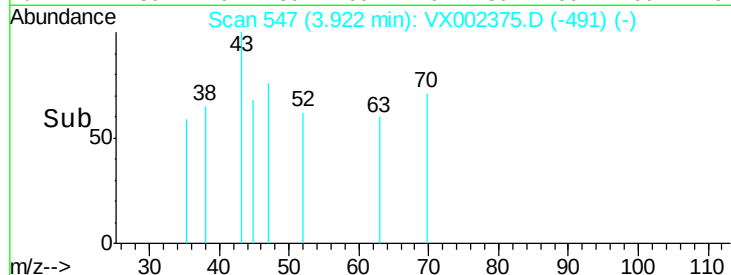
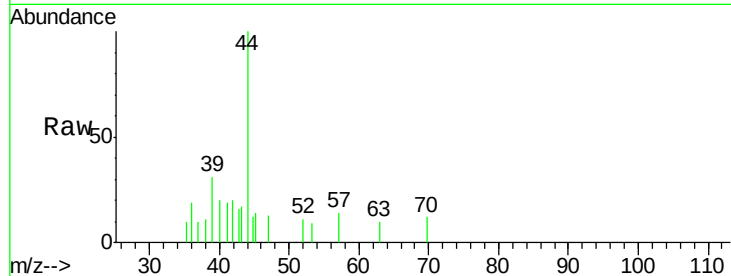
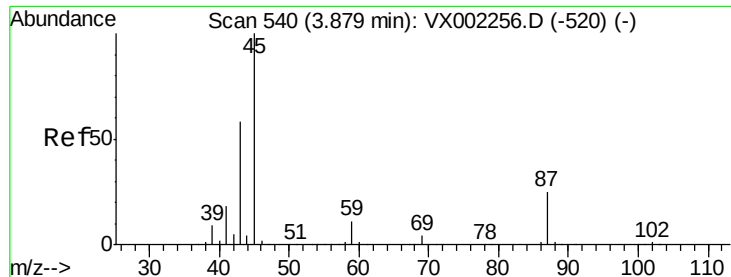
0

2.80 2.85 2.90

Time-->





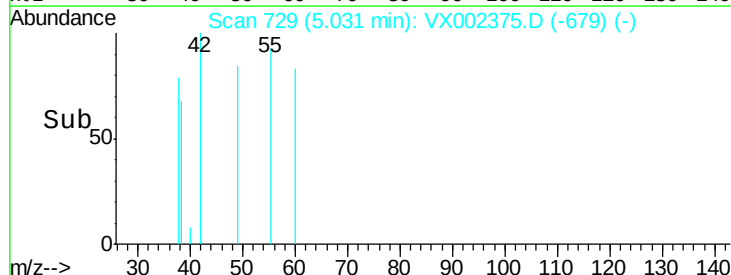
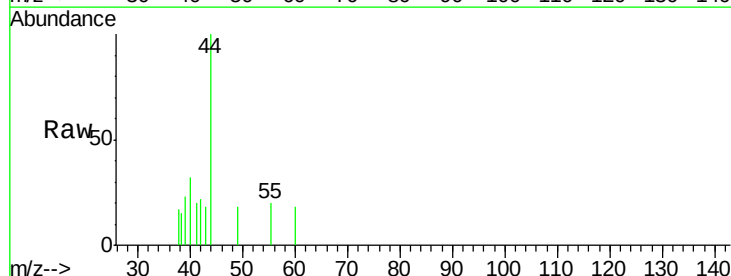
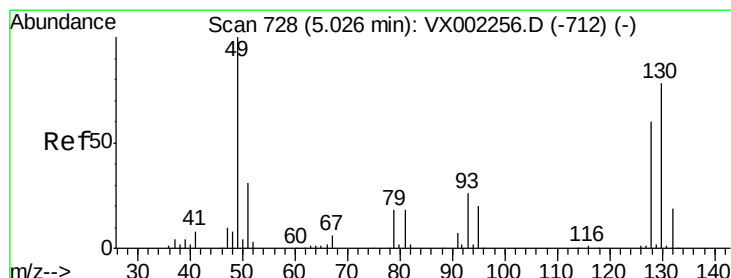
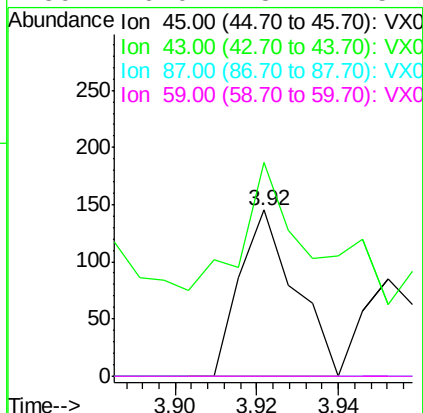


#22

Diisopropyl ether  
Concen: Below Cal  
RT: 3.92 min Scan# 547  
Delta R.T. 0.04 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

Instrument :  
MSVOA\_X  
ClientSampled :  
LF5-TB-2018-1

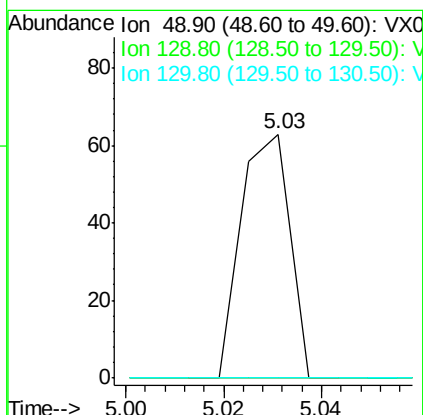
Tot Ion: 45 Resp: 136  
Ion Ratio Lower Upper  
45 100  
43 77.2 46.8 70.2#  
87 0.0 20.2 30.4#  
59 0.0 8.7 13.1#

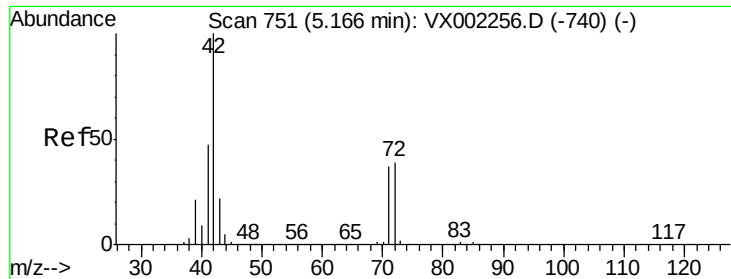


#28

Bromochloromethane  
Concen: Below Cal  
RT: 5.03 min Scan# 729  
Delta R.T. 0.01 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

Tgt Ion: 49 Resp: 44  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 4.2  
130 0.0 61.2 91.8#

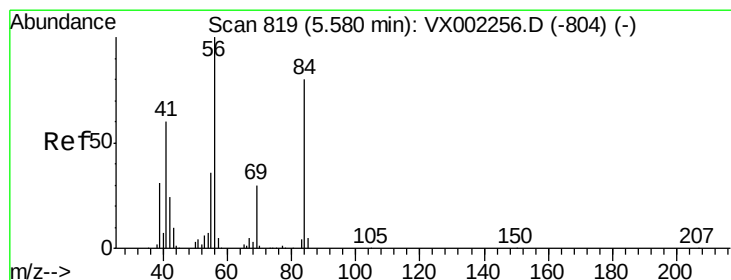
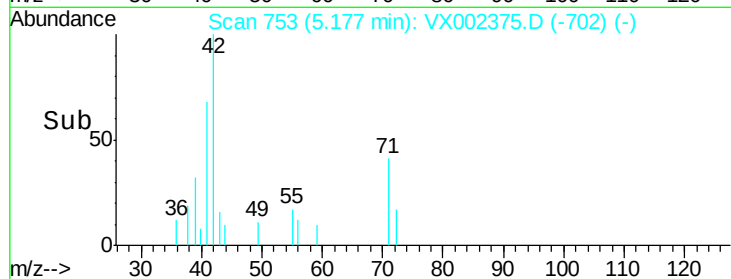
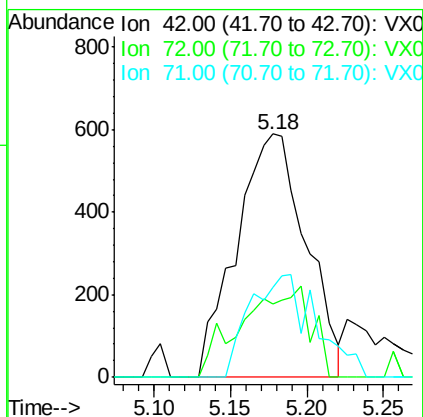
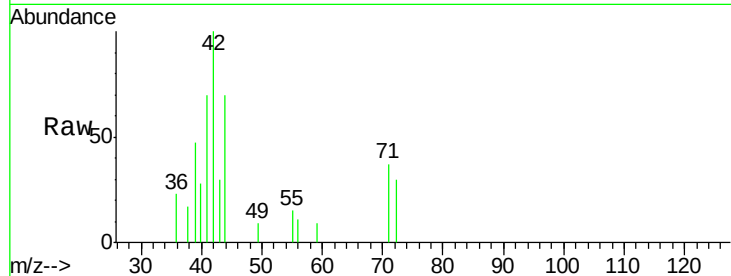




#29  
Tetrahydrofuran  
Concen: 1.233 ug/l  
RT: 5.18 min Scan# 753  
Delta R.T. 0.01 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

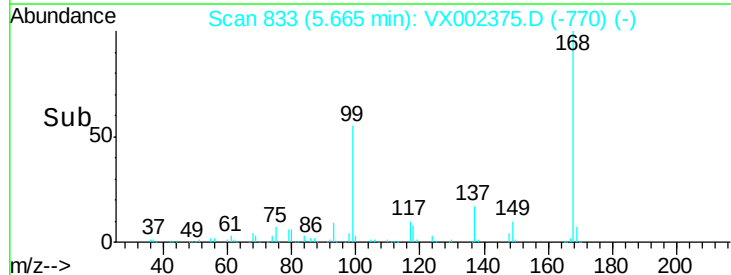
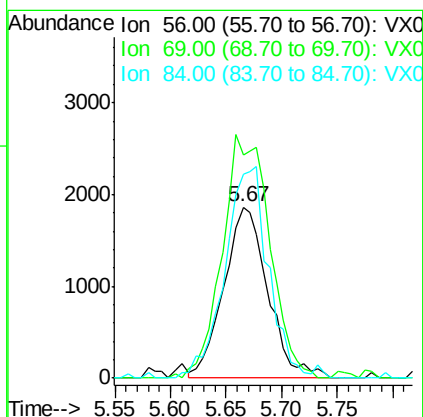
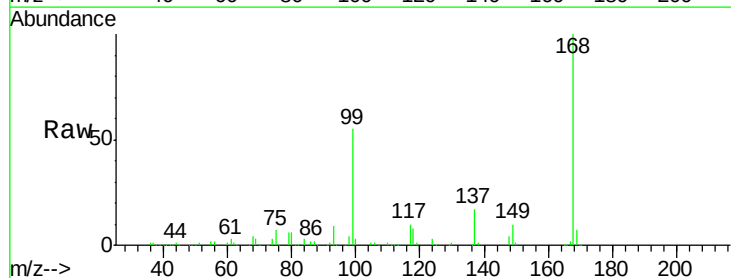
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF5-TB-2018-1

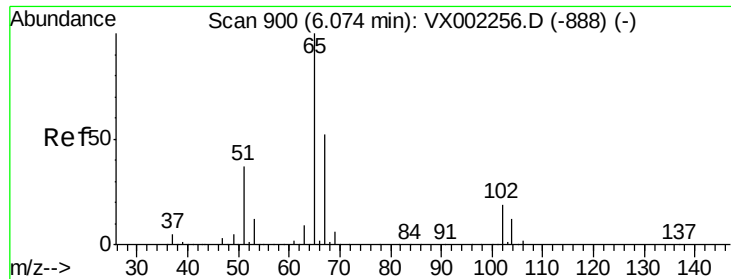
Tot Ion: 42 Resp: 1863  
Ion Ratio Lower Upper  
42 100  
72 36.7 32.0 48.0  
71 40.2 30.1 45.1



#31  
Cyclohexane  
Concen: 1.182 ug/l  
RT: 5.67 min Scan# 833  
Delta R.T. 0.08 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

Tgt Ion: 56 Resp: 5100  
Ion Ratio Lower Upper  
56 100  
69 126.9 23.7 35.5#  
84 119.6 64.1 96.1#

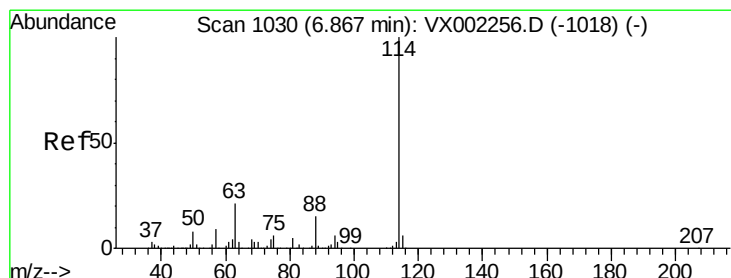
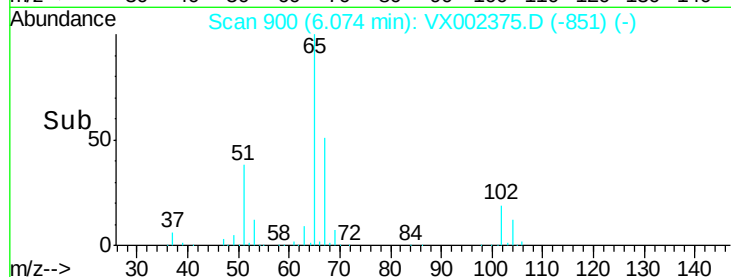
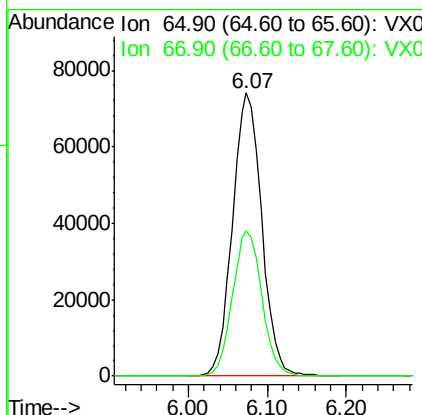
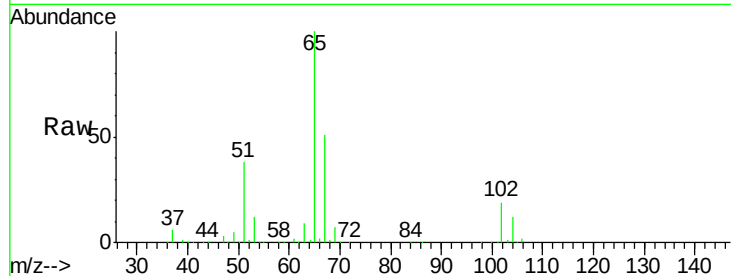




#33  
 1,2-Dichloroethane-d4  
 Concen: 56.299 ug/l  
 RT: 6.07 min Scan# 900  
 Delta R.T. -0.00 min  
 Lab File: VX002375.D  
 Acq: 07 Jun 2018 14:07

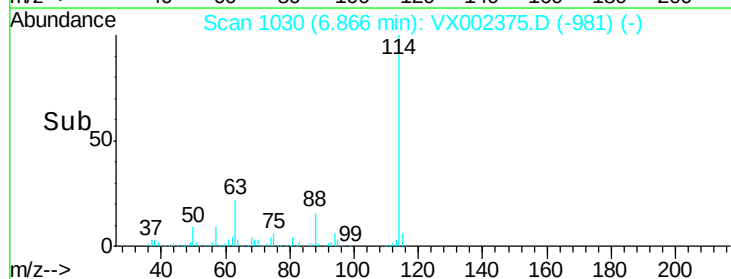
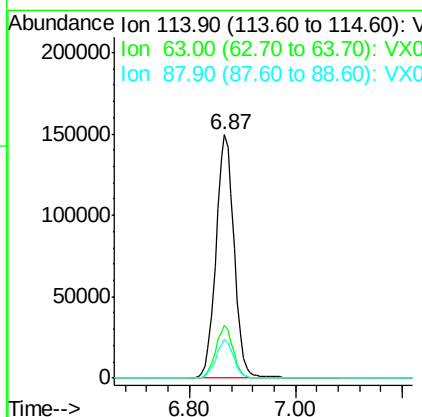
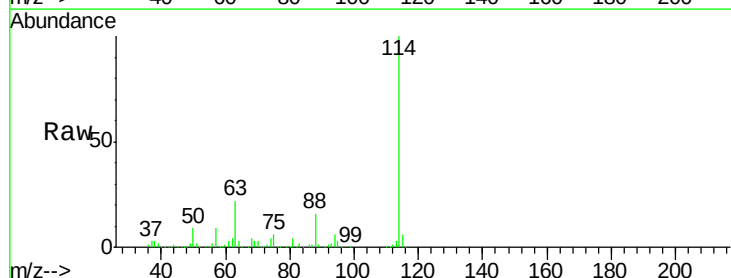
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF5-TB-2018-1

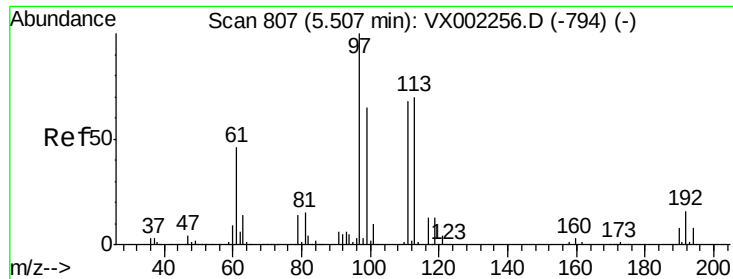
Tot Ion: 65 Resp: 190918  
 Ion Ratio Lower Upper  
 65 100  
 67 51.6 0.0 102.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.87 min Scan# 1030  
 Delta R.T. -0.00 min  
 Lab File: VX002375.D  
 Acq: 07 Jun 2018 14:07

Tgt Ion: 114 Resp: 354583  
 Ion Ratio Lower Upper  
 114 100  
 63 21.8 0.0 41.4  
 88 16.1 0.0 30.0

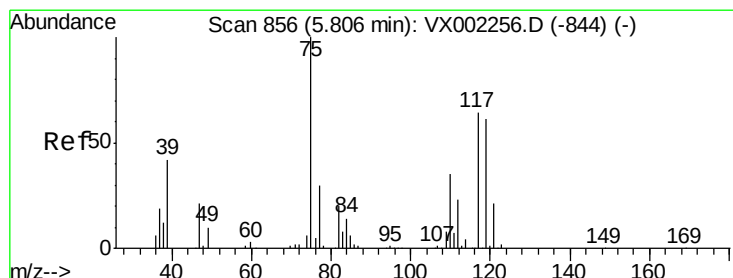
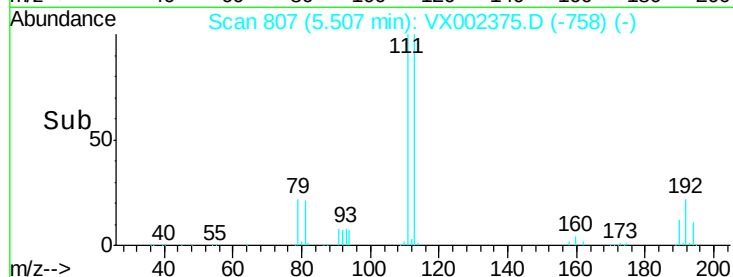
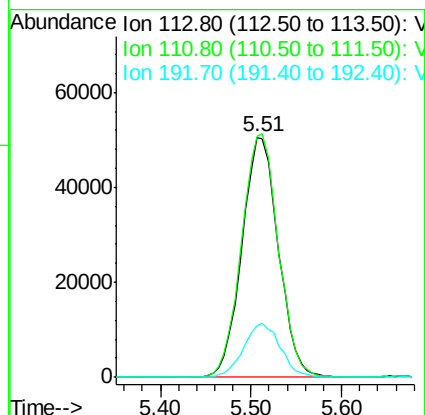
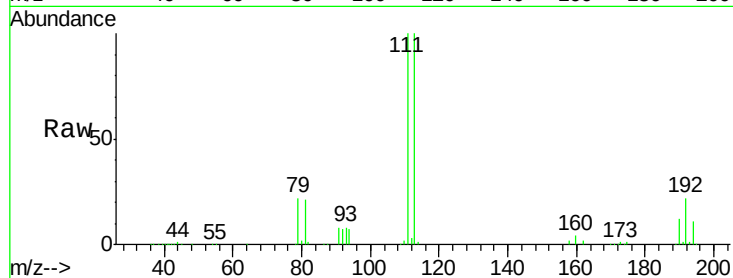




#35  
 Dibromofluoromethane  
 Concen: 50.472 ug/l  
 RT: 5.51 min Scan# 807  
 Delta R.T. -0.00 min  
 Lab File: VX002375.D  
 Acq: 07 Jun 2018 14:07

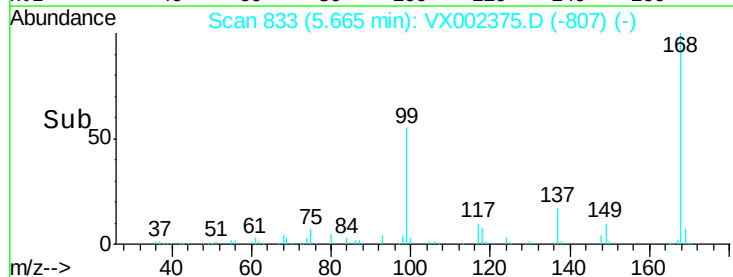
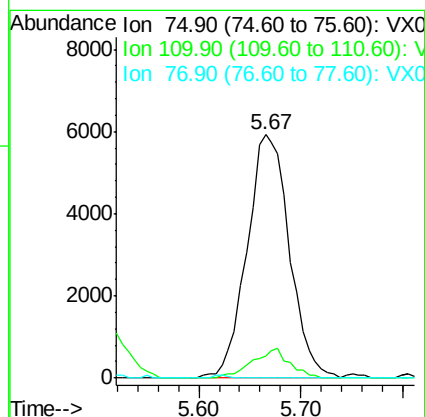
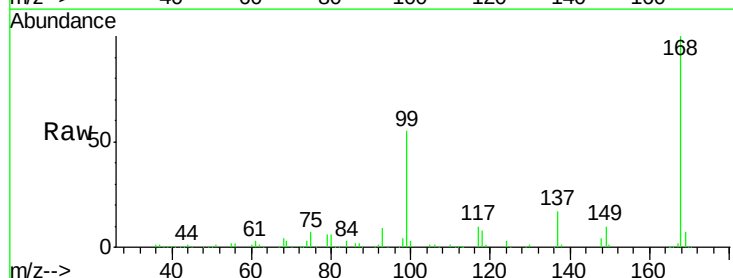
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF5-TB-2018-1

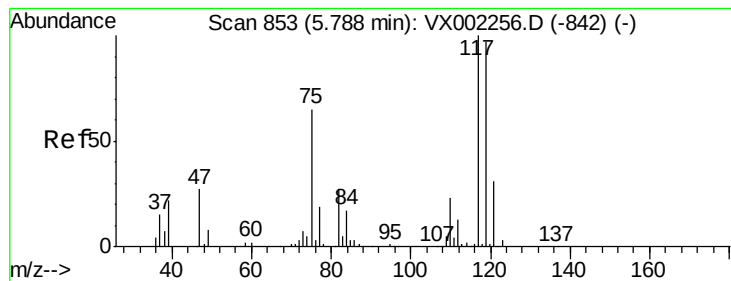
Tot Ion:113 Resp: 140740  
 Ion Ratio Lower Upper  
 113 100  
 111 102.4 81.4 122.0  
 192 22.8 19.1 28.7



#36  
 1,1-Dichloropropene  
 Concen: 4.586 ug/l  
 RT: 5.67 min Scan# 833  
 Delta R.T. -0.14 min  
 Lab File: VX002375.D  
 Acq: 07 Jun 2018 14:07

Tgt Ion: 75 Resp: 17095  
 Ion Ratio Lower Upper  
 75 100  
 110 10.7 18.1 54.4#  
 77 0.0 24.3 36.5#





#38

Carbon Tetrachloride

Concen: 5.802 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampled :

LF5-TB-2018-1

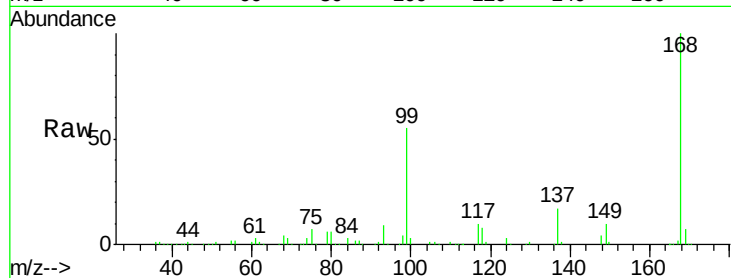
Tot Ion:117 Resp: 22626

Ion Ratio Lower Upper

117 100

119 5.8 77.4 116.0#

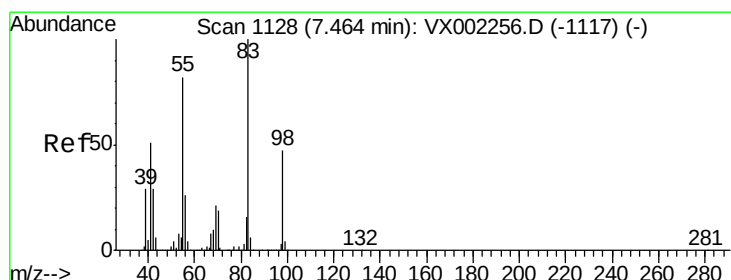
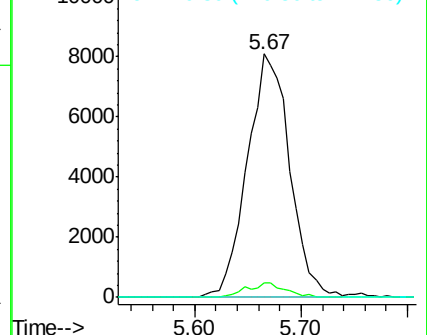
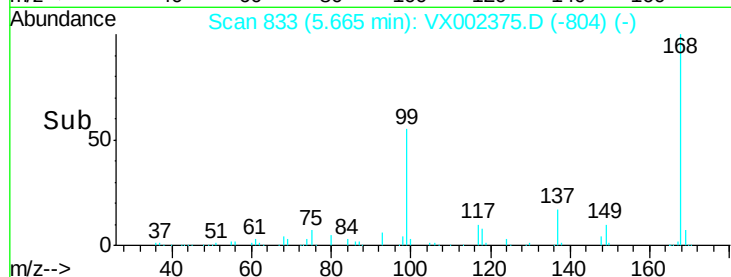
121 0.0 24.4 36.6#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#39

Methylcyclohexane

Concen: 0.269 ug/l

RT: 7.47 min Scan# 1129

Delta R.T. 0.01 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

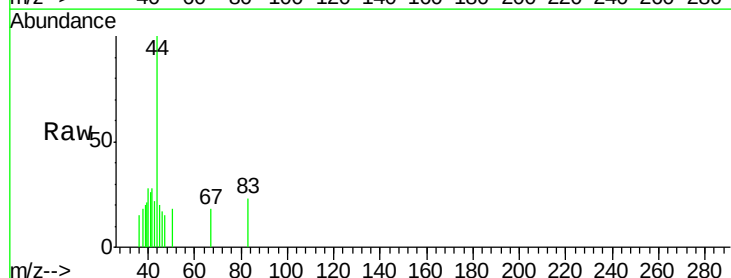
Tgt Ion: 83 Resp: 31

Ion Ratio Lower Upper

83 100

55 0.0 65.4 98.0#

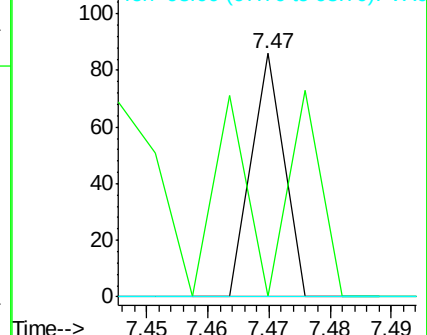
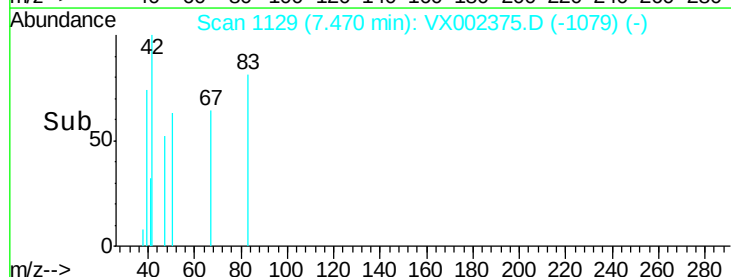
98 0.0 37.4 56.0#

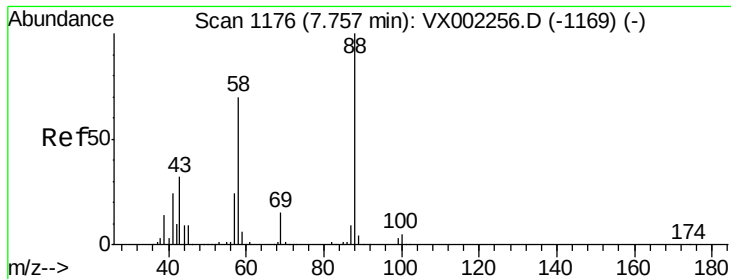


Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 98.00 (97.70 to 98.70): VX0

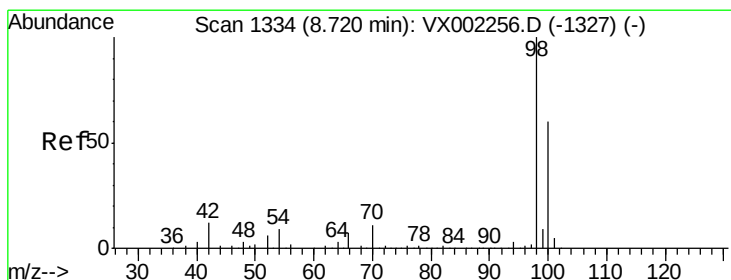
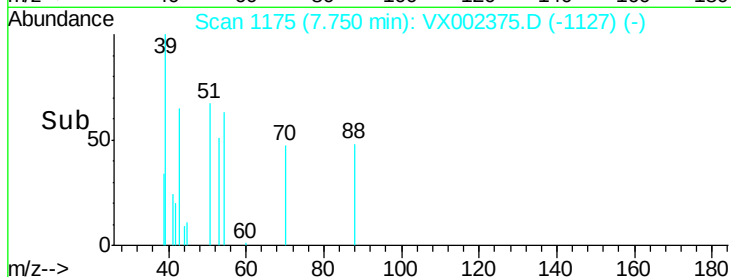
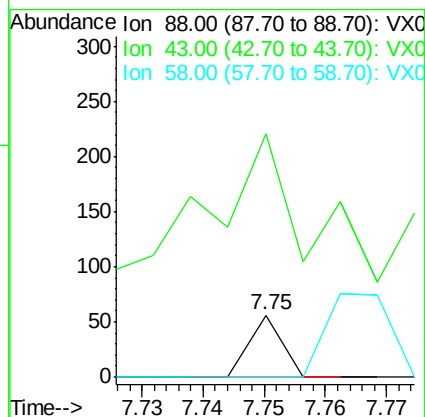
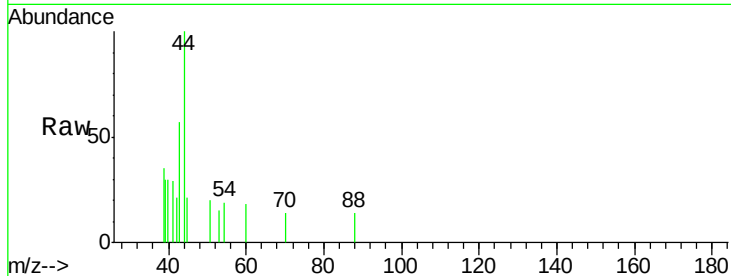




#49  
1,4-Dioxane  
Concen: 0.280 ug/l  
RT: 7.75 min Scan# 1175  
Delta R.T. -0.01 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

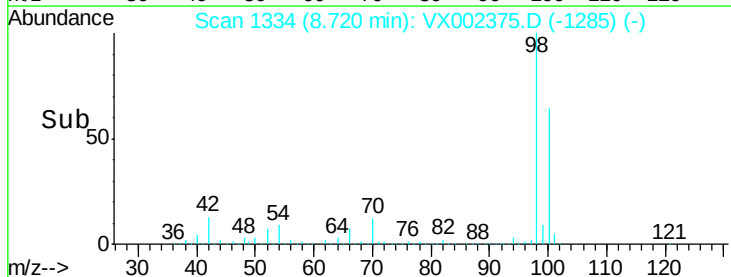
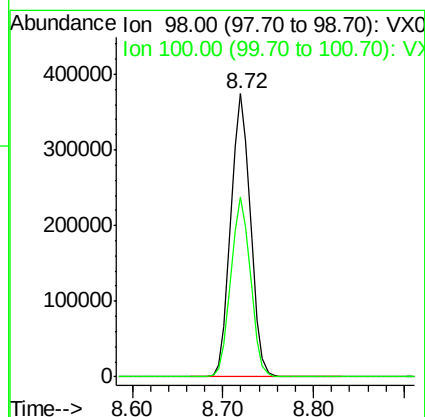
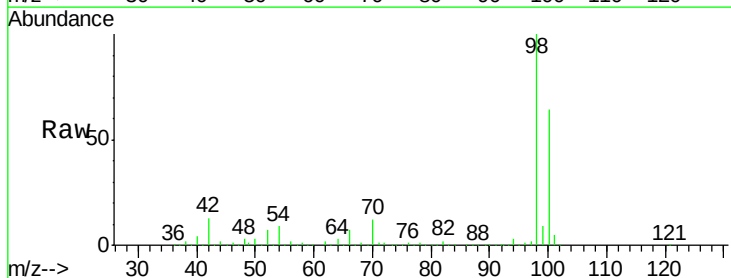
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF5-TB-2018-1

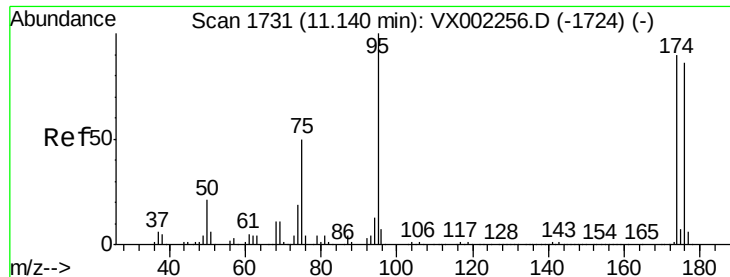
Tot Ion: 88 Resp: 20  
Ion Ratio Lower Upper  
88 100  
43 655.0 29.8 44.6#  
58 275.0 57.1 85.7#



#50  
Toluene-d8  
Concen: 52.901 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. -0.00 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

Tgt Ion: 98 Resp: 565407  
Ion Ratio Lower Upper  
98 100  
100 63.7 50.9 76.3

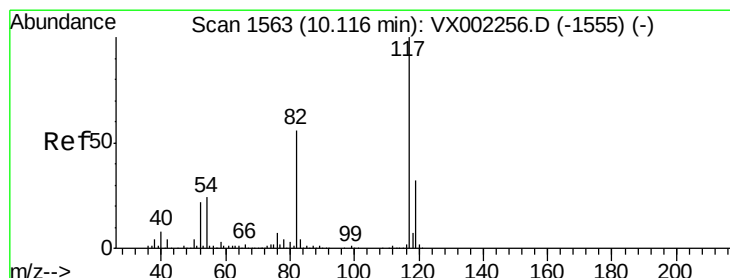
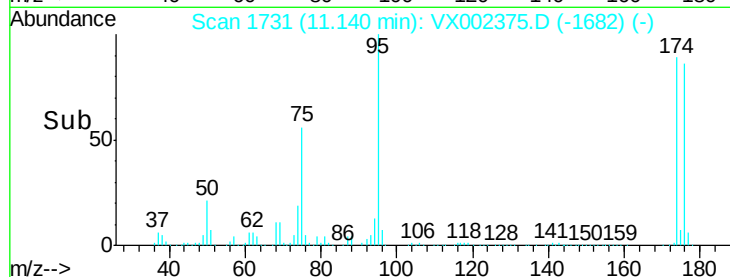
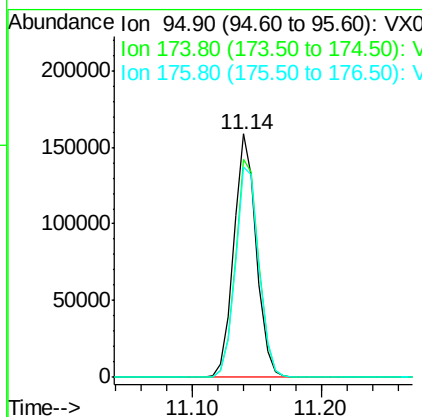
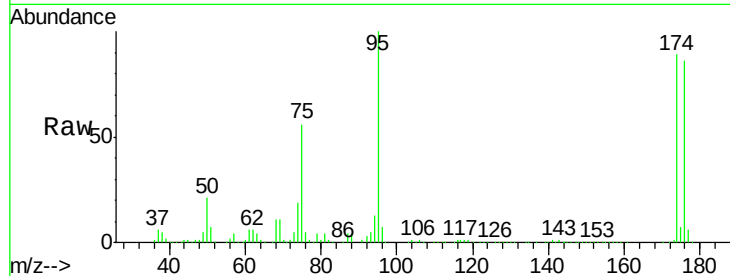




#62  
4-Bromofluorobenzene  
Concen: 46.711 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. -0.00 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

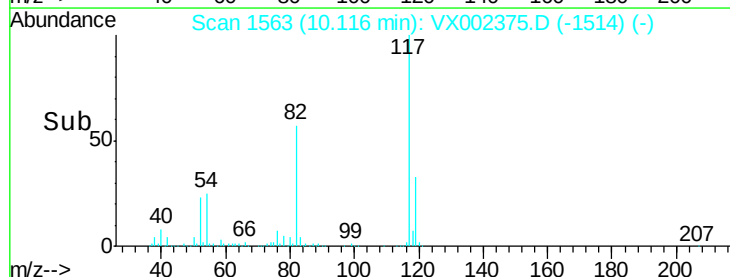
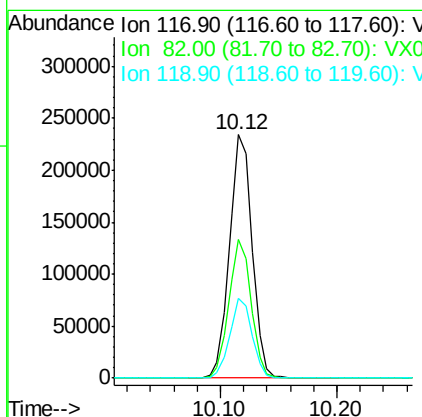
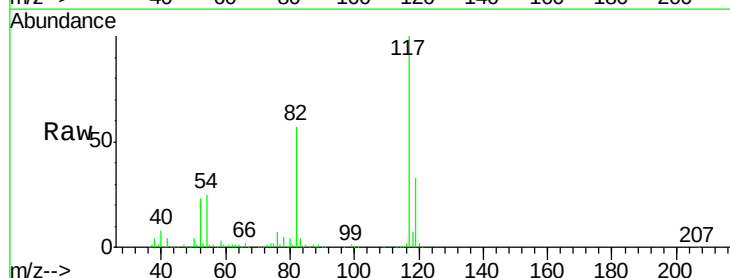
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF5-TB-2018-1

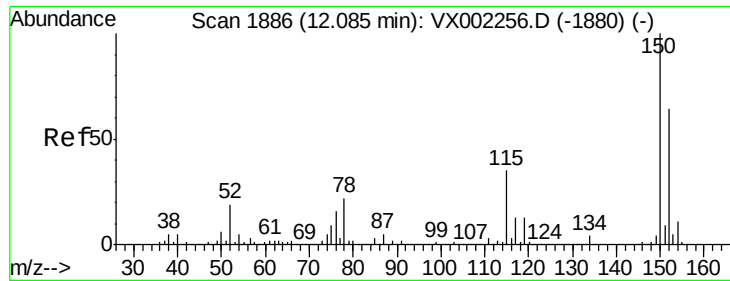
Tot Ion: 95 Resp: 192516  
Ion Ratio Lower Upper  
95 100  
174 92.9 0.0 187.4  
176 90.5 0.0 181.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX002375.D  
Acq: 07 Jun 2018 14:07

Tgt Ion: 117 Resp: 316456  
Ion Ratio Lower Upper  
117 100  
82 56.9 45.0 67.4  
119 32.6 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1886

Delta R.T. -0.00 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampled :

LF5-TB-2018-1

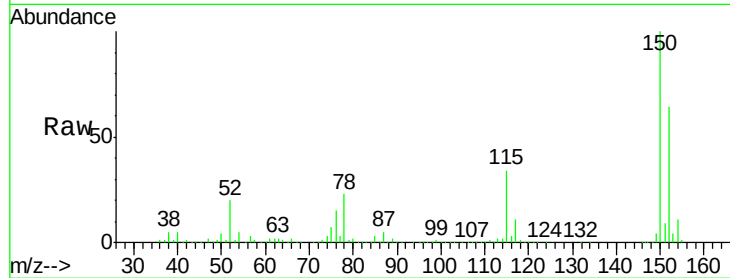
Tot Ion:152 Resp: 168325

Ion Ratio Lower Upper

152 100

115 55.9 40.1 120.2

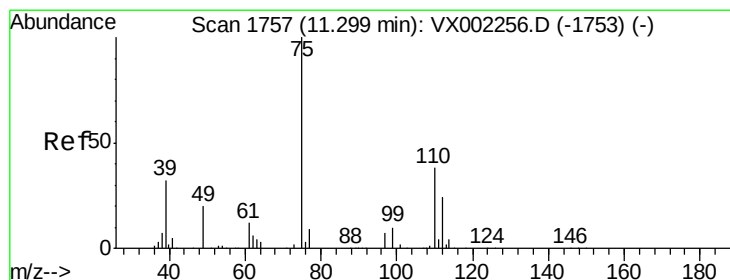
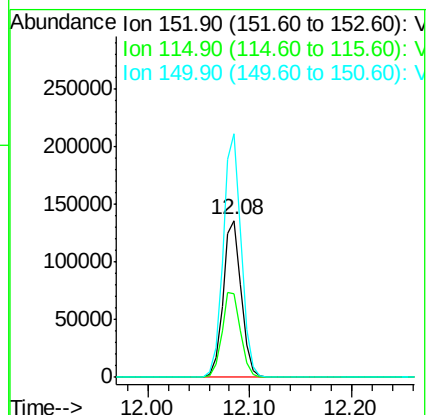
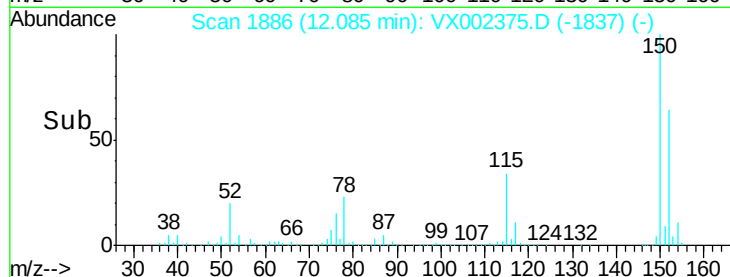
150 155.0 0.0 347.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 28.095 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002375.D

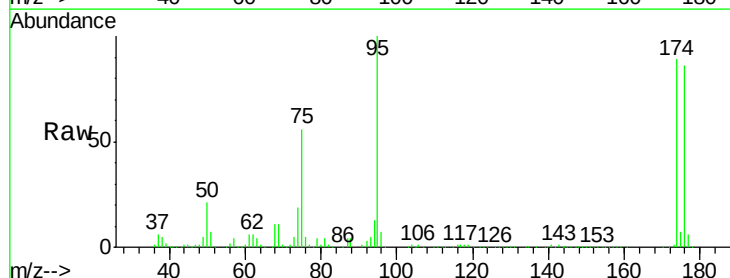
Acq: 07 Jun 2018 14:07

Tgt Ion: 75 Resp: 103768

Ion Ratio Lower Upper

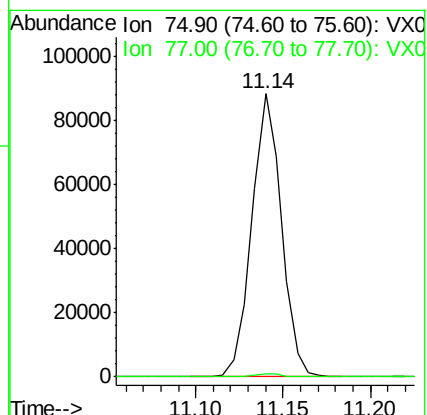
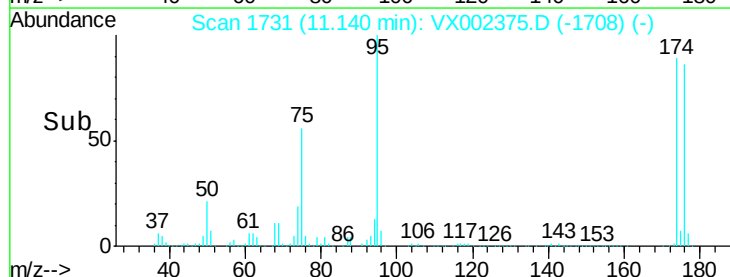
75 100

77 1.3 22.8 68.3#

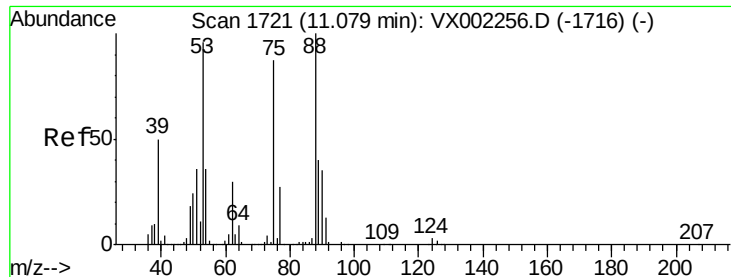


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0







#81

trans-1,4-Dichloro-2-butene

Concen: 98.482 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002375.D

Acq: 07 Jun 2018 14:07

Instrument :

MSVOA\_X

ClientSampleId :

LF5-TB-2018-1

Tot Ion: 75 Resp: 103768

Ion Ratio Lower Upper

75 100

53 0.0 86.8 130.2#

89 0.1 38.2 57.2#

