

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX042220\  
 Data File : VX015860.D  
 Acq On : 22 Apr 2020 23:48  
 Operator : JC/SP  
 Sample : L2380-17  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 B98-TB1-200421

Quant Time: Apr 23 04:59:11 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042220W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 23 04:36:12 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 891685   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 1379707  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 1364246  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 747777   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.04  | 65   | 503162   | 49.61 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.22%  |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 403360   | 50.65 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.30% |          |
| 50) Toluene-d8              | 8.70  | 98   | 1667538  | 52.01 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.02% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 700177   | 53.24 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.48% |          |

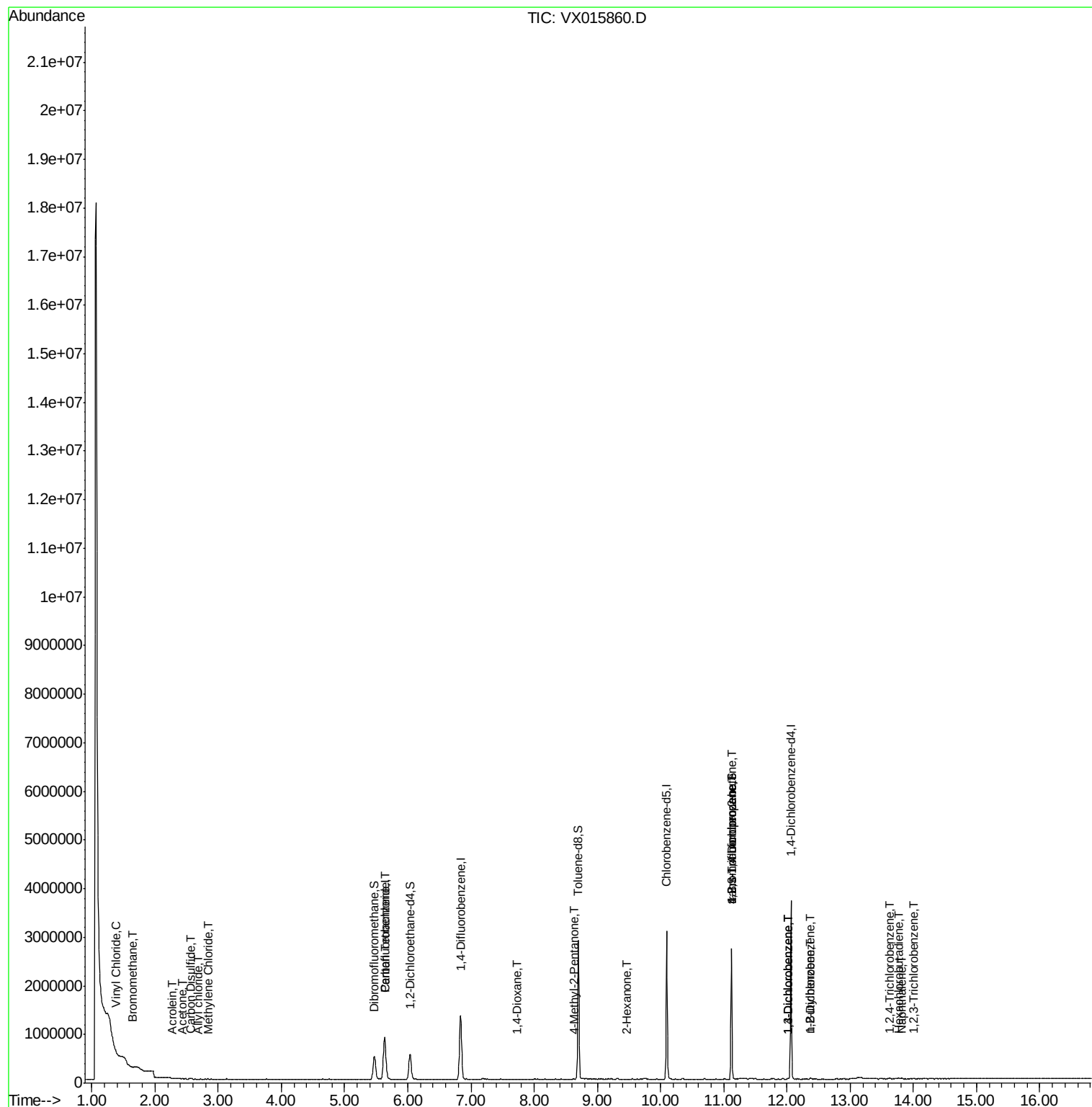
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 4) Vinyl Chloride              | 1.39  | 62   | 2737     | 0.302  | ug/l # | 43     |
| 5) Bromomethane                | 1.65  | 94   | 1100     | 0.362  | ug/l # | 44     |
| 13) Acrolein                   | 2.27  | 56   | 1425     | 1.162  | ug/l # | 25     |
| 14) Allyl chloride             | 2.69  | 41   | 3396     | 0.205  | ug/l # | 28     |
| 16) Acetone                    | 2.42  | 43   | 5433     | 1.230  | ug/l   | 91     |
| 17) Carbon Disulfide           | 2.55  | 76   | 23149    | 0.816  | ug/l # | 90     |
| 20) Methylene Chloride         | 2.84  | 84   | 1879     | 0.210  | ug/l # | 55     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 81598    | 6.773  | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 314      | 1.376  | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.63  | 43   | 2898     | 0.204  | ug/l # | 55     |
| 59) 2-Hexanone                 | 9.48  | 43   | 3126     | 0.290  | ug/l   | 84     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 341690   | 24.030 | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 341690   | 57.804 | ug/l # | 12     |
| 87) 1,3-Dichlorobenzene        | 12.01 | 146  | 5063     | 0.213  | ug/l   | 89     |
| 88) 1,4-Dichlorobenzene        | 12.01 | 146  | 5386     | 0.226  | ug/l   | 97     |
| 89) n-Butylbenzene             | 12.37 | 91   | 8999     | 0.227  | ug/l   | 87     |
| 91) 1,2-Dichlorobenzene        | 12.37 | 146  | 4557     | 0.202  | ug/l   | 88     |
| 93) 1,2,4-Trichlorobenzene     | 13.63 | 180  | 7366     | 0.414  | ug/l   | 85     |
| 94) Hexachlorobutadiene        | 13.77 | 225  | 3977     | 0.498  | ug/l   | 94     |
| 95) Naphthalene                | 13.82 | 128  | 14749    | 0.288  | ug/l # | 82     |
| 96) 1,2,3-Trichlorobenzene     | 14.00 | 180  | 6214     | 0.358  | ug/l   | 94     |

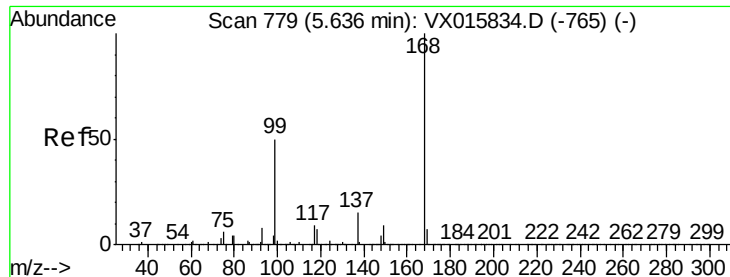
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Thu Apr 23 04:36:12 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 778

Delta R.T. -0.01 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

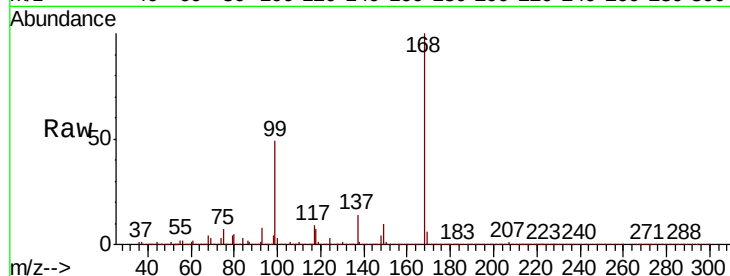
B98-TB1-200421

Tot Ion:168 Resp: 891685

Ion Ratio Lower Upper

168 100

99 49.3 40.3 60.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.63

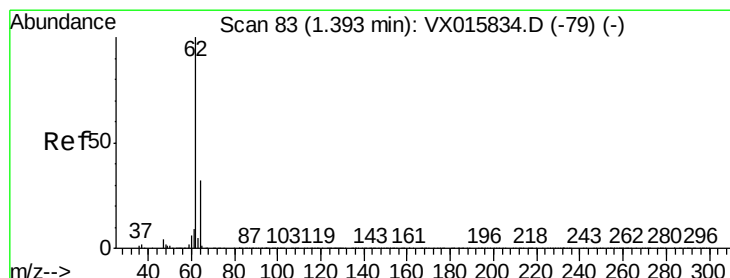
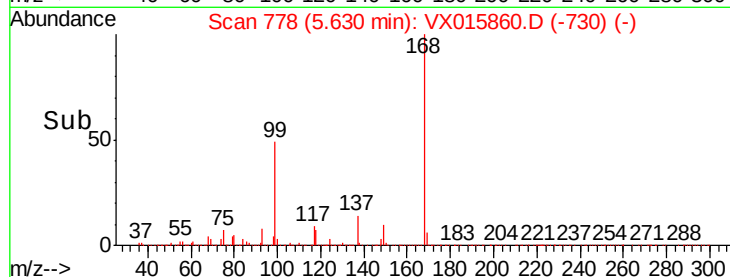
300000

200000

100000

0

Time-->



#4

Vinyl Chloride

Concen: 0.302 ug/l

RT: 1.39 min Scan# 82

Delta R.T. -0.01 min

Lab File: VX015860.D

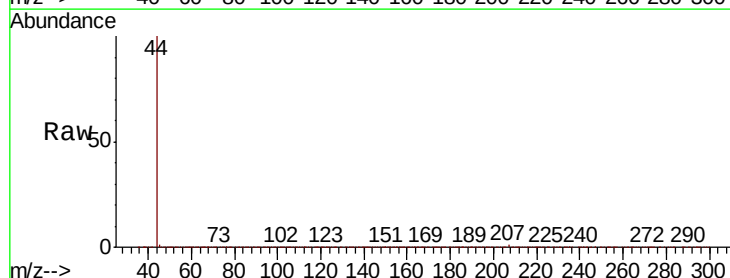
Acq: 22 Apr 2020 23:48

Tgt Ion: 62 Resp: 2737

Ion Ratio Lower Upper

62 100

64 0.0 25.4 38.2#



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0

1.39

1000

800

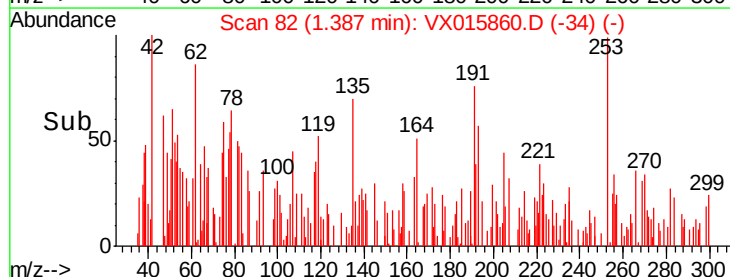
600

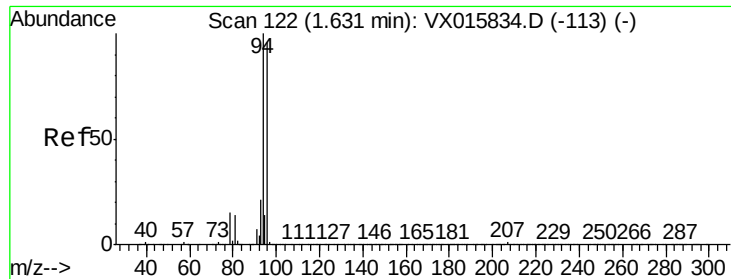
400

200

0

Time-->





#5

Bromomethane

Concen: 0.362 ug/l

RT: 1.65 min Scan# 125

Delta R.T. 0.02 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

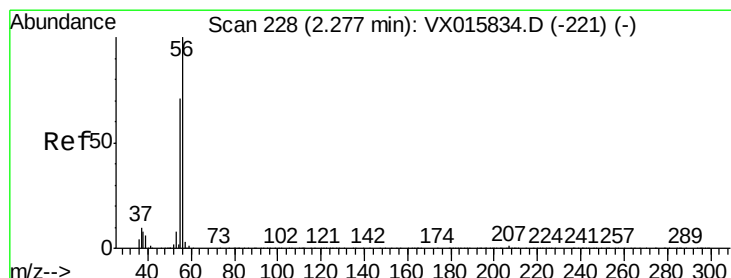
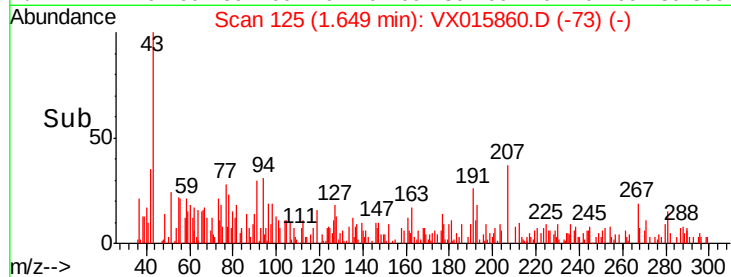
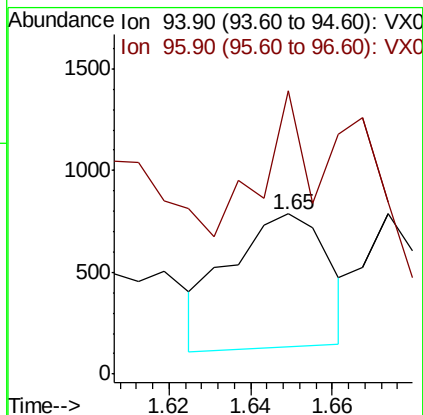
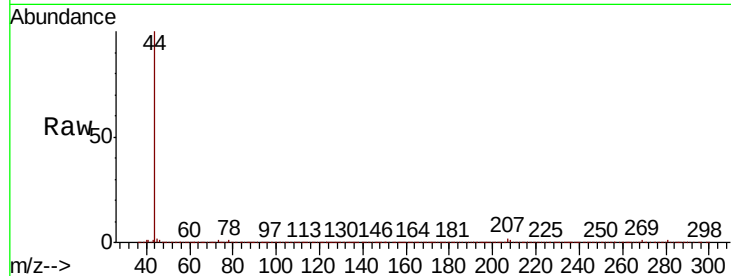
B98-TB1-200421

Tot Ion: 94 Resp: 1100

Ion Ratio Lower Upper

94 100

96 150.5 76.7 115.1#



#13

Acrolein

Concen: 1.162 ug/l

RT: 2.27 min Scan# 227

Delta R.T. -0.01 min

Lab File: VX015860.D

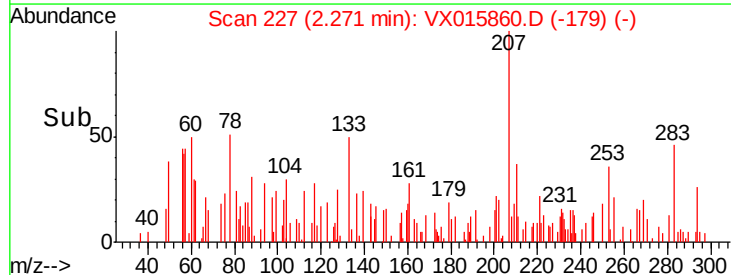
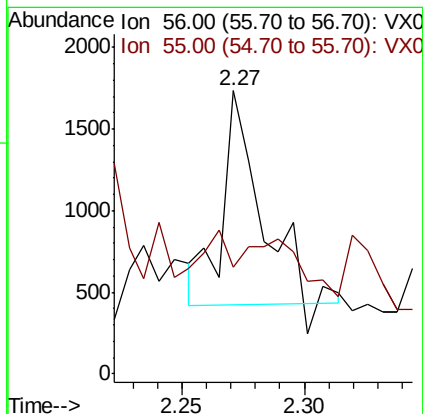
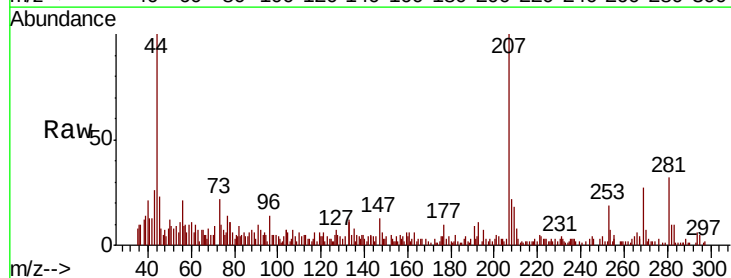
Acq: 22 Apr 2020 23:48

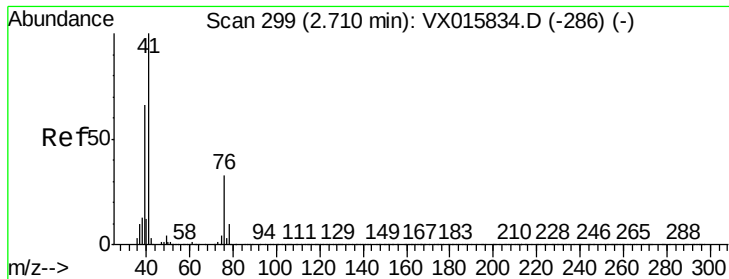
Tgt Ion: 56 Resp: 1425

Ion Ratio Lower Upper

56 100

55 8.8 56.1 84.1#

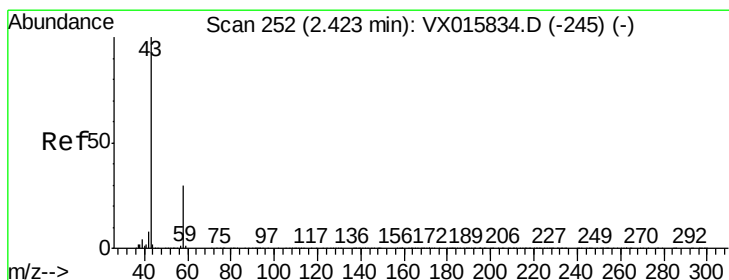
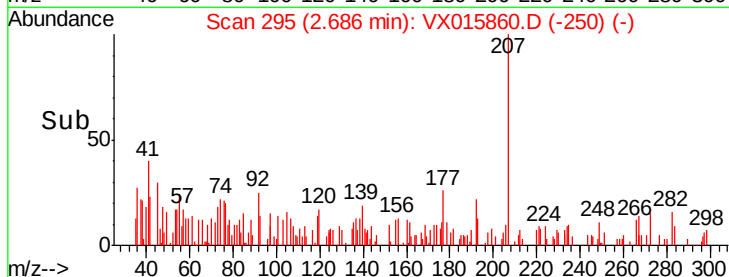
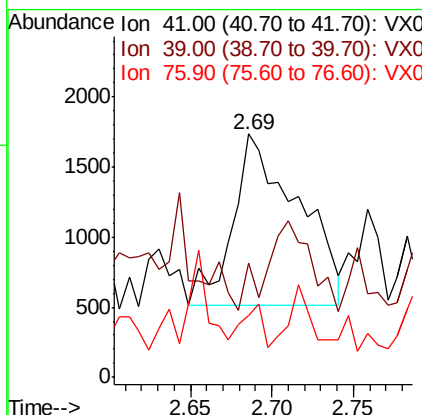
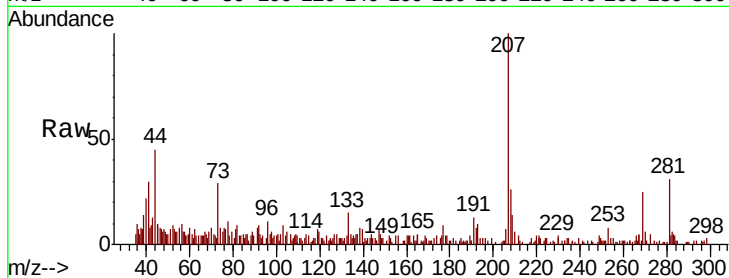




#14  
Allvl chloride  
Concen: 0.205 ug/l  
RT: 2.69 min Scan# 295  
Delta R.T. -0.02 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

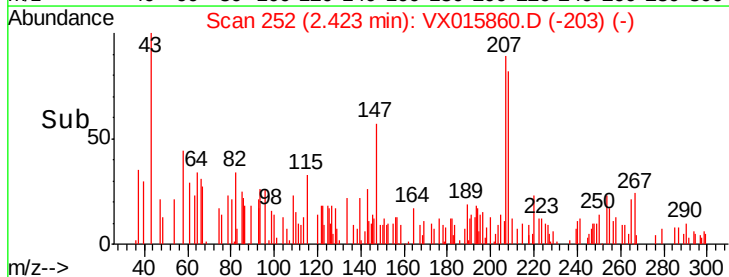
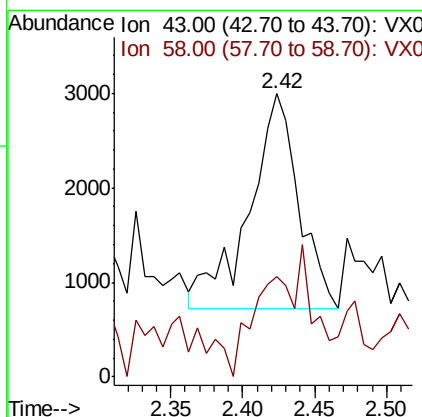
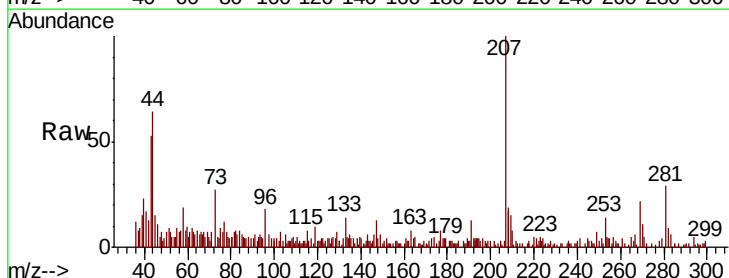
Instrument :  
MSVOA\_X  
ClientSampleId :  
B98-TB1-200421

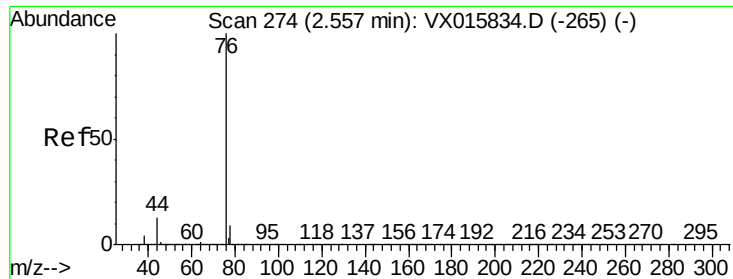
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 39      | 0.0   | 48.4  | 72.6# |
| 76      | 0.0   | 23.8  | 35.8# |



#16  
Acetone  
Concen: 1.230 ug/l  
RT: 2.42 min Scan# 252  
Delta R.T. 0.00 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 34.7  | 24.0  | 36.0  |

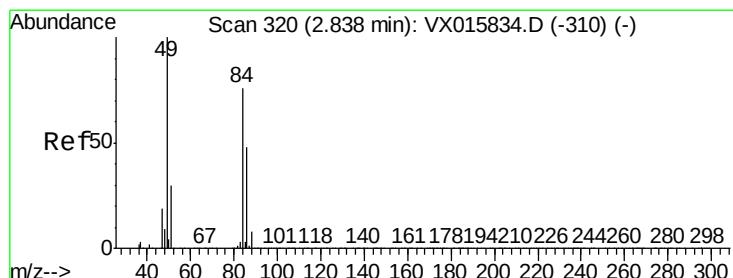
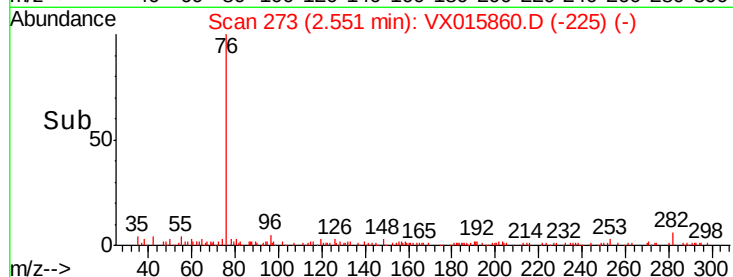
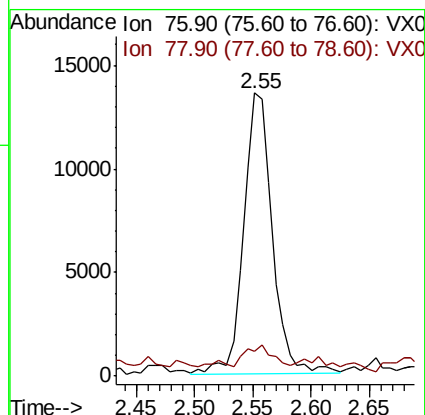
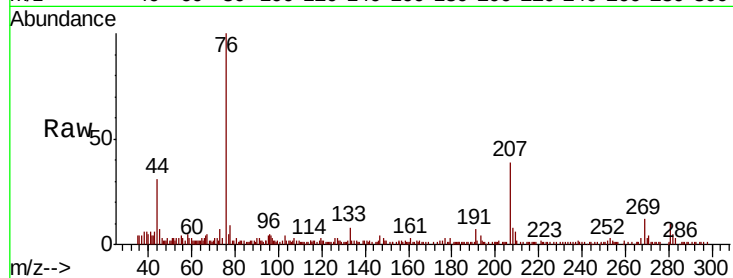




#17  
Carbon Disulfide  
Concen: 0.816 ug/l  
RT: 2.55 min Scan# 273  
Delta R.T. -0.01 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

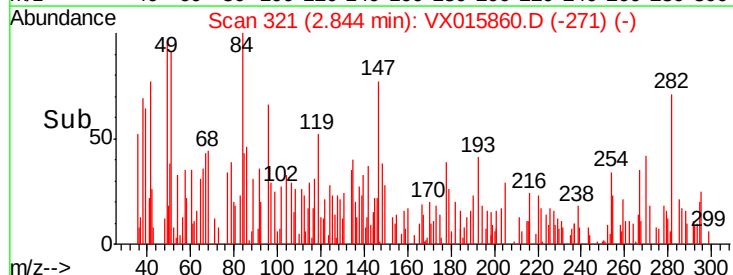
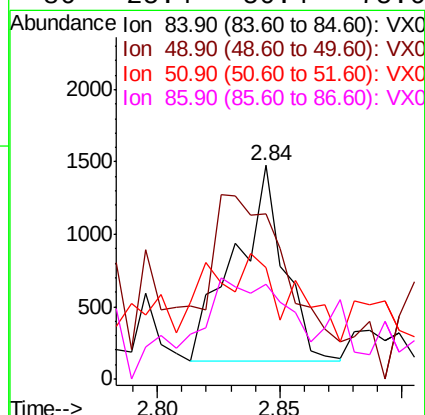
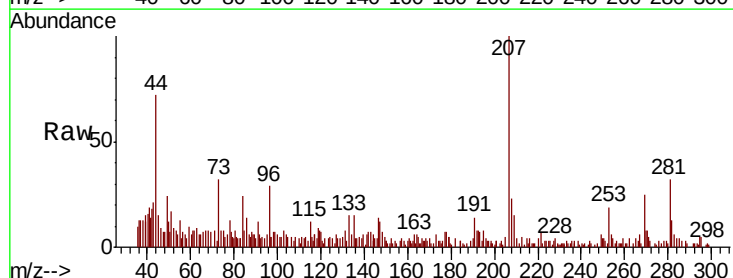
Instrument :  
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ClientSampleId :  
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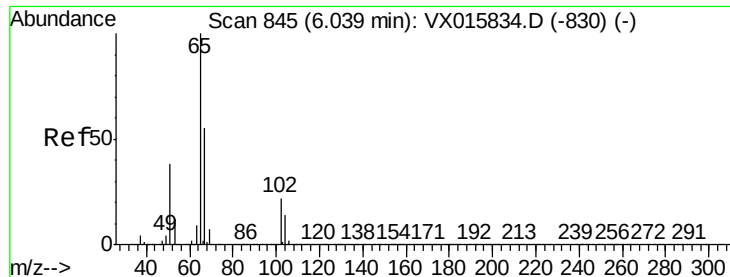
Tot Ion: 76 Resp: 23149  
Ion Ratio Lower Upper  
76 100  
78 5.7 7.4 11.2#



#20  
Methylene Chloride  
Concen: 0.210 ug/l  
RT: 2.84 min Scan# 321  
Delta R.T. 0.01 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

Tgt Ion: 84 Resp: 1879  
Ion Ratio Lower Upper  
84 100  
49 65.4 104.9 157.3#  
51 38.3 32.0 48.0  
86 25.4 50.4 75.6#





#33

1,2-Dichloroethane-d4

Concen: 49.613 ug/l

RT: 6.04 min Scan# 845

Delta R.T. 0.00 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

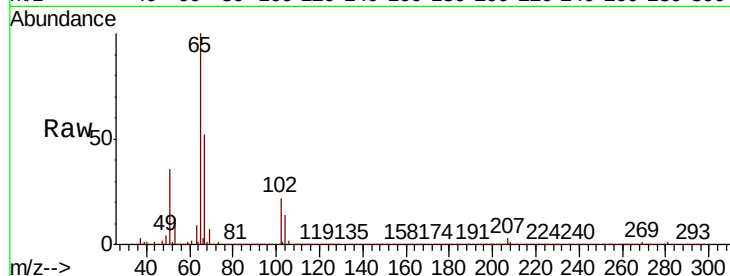
B98-TB1-200421

Tot Ion: 65 Resp: 503162

Ion Ratio Lower Upper

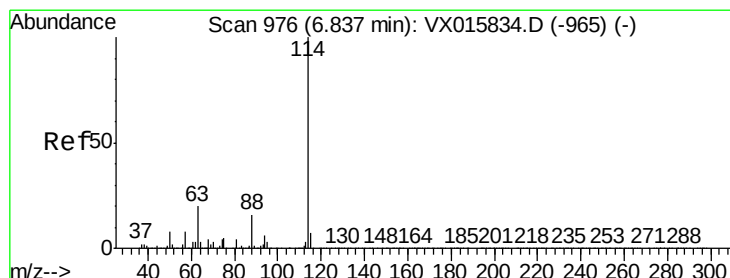
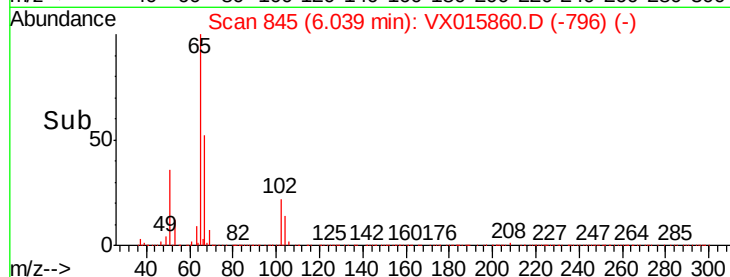
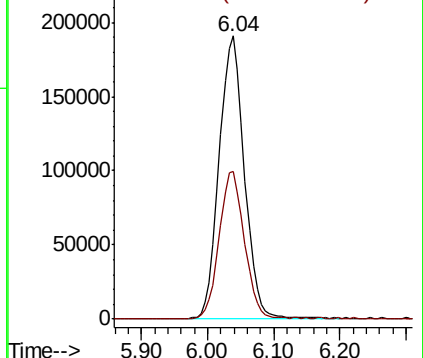
65 100

67 51.9 0.0 104.2



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 976

Delta R.T. 0.00 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

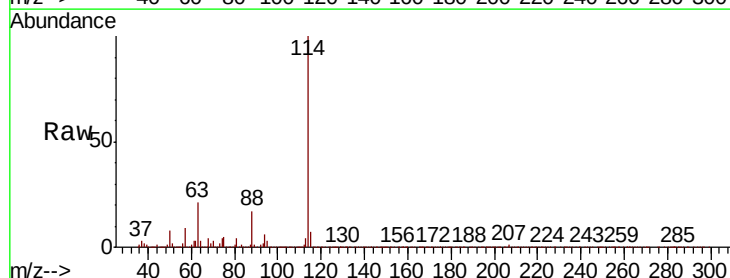
Tgt Ion: 114 Resp: 1379707

Ion Ratio Lower Upper

114 100

63 21.3 0.0 40.6

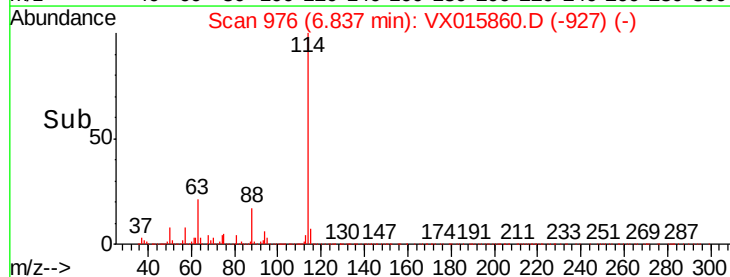
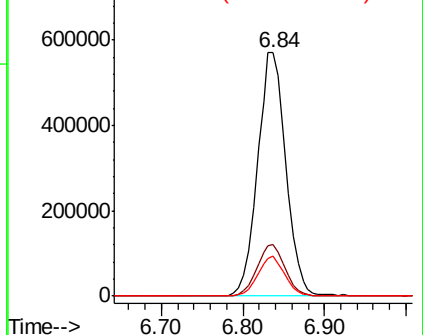
88 16.6 0.0 32.8

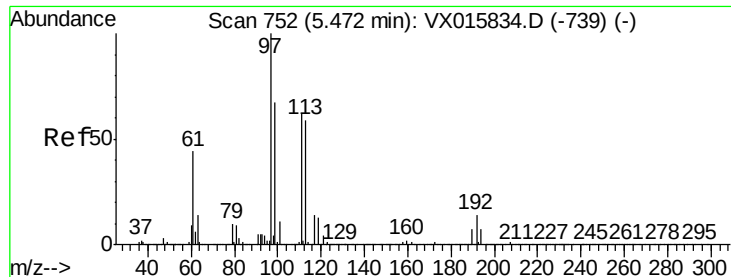


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

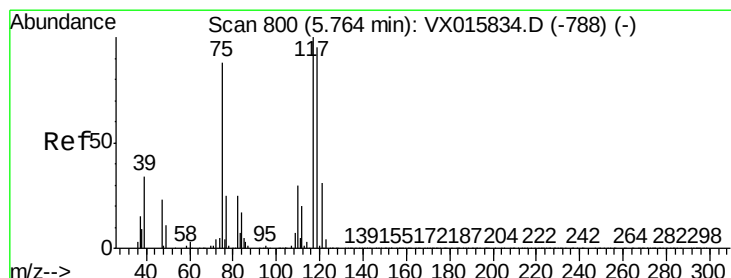
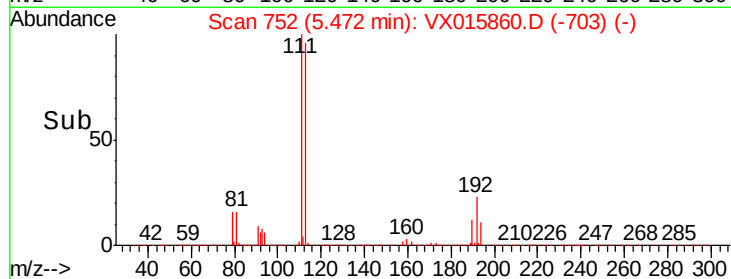
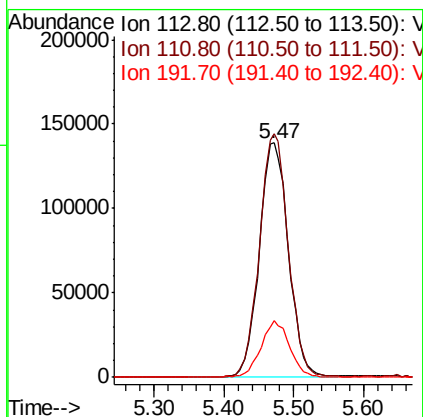
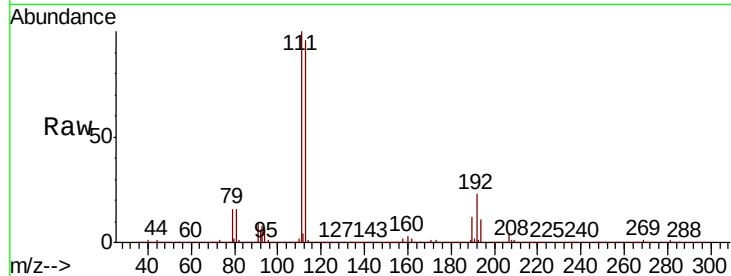




#35  
Dibromofluoromethane  
Concen: 50.648 ug/l  
RT: 5.47 min Scan# 752  
Delta R.T. 0.00 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

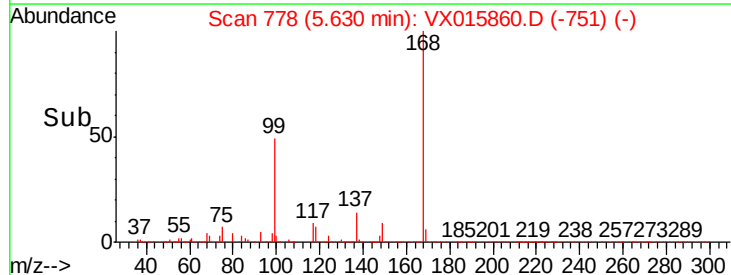
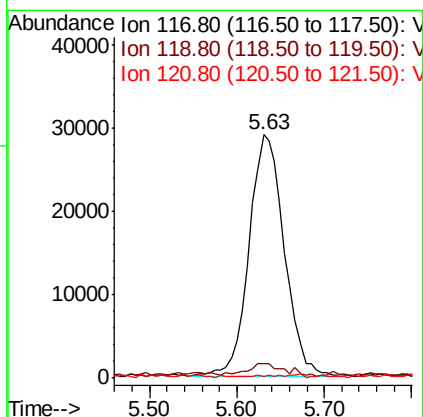
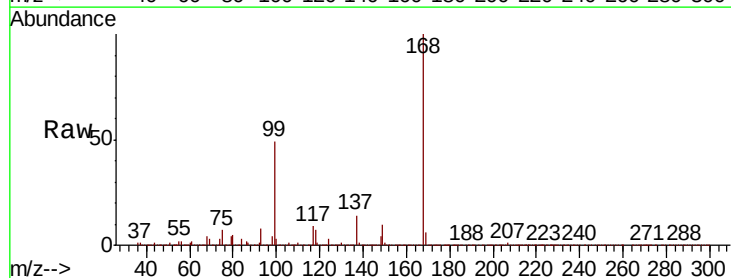
Instrument :  
MSVOA\_X  
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B98-TB1-200421

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.5 | 82.7  | 124.1 |
| 192     | 23.8  | 19.3  | 28.9  |

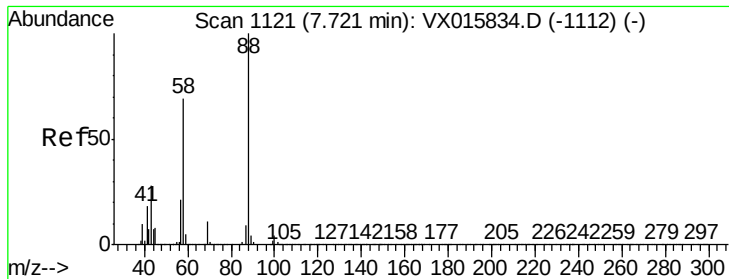


#38  
Carbon Tetrachloride  
Concen: 6.773 ug/l  
RT: 5.63 min Scan# 778  
Delta R.T. -0.13 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.1   | 75.7  | 113.5# |
| 121     | 0.1   | 25.0  | 37.6#  |







#49

1,4-Dioxane

Concen: 1.376 ug/l

RT: 7.73 min Scan# 1122

Delta R.T. 0.01 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

B98-TB1-200421

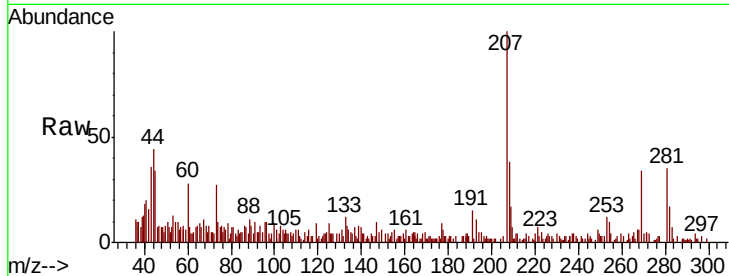
Tot Ion: 88 Resp: 314

Ion Ratio Lower Upper

88 100

43 381.5 28.2 42.4#

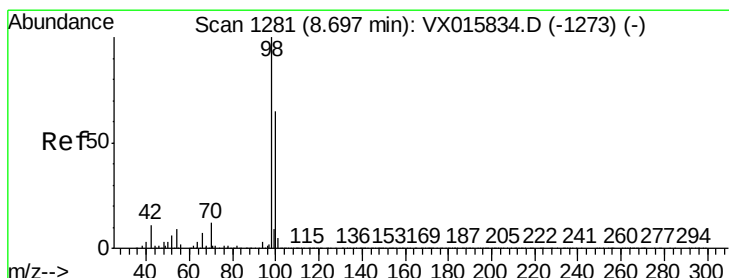
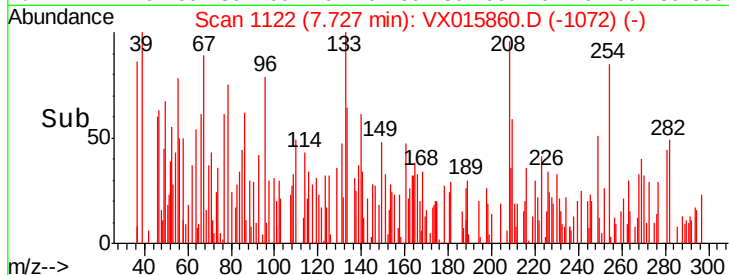
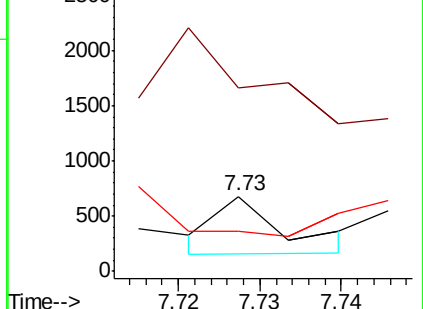
58 293.6 58.9 88.3#



Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#50

Toluene-d8

Concen: 52.013 ug/l

RT: 8.70 min Scan# 1281

Delta R.T. 0.00 min

Lab File: VX015860.D

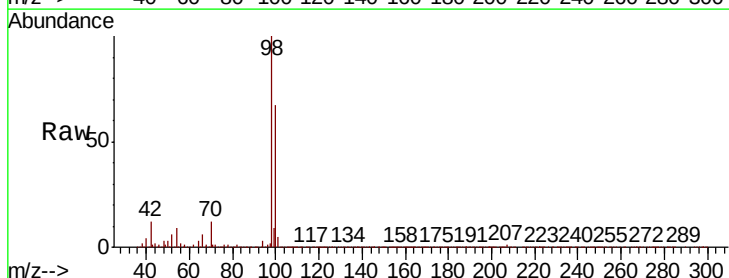
Acq: 22 Apr 2020 23:48

Tgt Ion: 98 Resp: 1667538

Ion Ratio Lower Upper

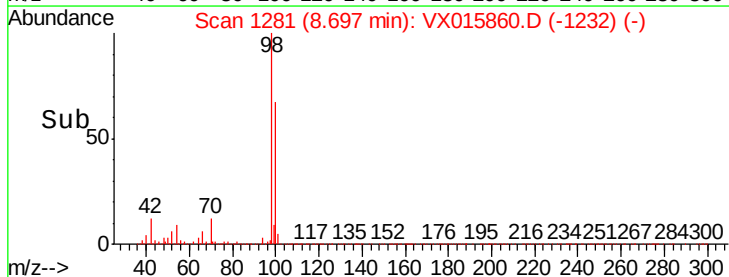
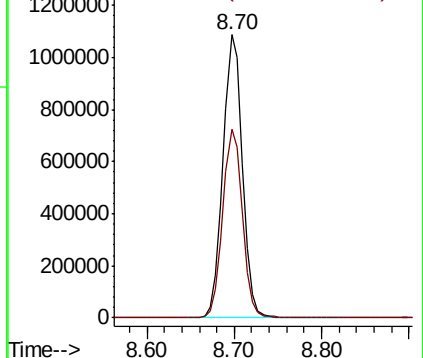
98 100

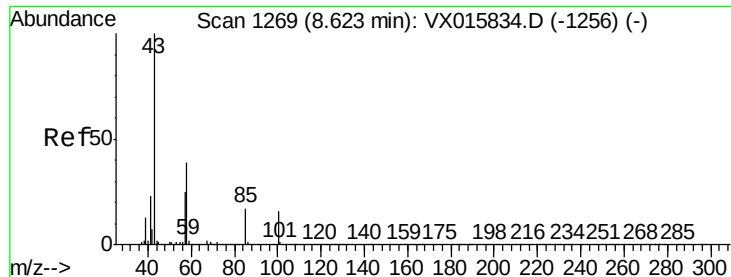
100 67.4 53.8 80.6



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#51

4-Methyl-2-Pentanone

Concen: 0.204 ug/l

RT: 8.63 min Scan# 1270

Delta R.T. 0.01 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

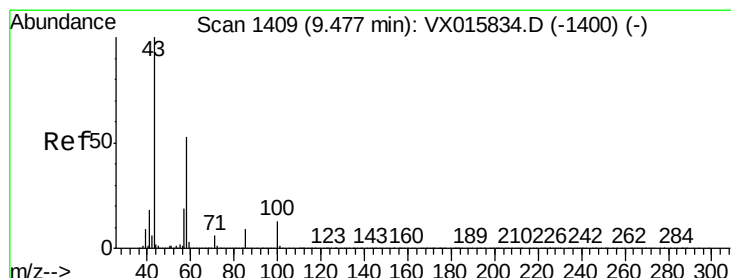
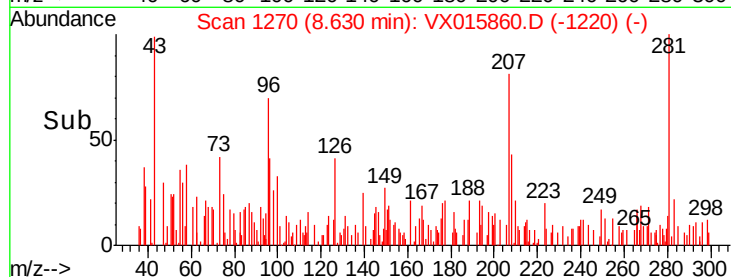
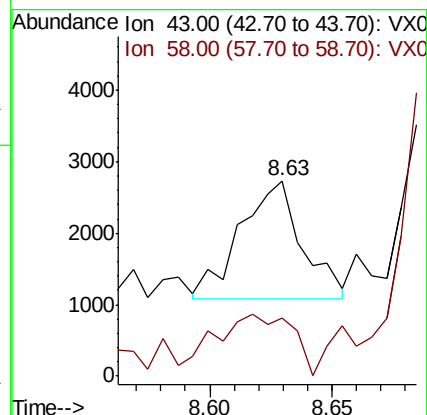
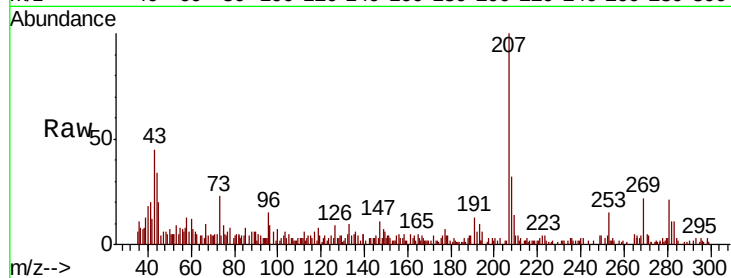
B98-TB1-200421

Tot Ion: 43 Resp: 2898

Ion Ratio Lower Upper

43 100

58 65.3 30.6 45.8#



#59

2-Hexanone

Concen: 0.290 ug/l

RT: 9.48 min Scan# 1409

Delta R.T. 0.00 min

Lab File: VX015860.D

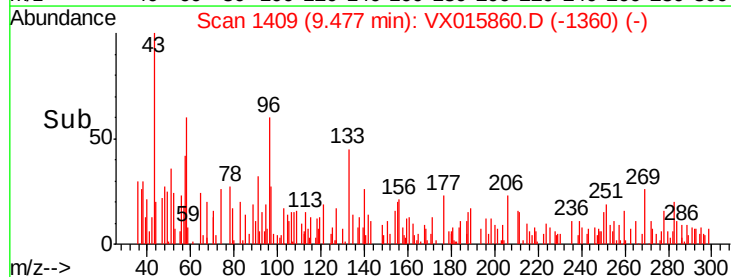
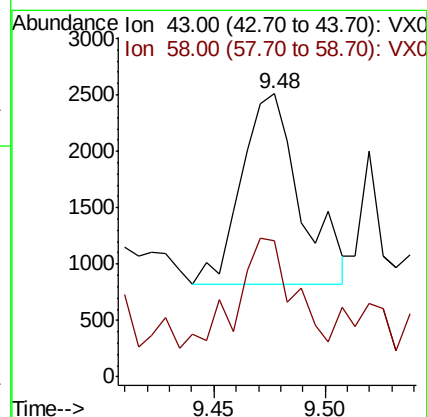
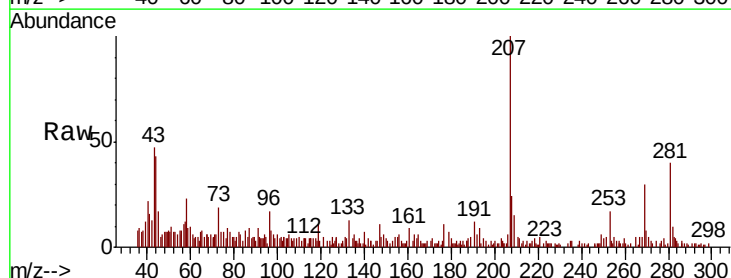
Acq: 22 Apr 2020 23:48

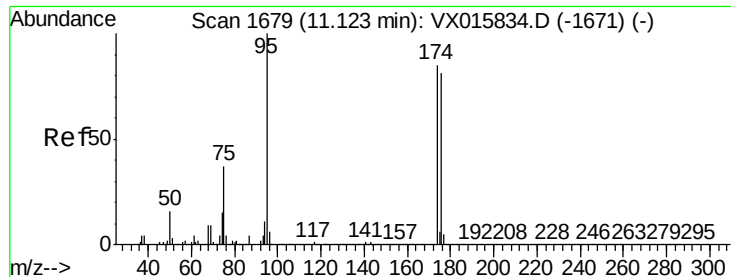
Tgt Ion: 43 Resp: 3126

Ion Ratio Lower Upper

43 100

58 64.3 26.5 79.4





#62

4-Bromofluorobenzene

Concen: 53.237 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. 0.00 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

B98-TB1-200421

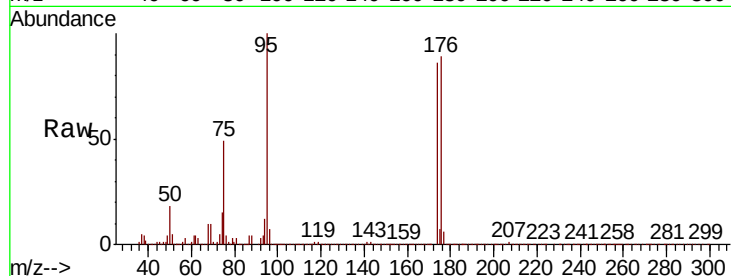
Tot Ion: 95 Resp: 700177

Ion Ratio Lower Upper

95 100

174 85.1 0.0 172.4

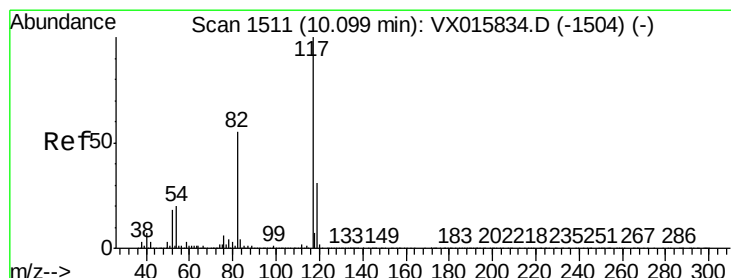
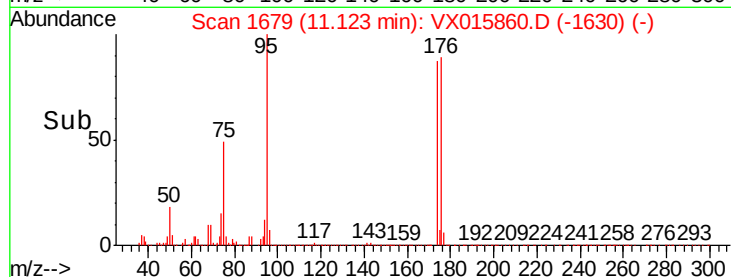
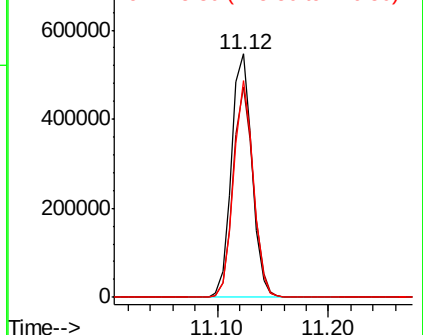
176 85.0 0.0 167.0



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.10 min Scan# 1511

Delta R.T. 0.00 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

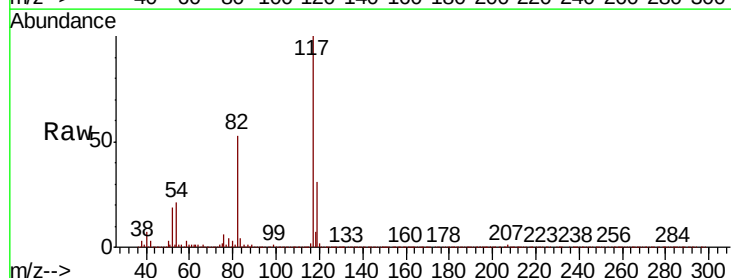
Tgt Ion: 117 Resp: 1364246

Ion Ratio Lower Upper

117 100

82 52.7 43.9 65.9

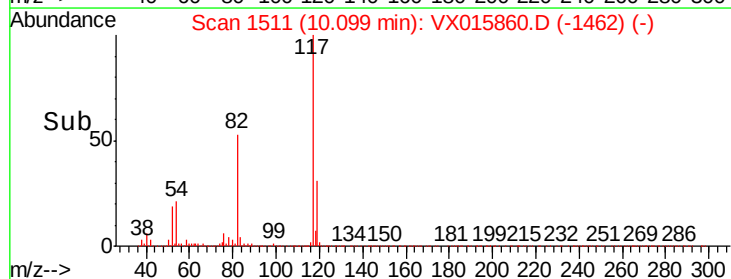
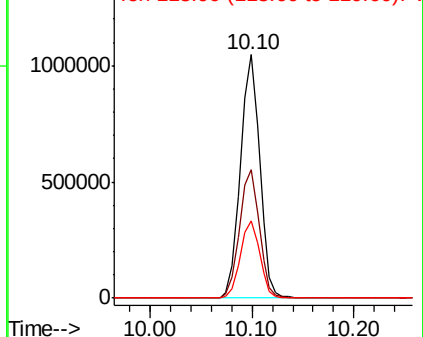
119 31.4 25.1 37.7

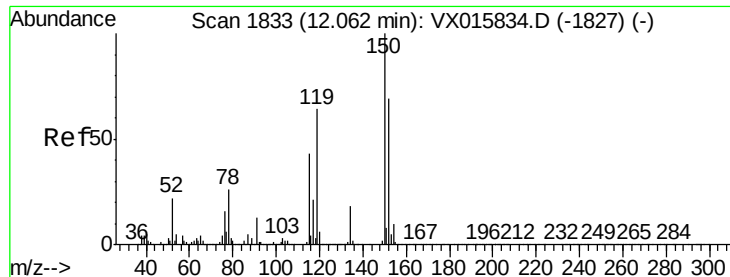


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

B98-TB1-200421

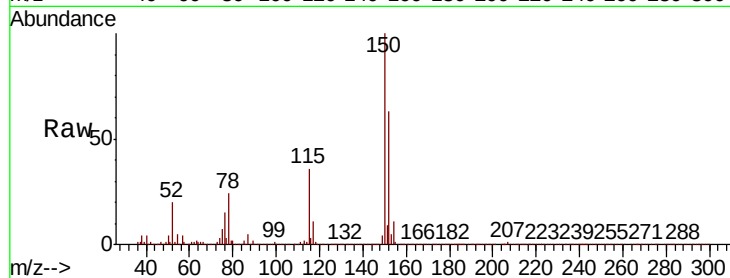
Tot Ion:152 Resp: 747777

Ion Ratio Lower Upper

152 100

115 56.1 39.0 116.9

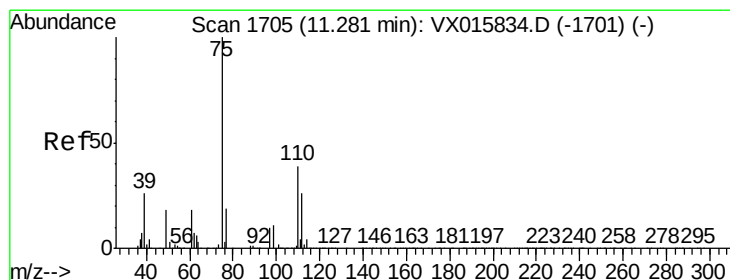
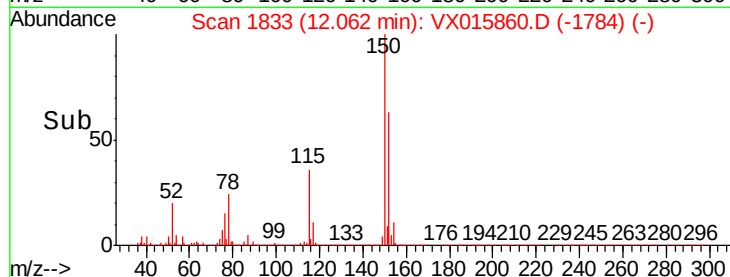
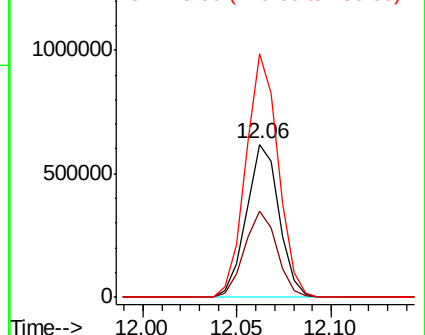
150 156.9 0.0 336.8



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: 24.030 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. -0.16 min

Lab File: VX015860.D

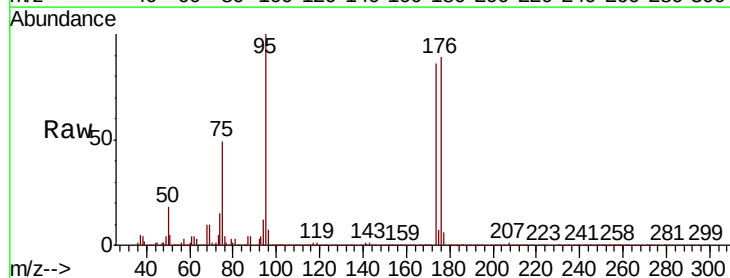
Acq: 22 Apr 2020 23:48

Tgt Ion: 75 Resp: 341690

Ion Ratio Lower Upper

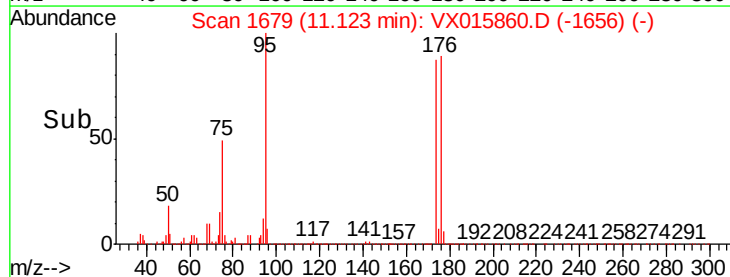
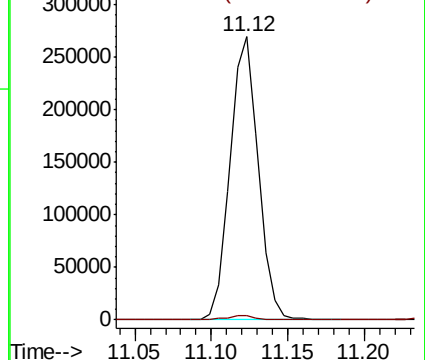
75 100

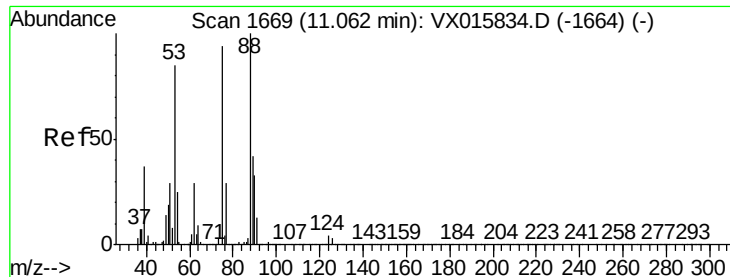
77 1.3 21.3 63.9#



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: 57.804 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. 0.06 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

Instrument :

MSVOA\_X

ClientSampleId :

B98-TB1-200421

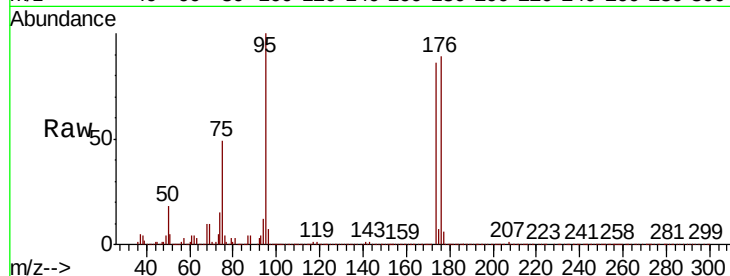
Tot Ion: 75 Resp: 341690

Ion Ratio Lower Upper

75 100

53 0.3 74.2 111.2#

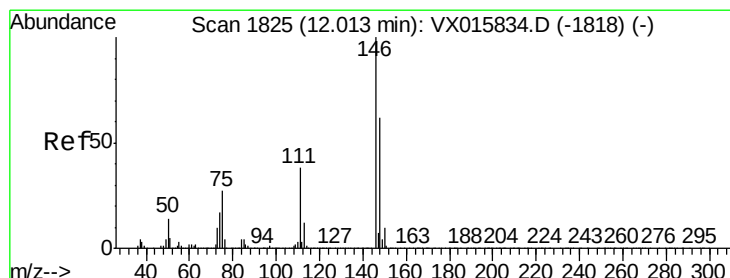
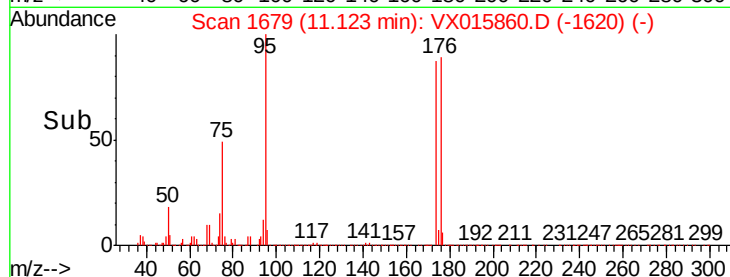
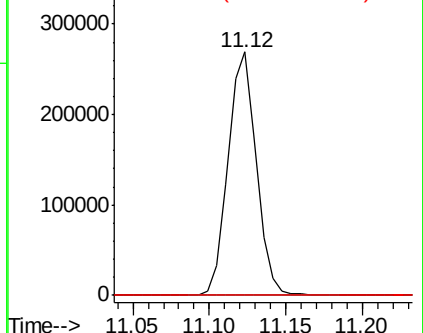
89 0.2 38.0 57.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0



#87

1,3-Dichlorobenzene

Concen: 0.213 ug/l

RT: 12.01 min Scan# 1825

Delta R.T. 0.00 min

Lab File: VX015860.D

Acq: 22 Apr 2020 23:48

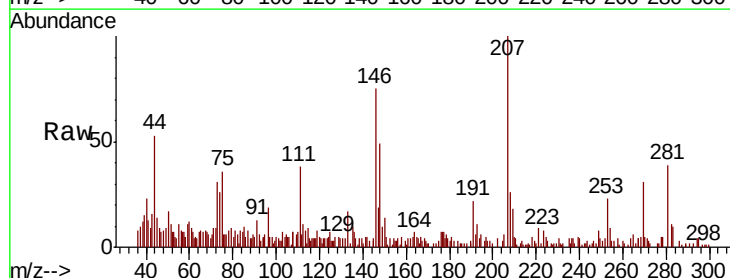
Tgt Ion: 146 Resp: 5063

Ion Ratio Lower Upper

146 100

111 45.7 19.1 57.1

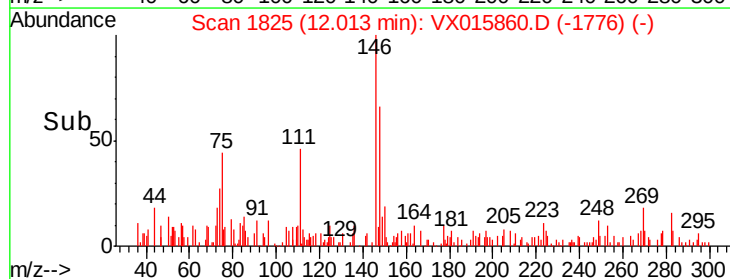
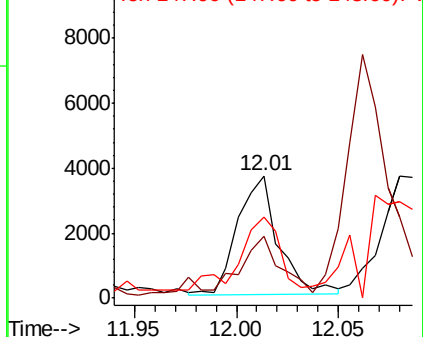
148 69.4 30.9 92.7

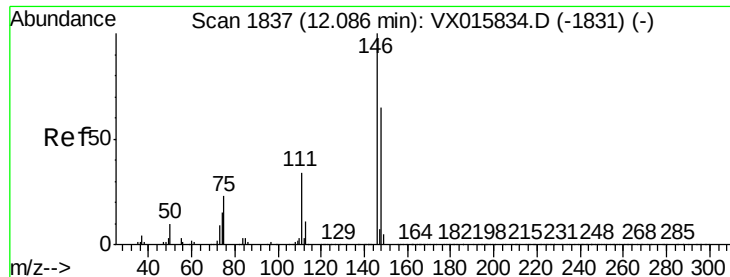


Abundance Ion 145.90 (145.60 to 146.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V

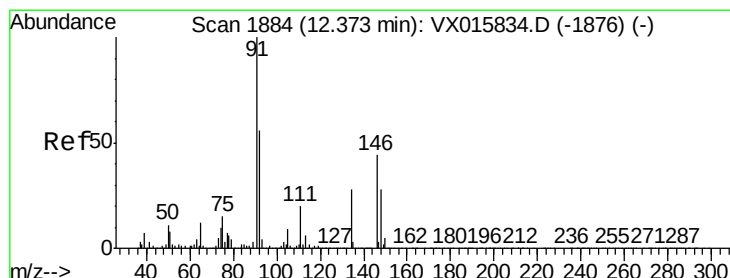
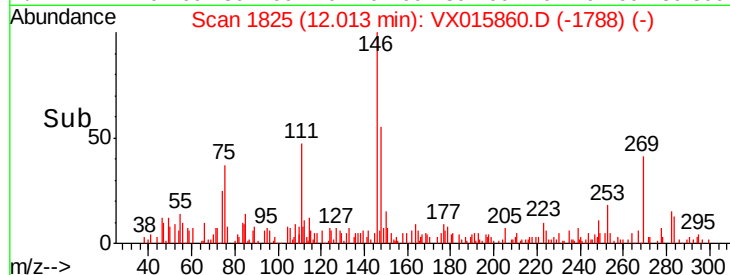
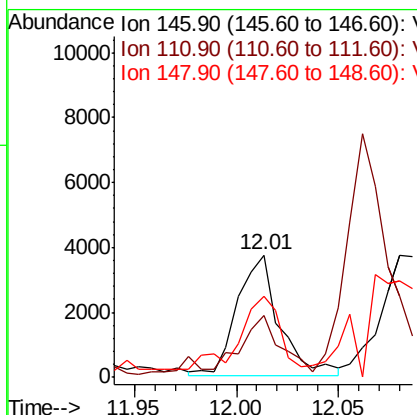
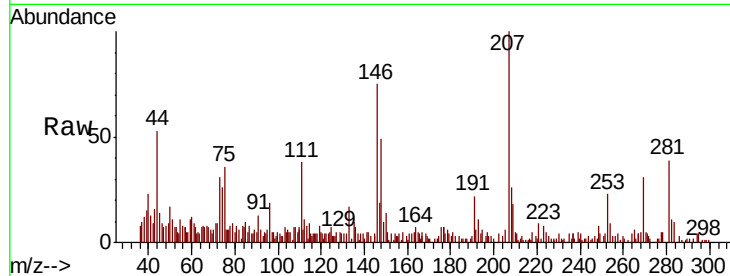




#88  
 1,4-Dichlorobenzene  
 Concen: 0.226 ug/l  
 RT: 12.01 min Scan# 1825  
 Delta R.T. -0.07 min  
 Lab File: VX015860.D  
 Acq: 22 Apr 2020 23:48

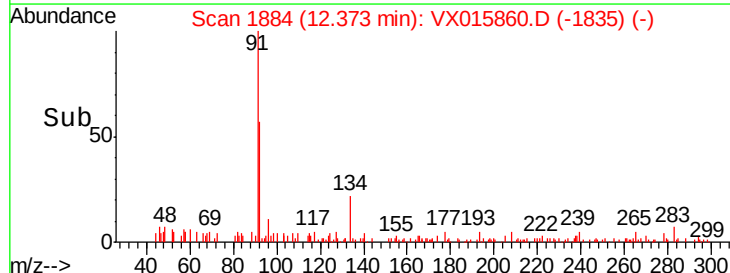
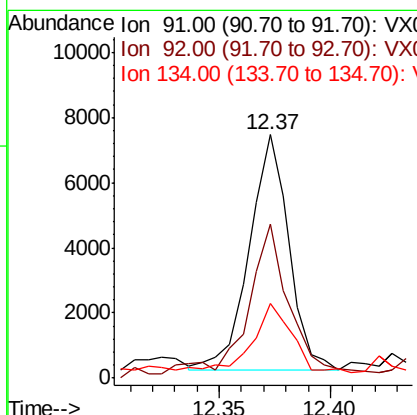
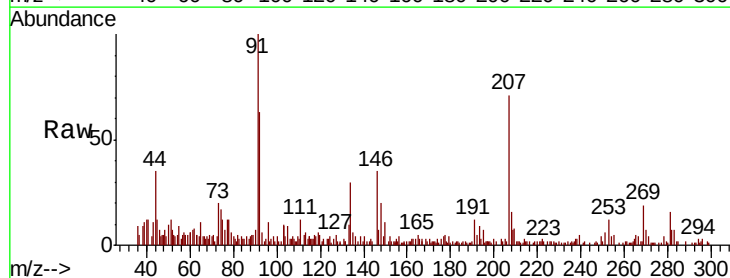
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 B98-TB1-200421

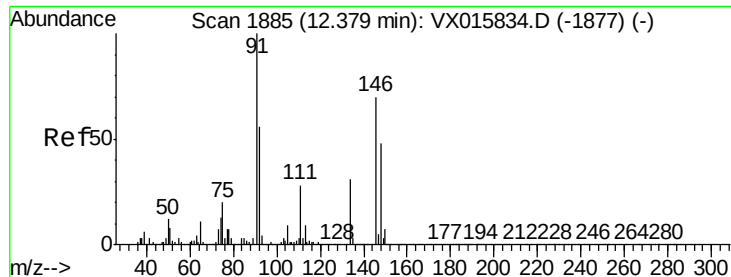
Tot Ion:146 Resp: 5386  
 Ion Ratio Lower Upper  
 146 100  
 111 43.0 19.4 58.2  
 148 68.5 33.8 101.4



#89  
 n-Butylbenzene  
 Concen: 0.227 ug/l  
 RT: 12.37 min Scan# 1884  
 Delta R.T. 0.00 min  
 Lab File: VX015860.D  
 Acq: 22 Apr 2020 23:48

Tgt Ion: 91 Resp: 8999  
 Ion Ratio Lower Upper  
 91 100  
 92 66.9 27.7 83.1  
 134 31.7 14.1 42.4

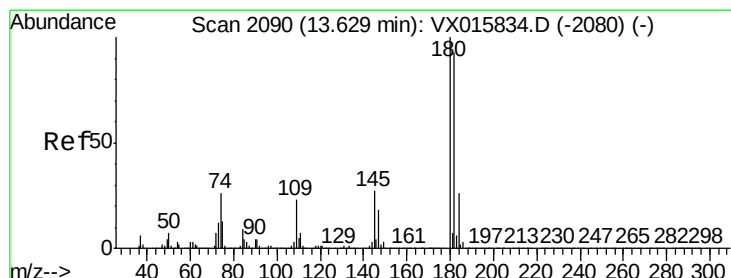
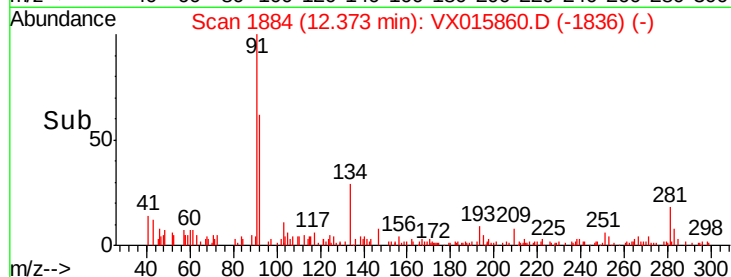
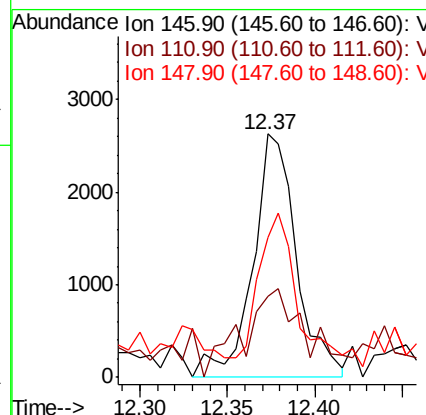
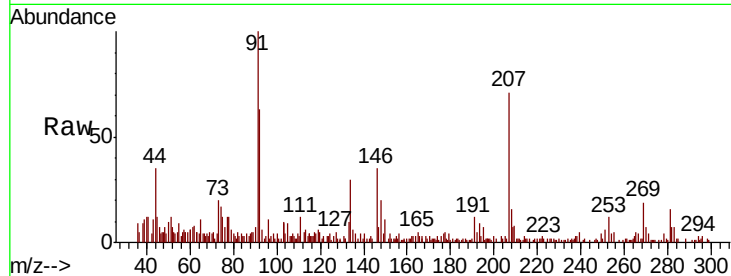




#91  
 1,2-Dichlorobenzene  
 Concen: 0.202 ug/l  
 RT: 12.37 min Scan# 1884  
 Delta R.T. -0.01 min  
 Lab File: VX015860.D  
 Acq: 22 Apr 2020 23:48

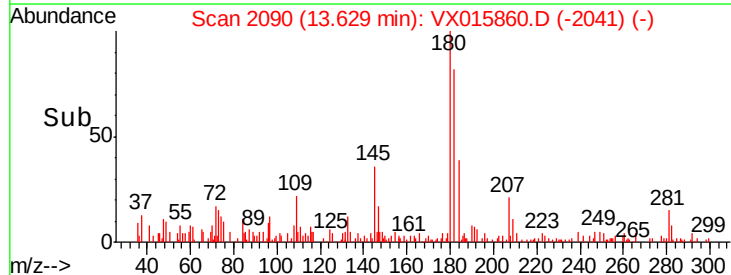
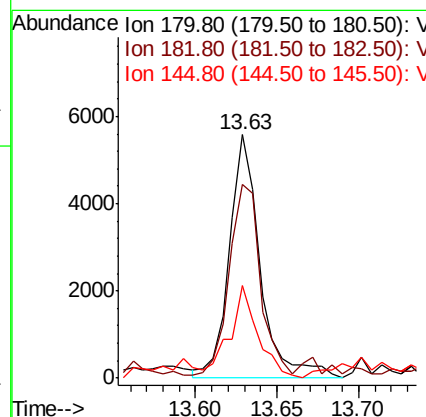
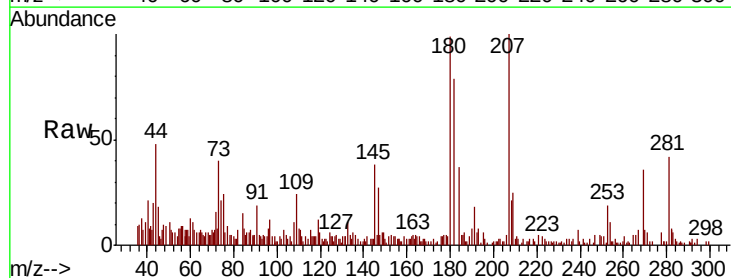
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 B98-TB1-200421

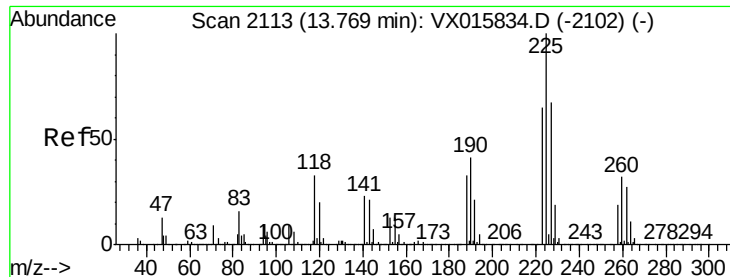
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 54.4  | 20.3  | 61.0  |
| 148     | 60.3  | 32.1  | 96.3  |



#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.414 ug/l  
 RT: 13.63 min Scan# 2090  
 Delta R.T. 0.00 min  
 Lab File: VX015860.D  
 Acq: 22 Apr 2020 23:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 79.2  | 47.7  | 143.1 |
| 145     | 34.7  | 14.5  | 43.5  |

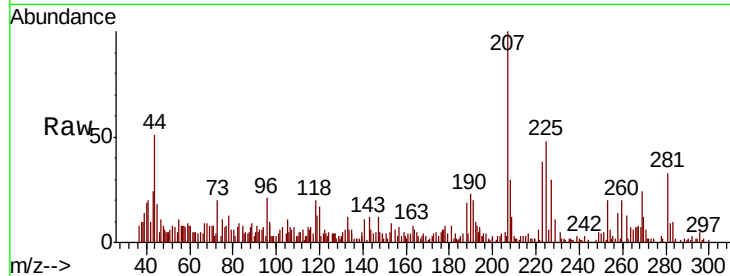




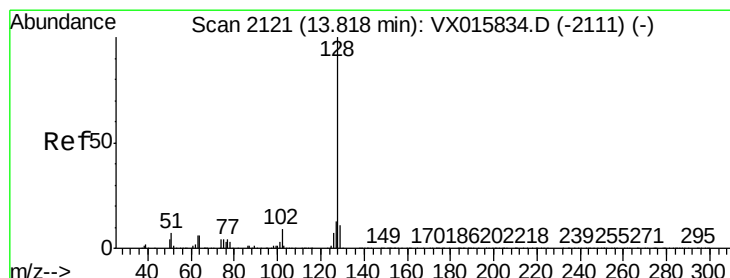
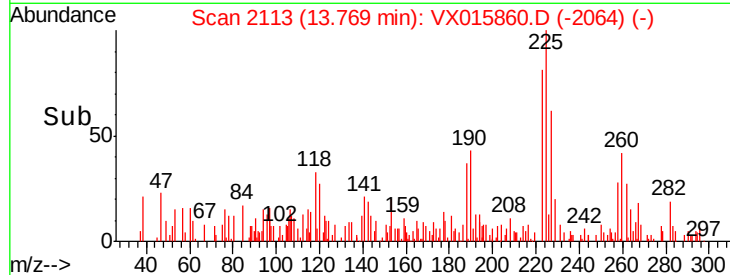
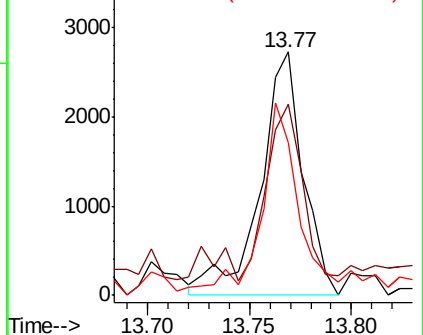
#94  
Hexachlorobutadiene  
Concen: 0.498 ug/l  
RT: 13.77 min Scan# 2113  
Delta R.T. 0.00 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

Instrument :  
MSVOA\_X  
ClientSampleId :  
B98-TB1-200421

Tot Ion:225 Resp: 3977  
Ion Ratio Lower Upper  
225 100  
223 60.7 31.3 93.8  
227 58.1 32.6 97.8

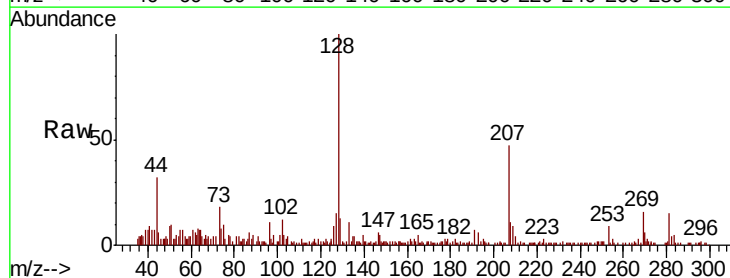


Abundance Ion 224.70 (224.40 to 225.40): V  
Ion 222.70 (222.40 to 223.40): V  
Ion 226.70 (226.40 to 227.40): V

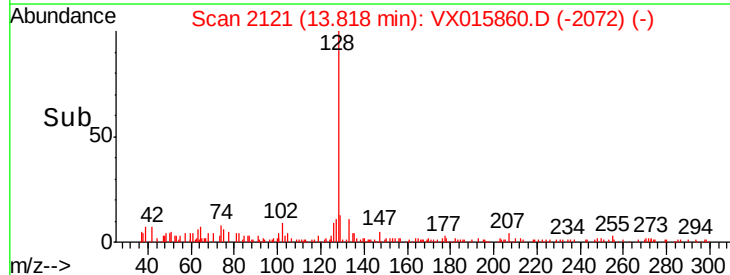
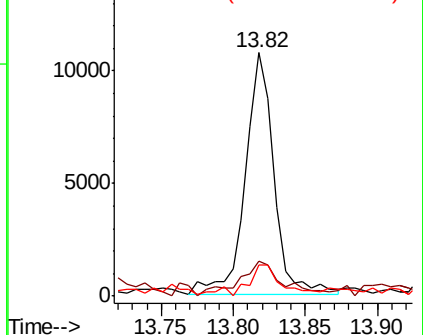


#95  
Naphthalene  
Concen: 0.288 ug/l  
RT: 13.82 min Scan# 2121  
Delta R.T. 0.00 min  
Lab File: VX015860.D  
Acq: 22 Apr 2020 23:48

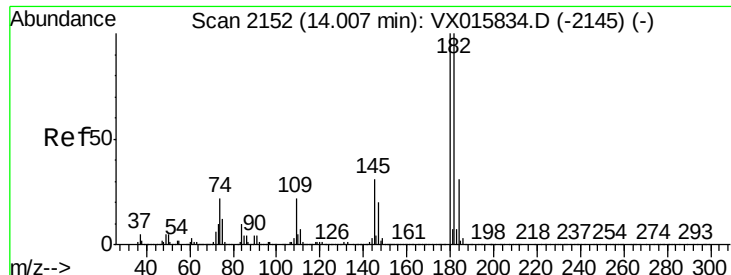
Tgt Ion:128 Resp: 14749  
Ion Ratio Lower Upper  
128 100  
127 22.6 10.5 15.7#  
129 14.3 8.5 12.7#



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V







#96  
 1,2,3-Trichlorobenzene  
 Concen: 0.358 ug/l  
 RT: 14.00 min Scan# 2151  
 Delta R.T. -0.01 min  
 Lab File: VX015860.D  
 Acq: 22 Apr 2020 23:48

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 B98-TB1-200421

Tot Ion:180 Resp: 6214  
 Ion Ratio Lower Upper  
 180 100  
 182 89.7 47.9 143.7  
 145 33.7 15.2 45.5

