

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031020\  
 Data File : VX015167.D  
 Acq On : 10 Mar 2020 13:48  
 Operator : JC/SP  
 Sample : L1842-26  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Mar 11 07:29:06 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X030420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 04 14:19:10 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 331351   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 545459   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 531757   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 267724   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 205289   | 52.22 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.44% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 171658   | 49.88 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.76%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 669637   | 51.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.32% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 238337   | 51.05 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.10% |          |

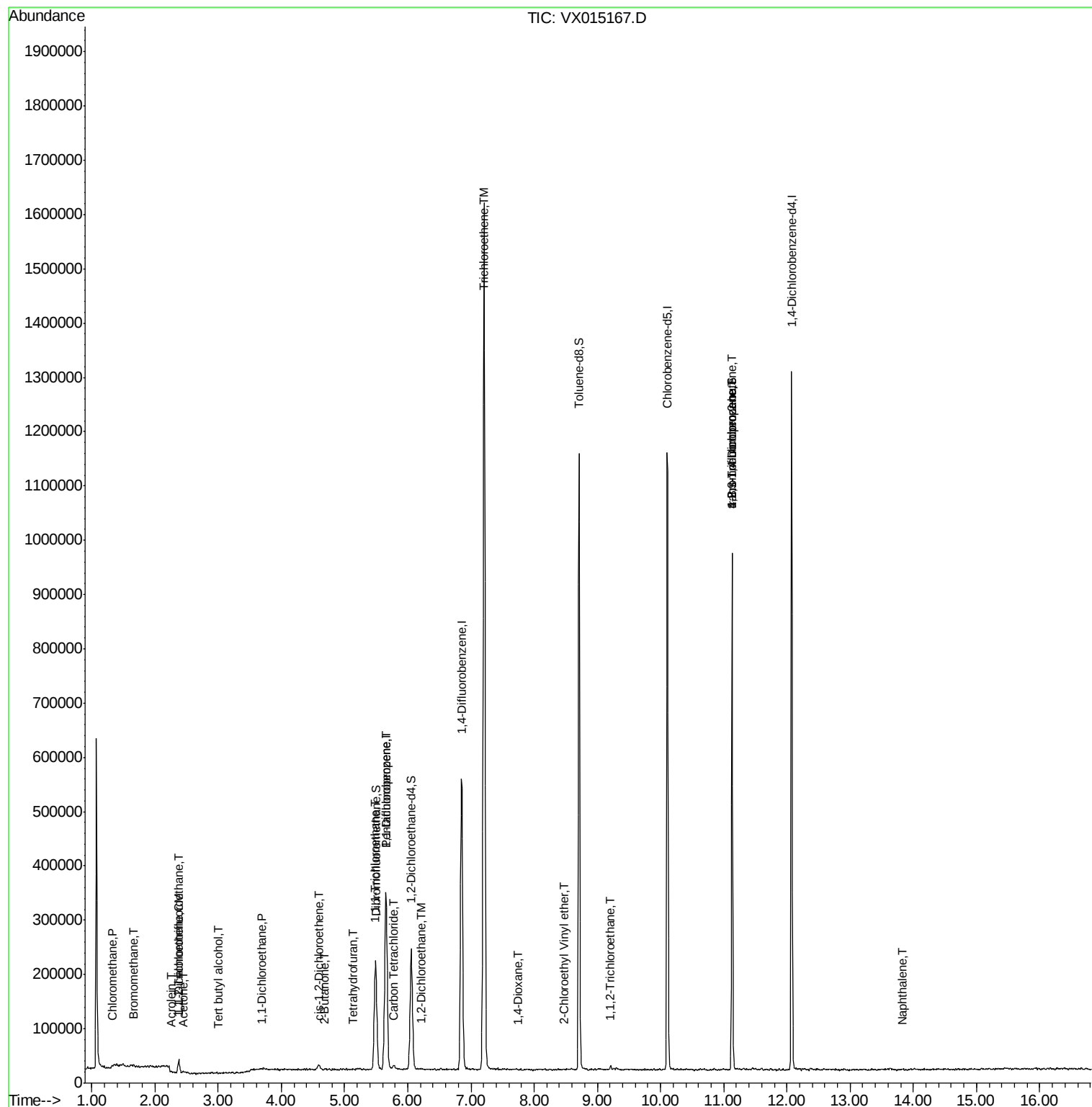
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1250     | 0.304   | ug/l   | 95     |
| 5) Bromomethane                | 1.66  | 94   | 536      | 0.209   | ug/l # | 49     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.39  | 101  | 5802     | 1.860   | ug/l   | 98     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 816      | 1.196   | ug/l # | 85     |
| 12) 1,1-Dichloroethene         | 2.37  | 96   | 5820     | 1.807   | ug/l   | 95     |
| 13) Acrolein                   | 2.27  | 56   | 163      | 0.254   | ug/l # | 1      |
| 16) Acetone                    | 2.44  | 43   | 1864     | 1.171   | ug/l   | 89     |
| 24) 1,1-Dichloroethane         | 3.69  | 63   | 2462     | 0.397   | ug/l # | 87     |
| 25) 2-Butanone                 | 4.67  | 43   | 543      | 0.233   | ug/l # | 49     |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96   | 5832     | 1.512   | ug/l   | 79     |
| 29) Tetrahydrofuran            | 5.14  | 42   | 479      | 0.319   | ug/l # | 32     |
| 32) 1,1,1-Trichloroethane      | 5.48  | 97   | 1045     | 0.208   | ug/l # | 23     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 22458    | 4.454   | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 5.78  | 117  | 6868     | 1.443   | ug/l   | 92     |
| 42) 1,2-Dichloroethane         | 6.21  | 62   | 1543     | 0.300   | ug/l   | 99     |
| 44) Trichloroethene            | 7.21  | 130  | 615739   | 147.786 | ug/l   | 95     |
| 49) 1,4-Dioxane                | 7.74  | 88   | 304      | 3.357   | ug/l # | 1      |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 2640     | 0.701   | ug/l # | 91     |
| 58) 2-Chloroethyl Vinyl ether  | 8.47  | 63   | 662      | 0.226   | ug/l   | 90     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 121240   | 22.703  | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 121240   | 64.431  | ug/l # | 11     |
| 95) Naphthalene                | 13.83 | 128  | 937      | 1.471   | ug/l # | 82     |

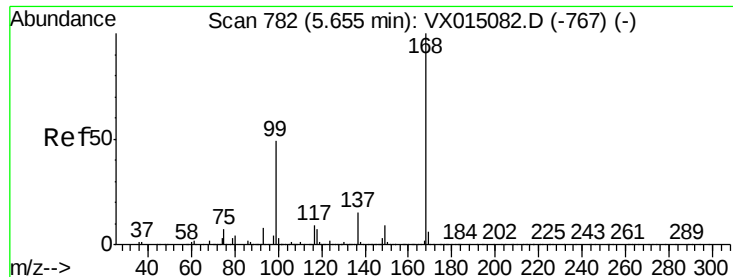
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX031020\  
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Sample : L1842-26  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Mar 11 07:29:06 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X030420W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 04 14:19:10 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.00 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :

MSVOA\_X

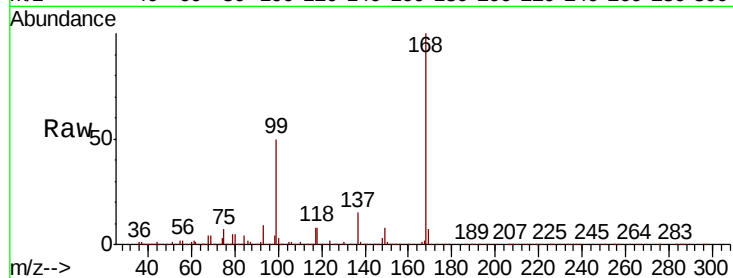
ClientSampled :

Tot Ion:168 Resp: 331351

Ion Ratio Lower Upper

168 100

99 49.8 39.4 59.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

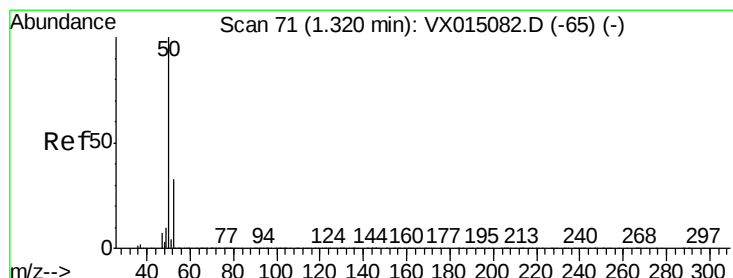
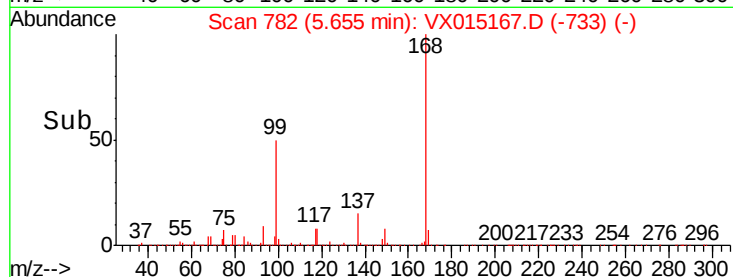
5.65

100000

50000

0

Time-->



#3

Chloromethane

Concen: 0.304 ug/l

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VX015167.D

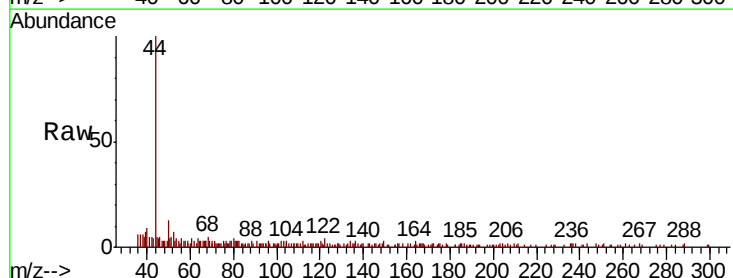
Acq: 10 Mar 2020 13:48

Tgt Ion: 50 Resp: 1250

Ion Ratio Lower Upper

50 100

52 29.7 26.2 39.2



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

800

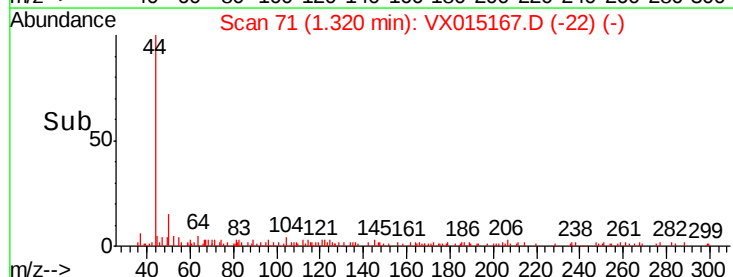
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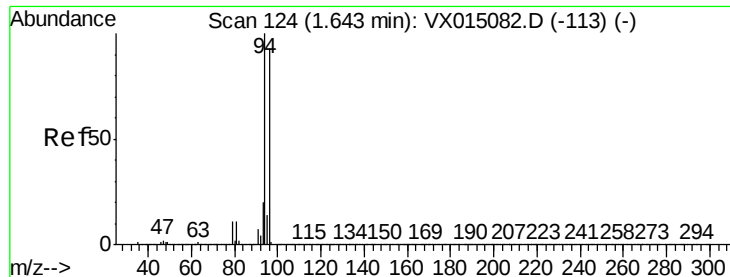
400

200

0

Time-->





#5

Bromomethane

Concen: 0.209 ug/l

RT: 1.66 min Scan# 126

Delta R.T. 0.01 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

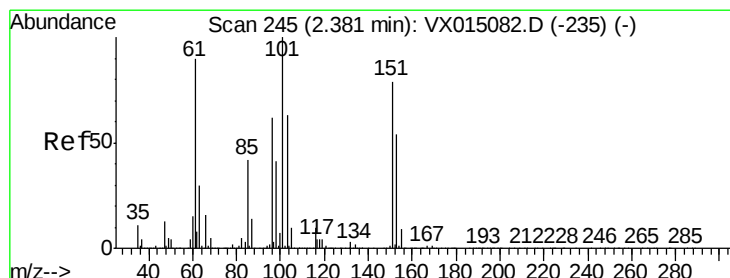
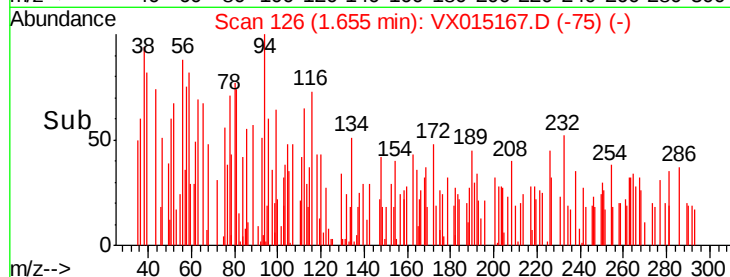
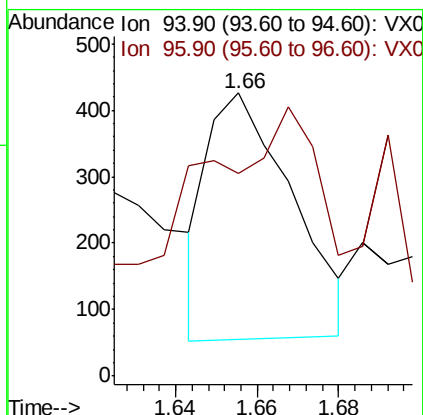
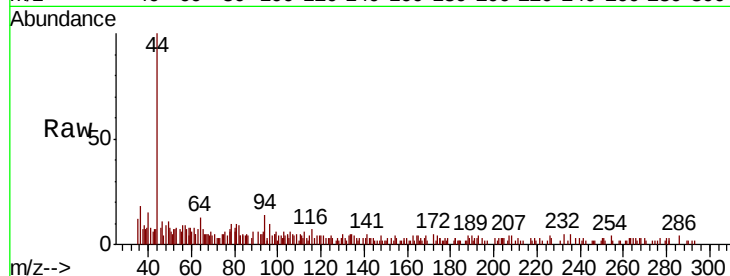
Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 94 Resp: 536

Ion Ratio Lower Upper

94 100

96 44.1 74.6 111.8#



#9

1,1,2-Trichlorotrifluoroethane

Concen: 1.860 ug/l

RT: 2.39 min Scan# 246

Delta R.T. 0.01 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

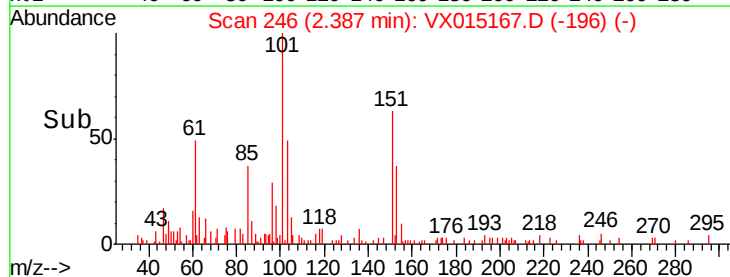
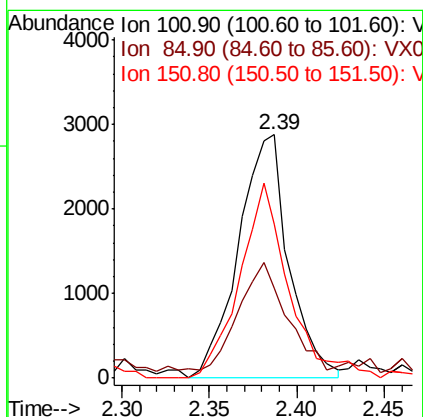
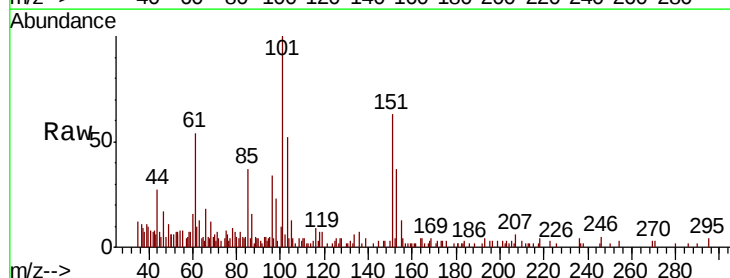
Tgt Ion:101 Resp: 5802

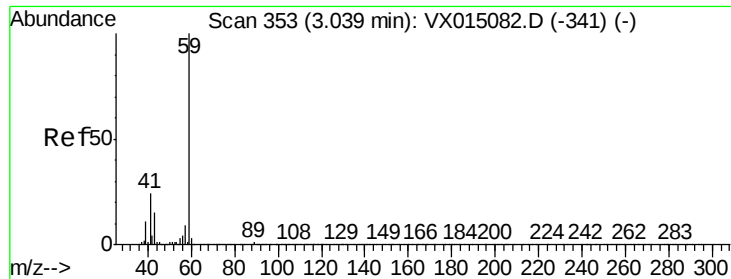
Ion Ratio Lower Upper

101 100

85 43.2 33.7 50.5

151 77.9 64.0 96.0



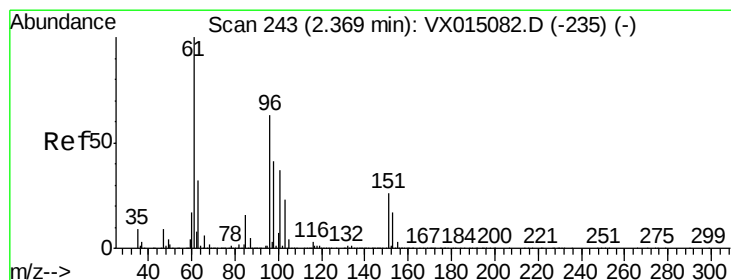
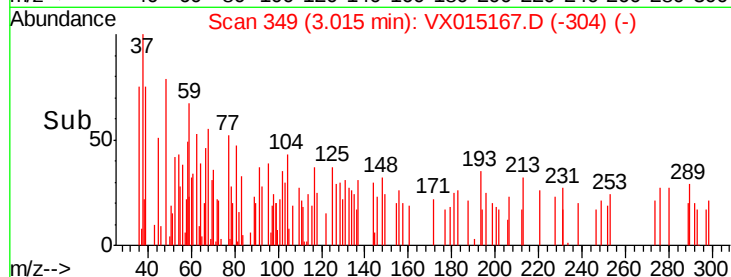
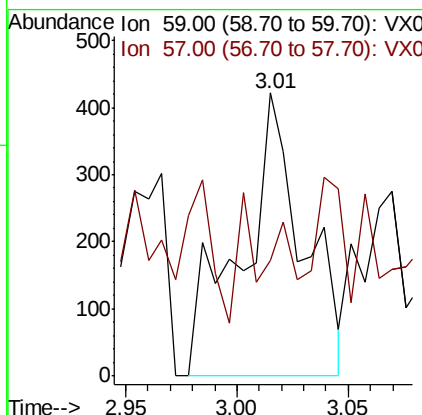
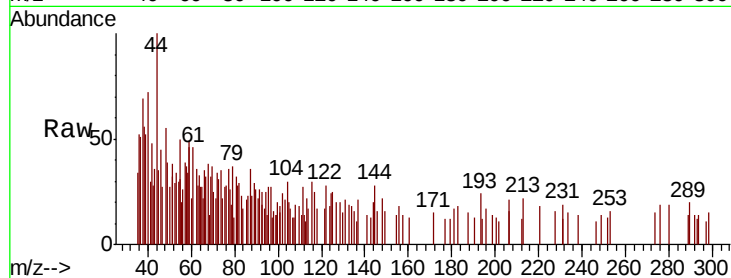


#11

Tert butyl alcohol  
Concen: 1.196 ug/l  
RT: 3.01 min Scan# 349  
Delta R.T. -0.02 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

Instrument :  
MSVOA\_X  
ClientSampled :

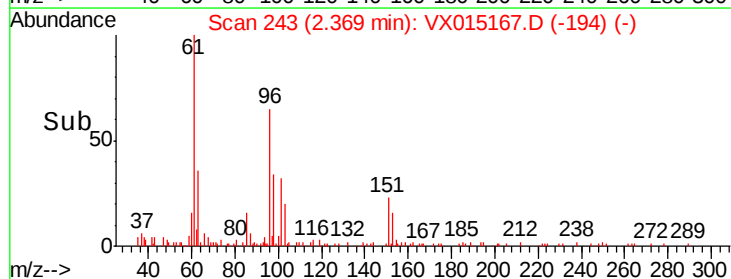
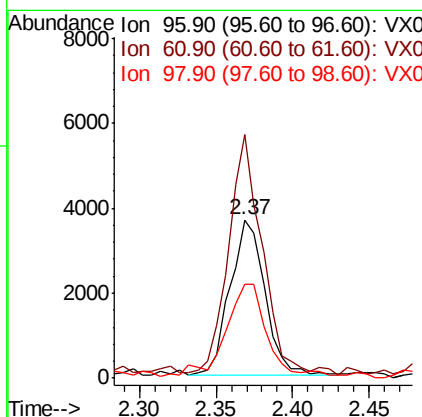
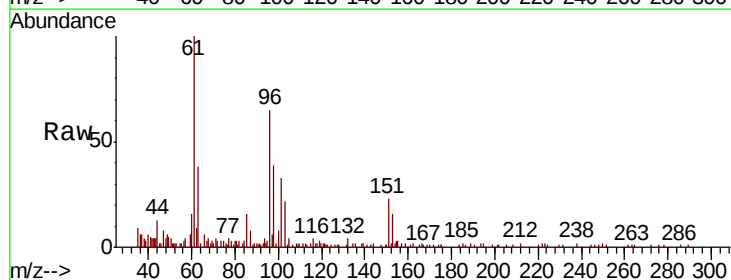
Tot Ion: 59 Resp: 816  
Ion Ratio Lower Upper  
59 100  
57 15.8 8.2 12.4#

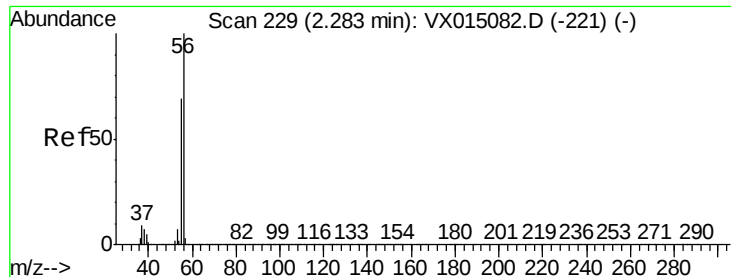


#12

1,1-Dichloroethene  
Concen: 1.807 ug/l  
RT: 2.37 min Scan# 243  
Delta R.T. 0.00 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

Tgt Ion: 96 Resp: 5820  
Ion Ratio Lower Upper  
96 100  
61 154.9 126.2 189.4  
98 55.4 51.4 77.0

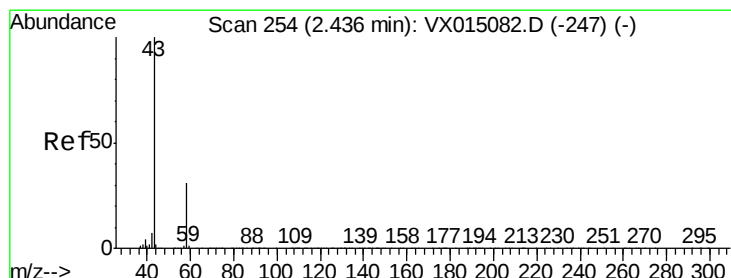
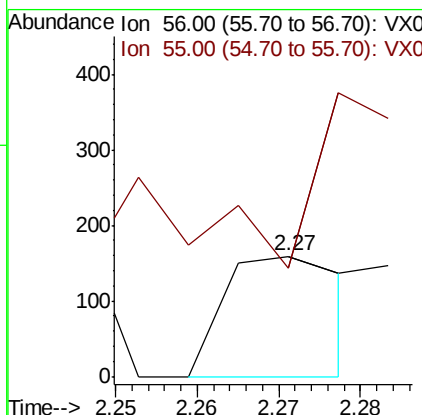
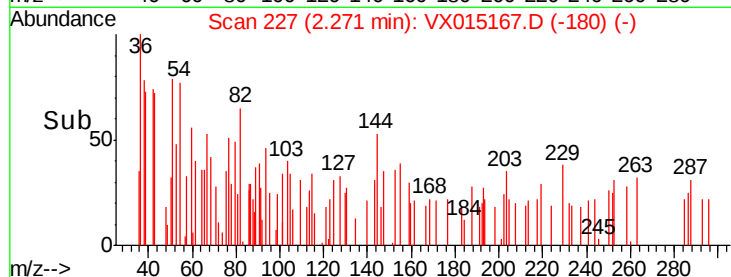
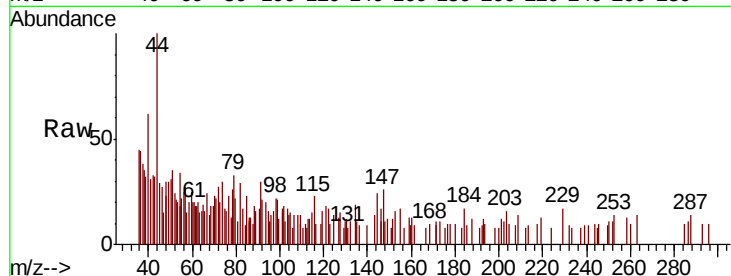




#13  
Acrolein  
Concen: 0.254 ug/l  
RT: 2.27 min Scan# 227  
Delta R.T. -0.01 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

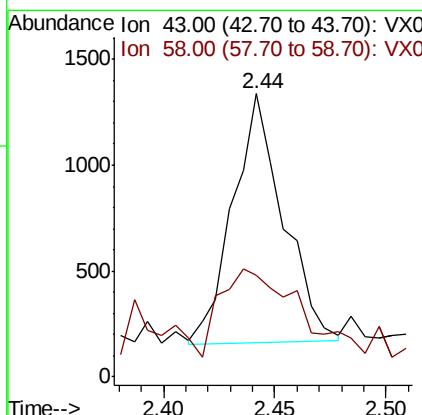
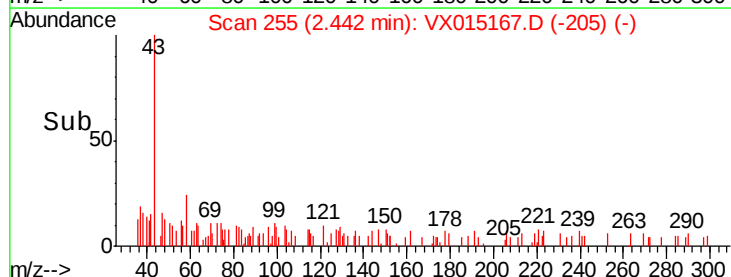
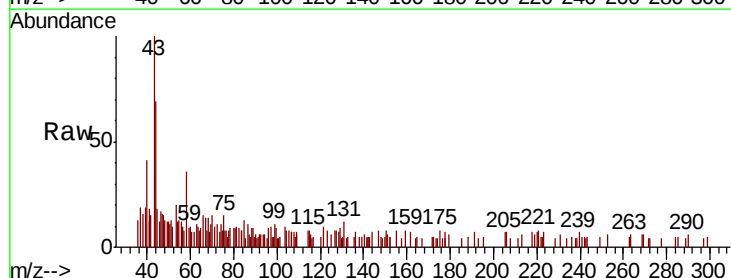
Instrument :  
MSVOA\_X  
ClientSampleId :

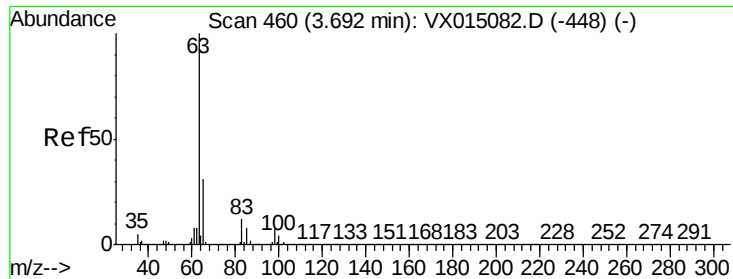
Tot Ion: 56 Resp: 163  
Ion Ratio Lower Upper  
56 100  
55 149.7 55.4 83.0#



#16  
Acetone  
Concen: 1.171 ug/l  
RT: 2.44 min Scan# 255  
Delta R.T. 0.01 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

Tgt Ion: 43 Resp: 1864  
Ion Ratio Lower Upper  
43 100  
58 24.9 24.8 37.2





#24

1,1-Dichloroethane

Concen: 0.397 ug/l

RT: 3.69 min Scan# 460

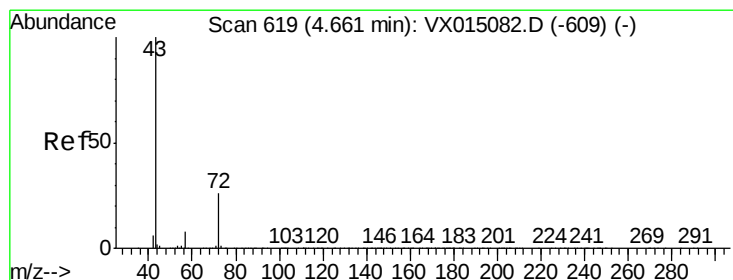
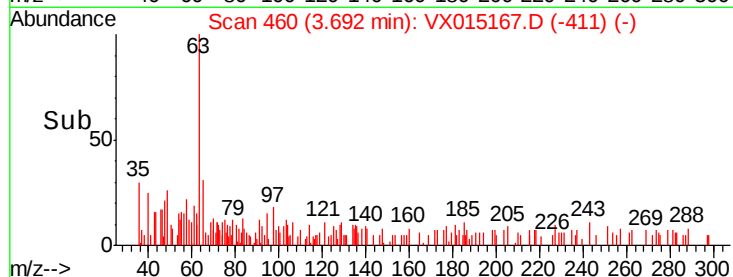
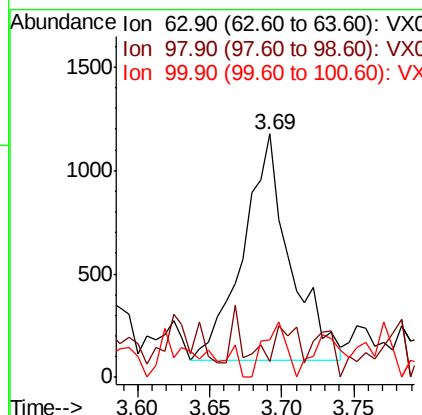
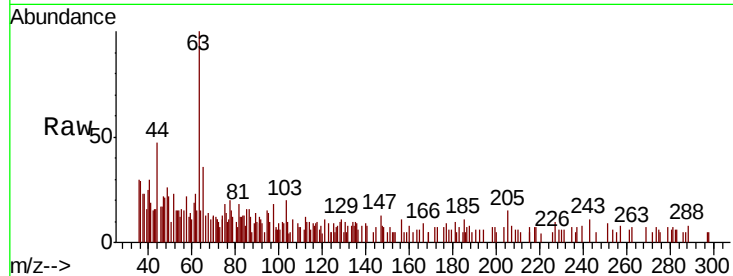
Delta R.T. 0.00 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :  
MSVOA\_X  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 63    | Resp: | 2462  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 14.0  | 3.7   | 11.1# |
| 100      | 5.5   | 2.1   | 6.5   |



#25

2-Butanone

Concen: 0.233 ug/l

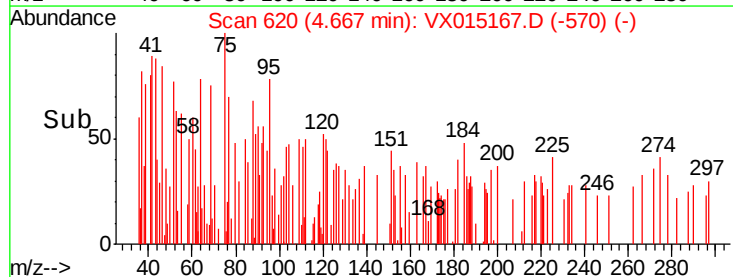
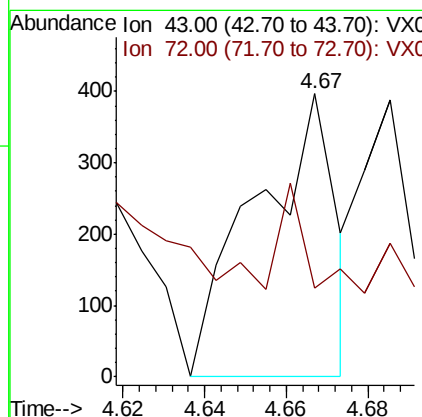
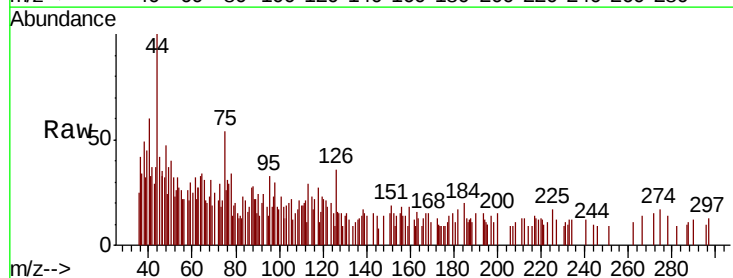
RT: 4.67 min Scan# 620

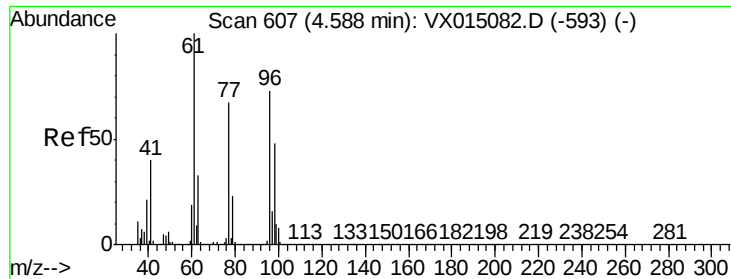
Delta R.T. 0.01 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 543   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 0.0   | 20.6  | 30.8# |



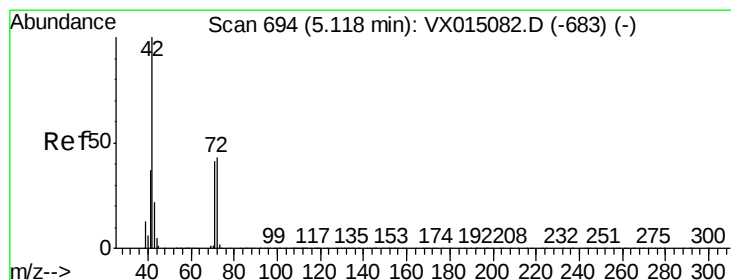
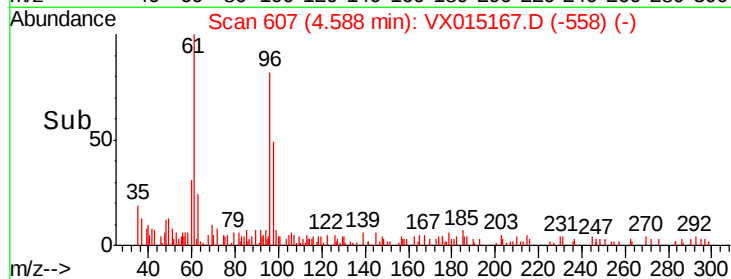
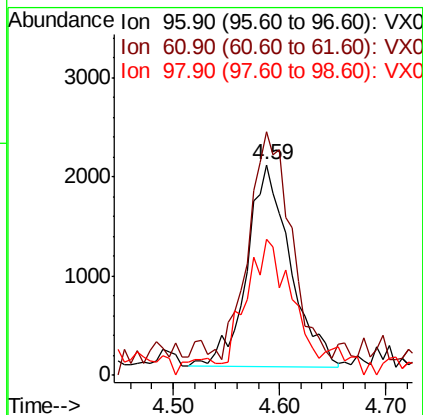
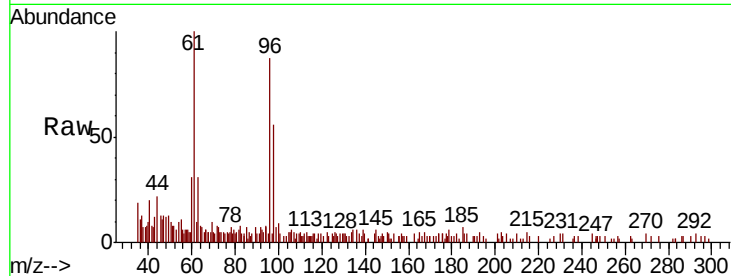


#27

cis-1,2-Dichloroethene  
 Concen: 1.512 ug/l  
 RT: 4.59 min Scan# 607  
 Delta R.T. 0.00 min  
 Lab File: VX015167.D  
 Acq: 10 Mar 2020 13:48

Instrument :  
 MSVOA\_X  
 ClientSampled :

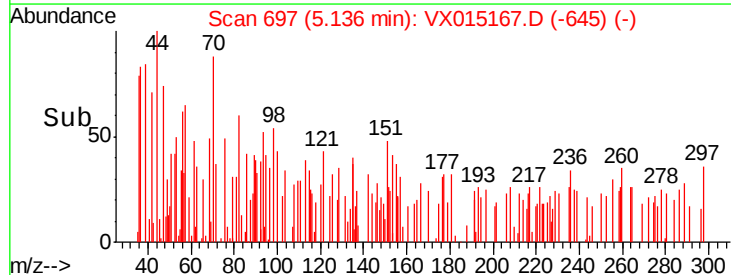
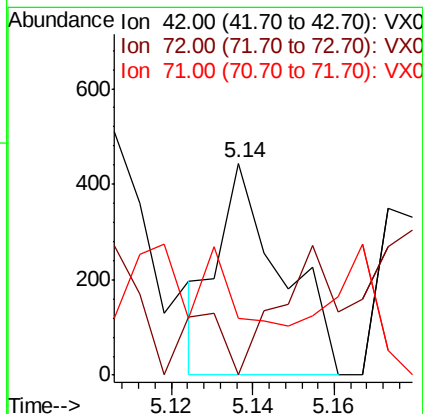
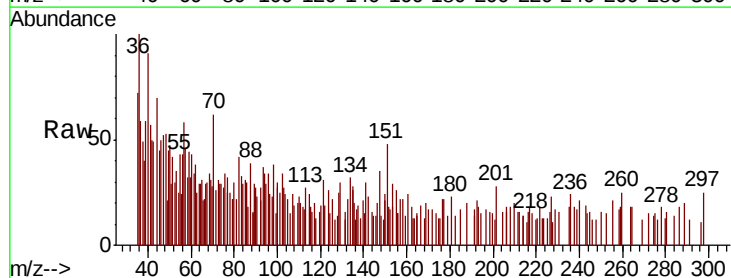
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 108.6 | 0.0   | 286.8 |
| 98      | 60.1  | 0.0   | 128.4 |

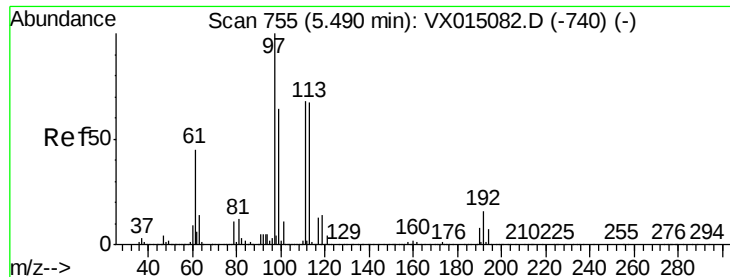


#29

Tetrahydrofuran  
 Concen: 0.319 ug/l  
 RT: 5.14 min Scan# 697  
 Delta R.T. 0.02 min  
 Lab File: VX015167.D  
 Acq: 10 Mar 2020 13:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 19.2  | 36.4  | 54.6# |
| 71      | 104.2 | 33.3  | 49.9# |





#32

1,1,1-Trichloroethane

Concen: 0.208 ug/l

RT: 5.48 min Scan# 753

Delta R.T. -0.01 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :

MSVOA\_X

ClientSampled :

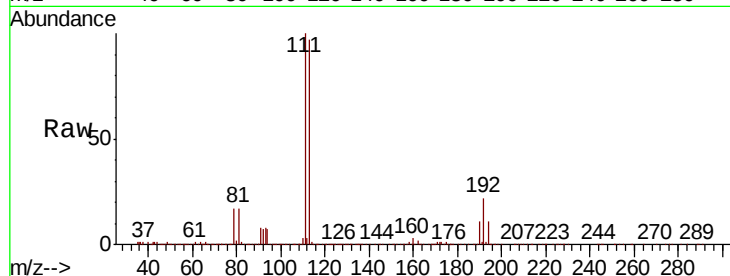
Tot Ion: 97 Resp: 1045

Ion Ratio Lower Upper

97 100

99 0.0 52.8 79.2#

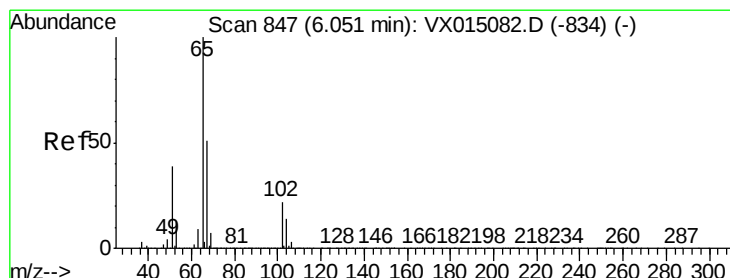
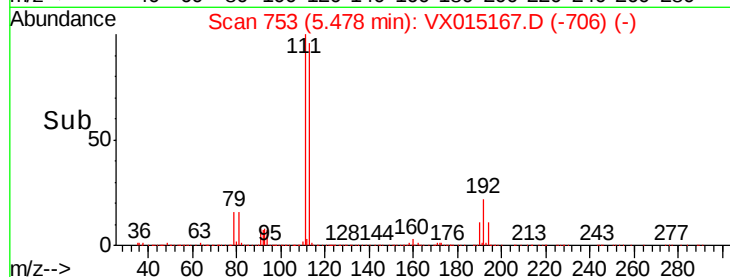
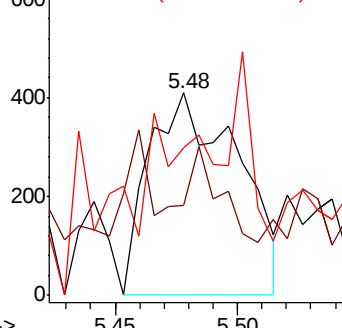
61 0.0 36.6 54.8#



Abundance Ion 96.90 (96.60 to 97.60): VX0

Ion 98.90 (98.60 to 99.60): VX0

Ion 60.90 (60.60 to 61.60): VX0



#33

1,2-Dichloroethane-d4

Concen: 52.222 ug/l

RT: 6.05 min Scan# 847

Delta R.T. 0.00 min

Lab File: VX015167.D

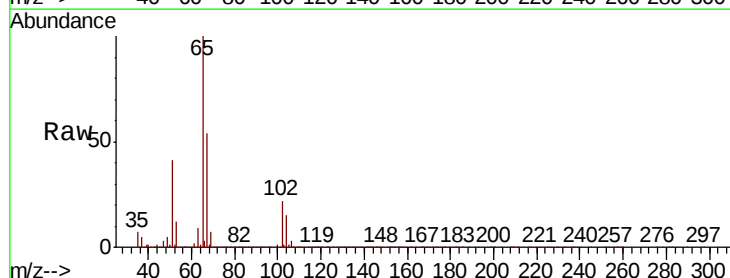
Acq: 10 Mar 2020 13:48

Tgt Ion: 65 Resp: 205289

Ion Ratio Lower Upper

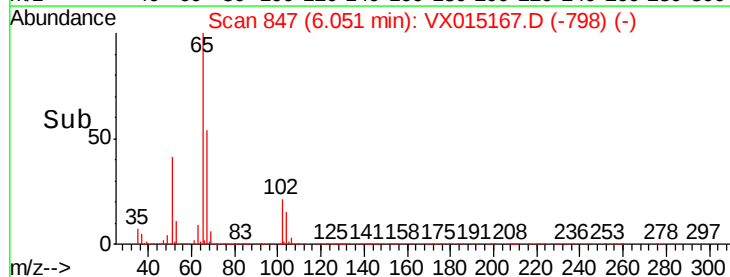
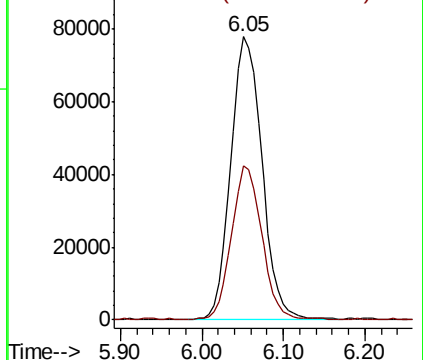
65 100

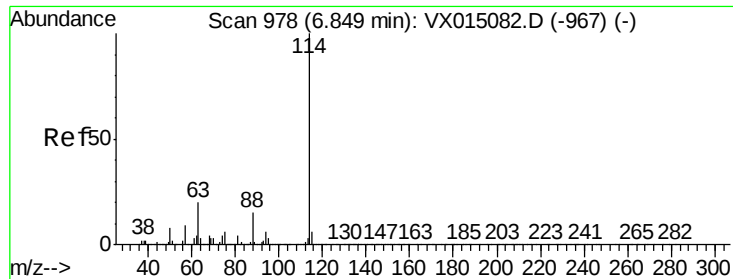
67 52.6 0.0 105.6



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

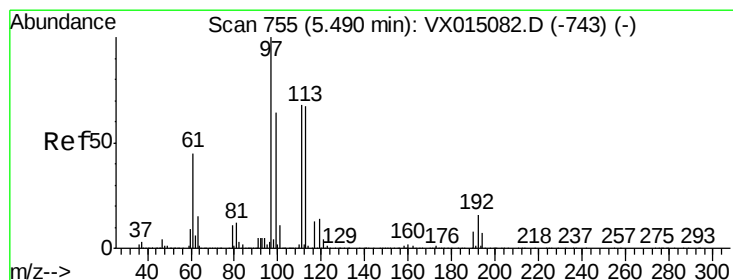
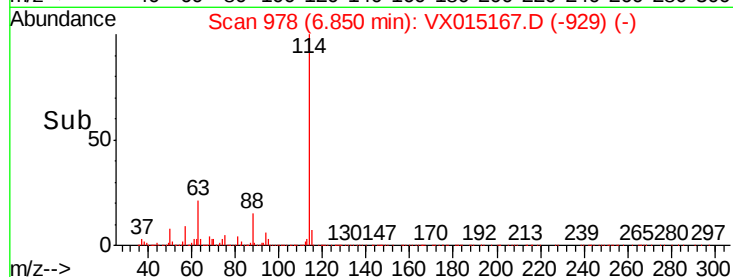
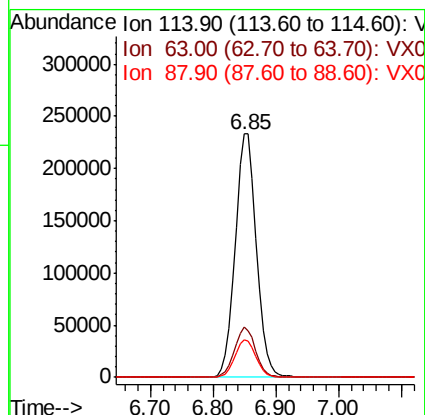
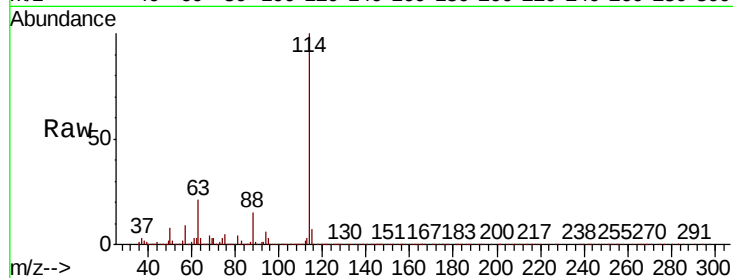




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.85 min Scan# 978  
Delta R.T. 0.00 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

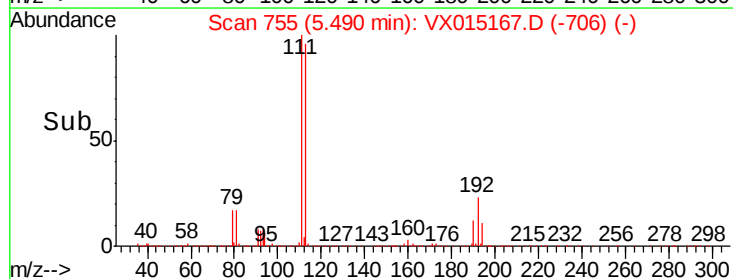
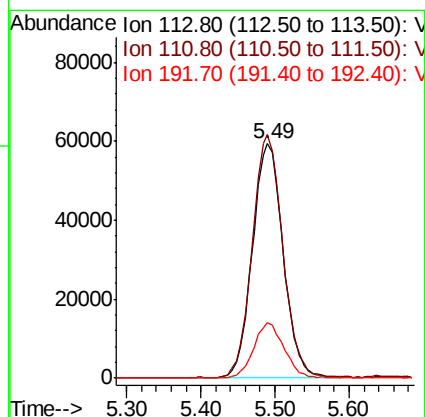
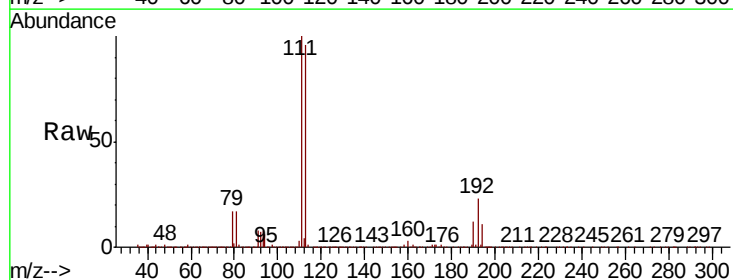
Instrument :  
MSVOA\_X  
ClientSampleId :

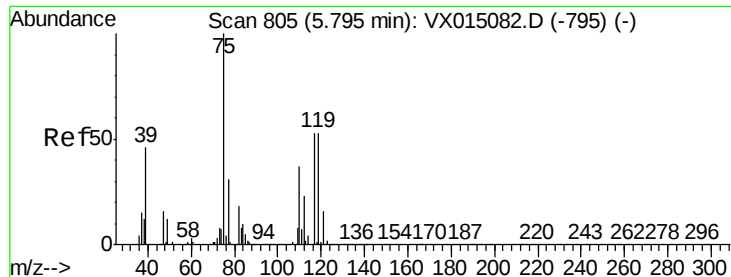
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 20.7  | 0.0   | 40.0  |
| 88      | 15.4  | 0.0   | 30.6  |



#35  
Dibromofluoromethane  
Concen: 49.884 ug/l  
RT: 5.49 min Scan# 755  
Delta R.T. 0.00 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.7 | 82.6  | 123.8 |
| 192     | 23.4  | 18.6  | 28.0  |





#36

1,1-Dichloropropene

Concen: 4.454 ug/l

RT: 5.65 min Scan# 782

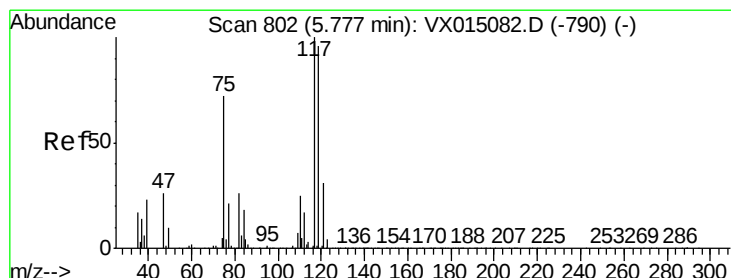
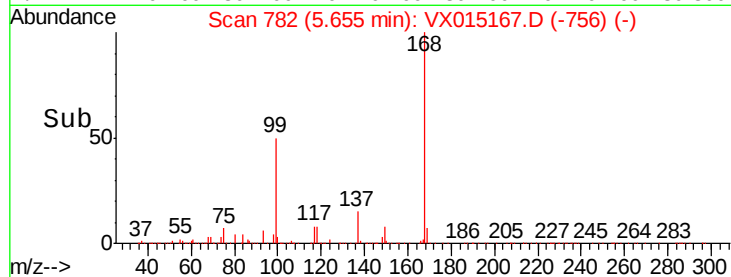
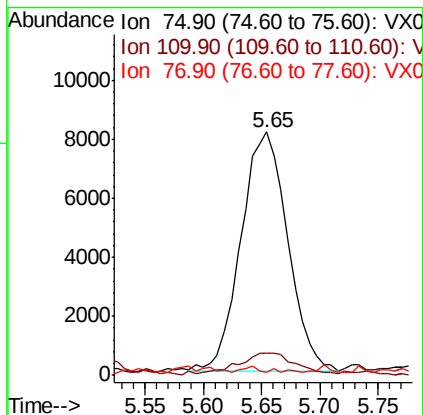
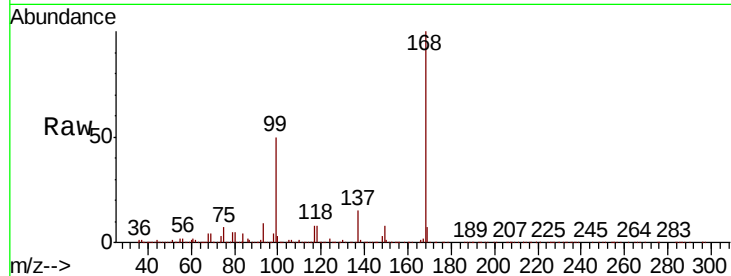
Delta R.T. -0.14 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :  
MSVOA\_X  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 75    | Resp: | 22458 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 110      | 12.2  | 17.9  | 53.8# |
| 77       | 1.0   | 24.8  | 37.2# |



#38

Carbon Tetrachloride

Concen: 1.443 ug/l

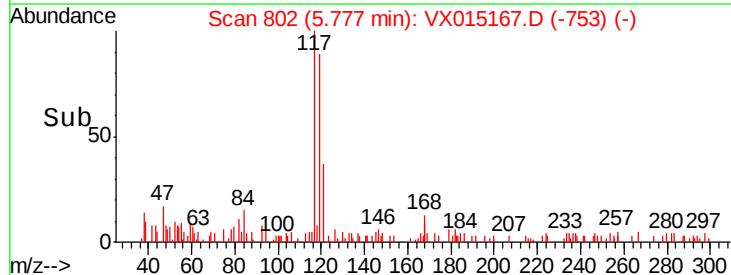
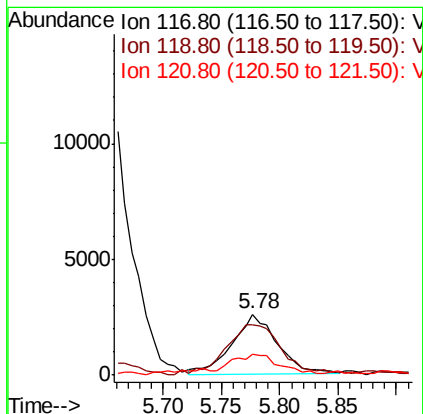
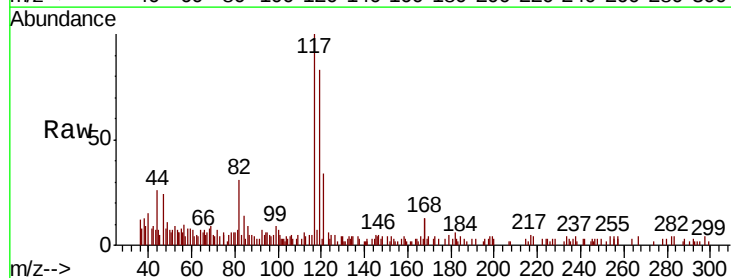
RT: 5.78 min Scan# 802

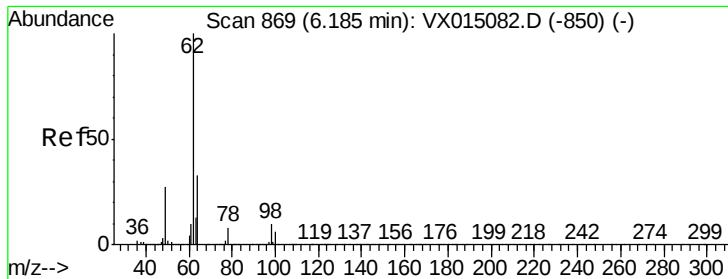
Delta R.T. 0.00 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 117   | Resp: | 6868  |
| Ion      | Ratio | Lower | Upper |
| 117      | 100   |       |       |
| 119      | 86.1  | 76.9  | 115.3 |
| 121      | 29.8  | 24.6  | 37.0  |





#42

1,2-Dichloroethane

Concen: 0.300 ug/l

RT: 6.21 min Scan# 873

Delta R.T. 0.02 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :

MSVOA\_X

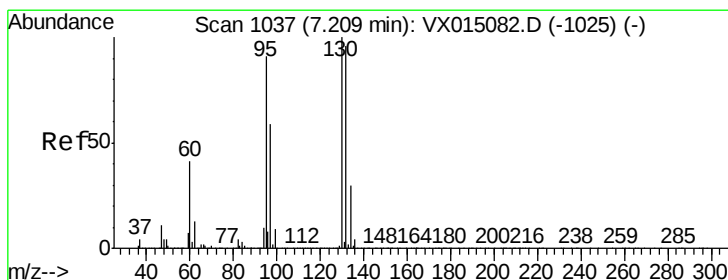
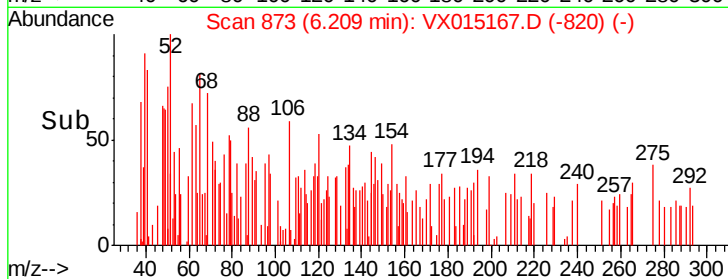
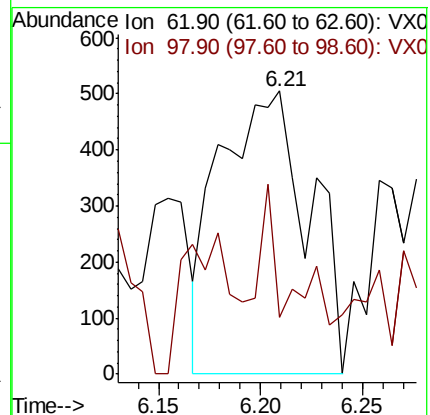
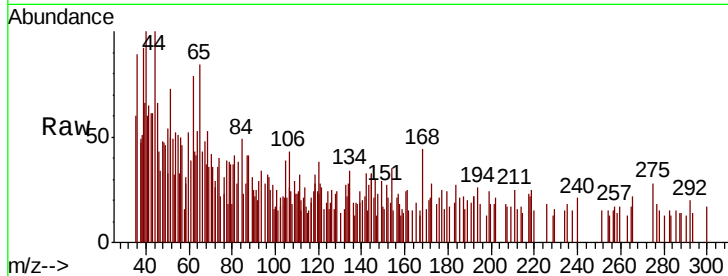
ClientSampled :

Tot Ion: 62 Resp: 1543

Ion Ratio Lower Upper

62 100

98 10.6 0.0 20.6



#44

Trichloroethene

Concen: 147.786 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. 0.00 min

Lab File: VX015167.D

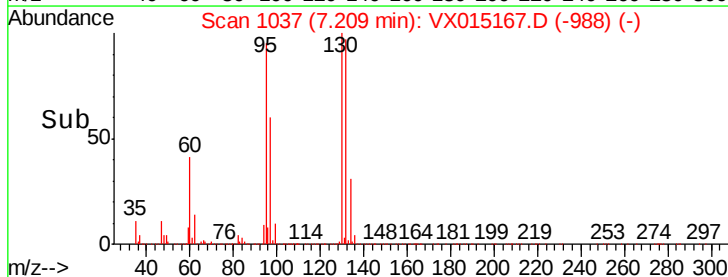
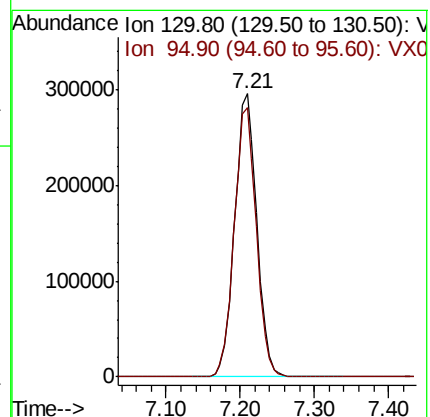
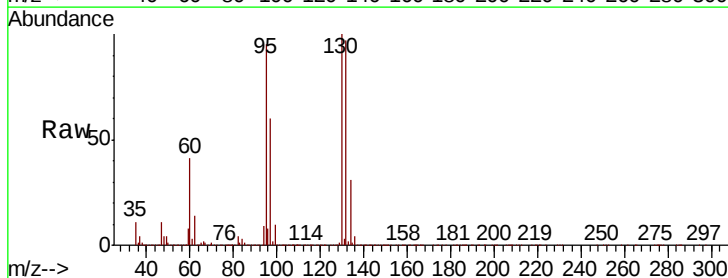
Acq: 10 Mar 2020 13:48

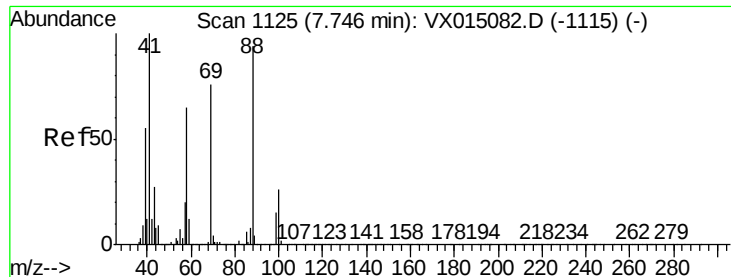
Tgt Ion:130 Resp: 615739

Ion Ratio Lower Upper

130 100

95 94.9 0.0 181.2

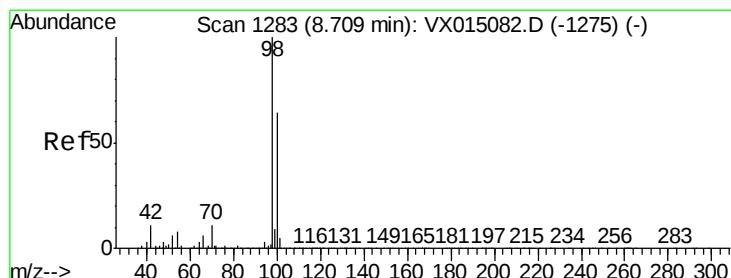
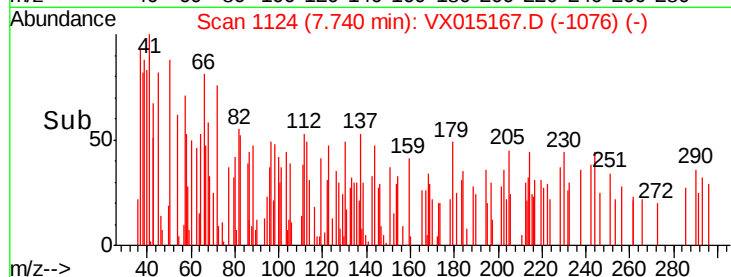
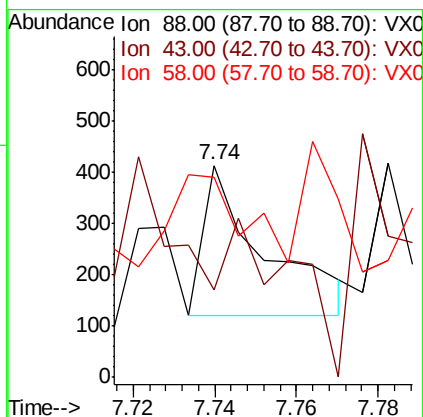
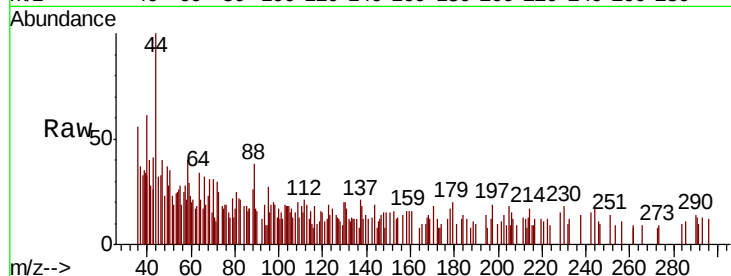




#49  
1,4-Dioxane  
Concen: 3.357 ug/l  
RT: 7.74 min Scan# 1124  
Delta R.T. -0.01 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

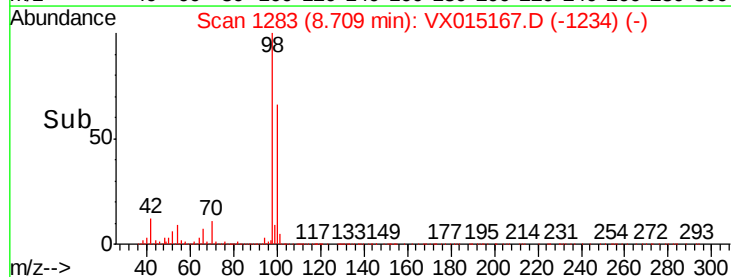
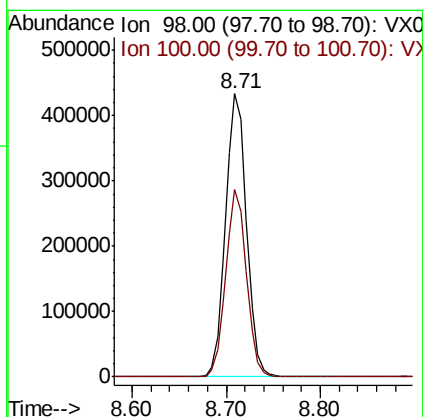
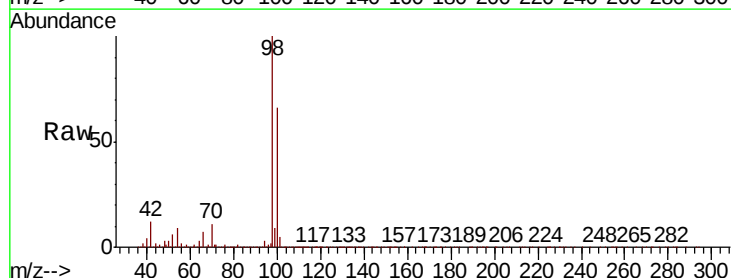
Instrument :  
MSVOA\_X  
ClientSampleId :

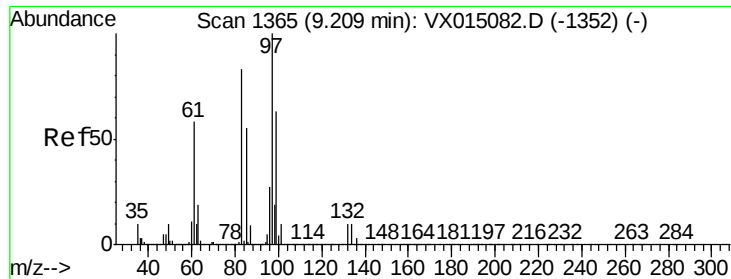
Tot Ion: 88 Resp: 304  
Ion Ratio Lower Upper  
88 100  
43 0.0 27.0 40.4#  
58 179.3 55.6 83.4#



#50  
Toluene-d8  
Concen: 51.158 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

Tgt Ion: 98 Resp: 669637  
Ion Ratio Lower Upper  
98 100  
100 65.4 52.4 78.6

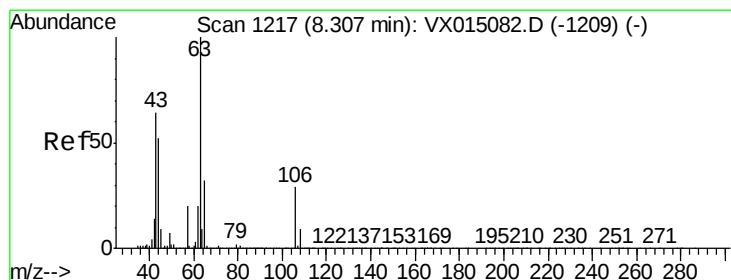
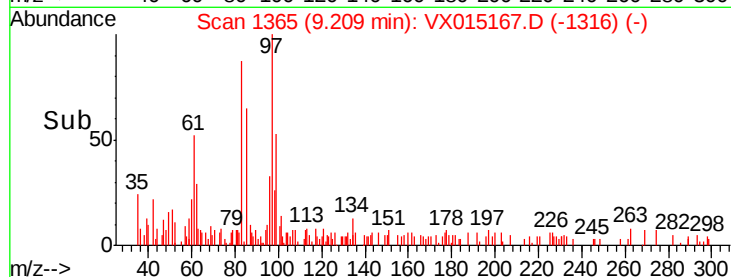
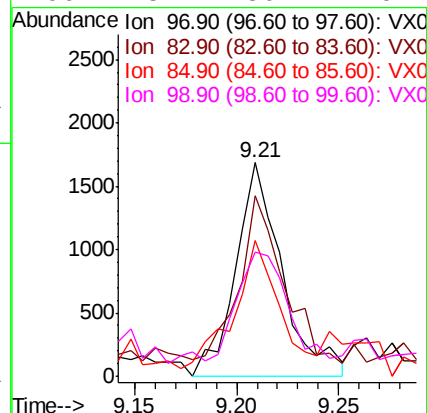
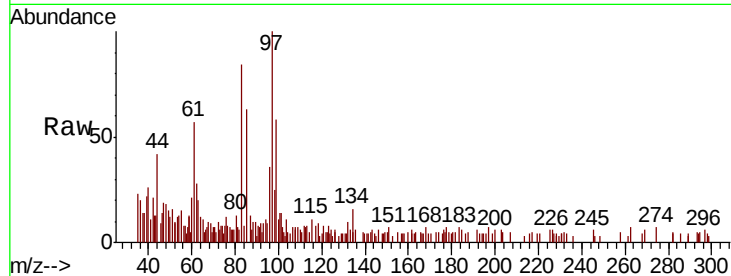




#55  
 1,1,2-Trichloroethane  
 Concen: 0.701 ug/l  
 RT: 9.21 min Scan# 1365  
 Delta R.T. 0.00 min  
 Lab File: VX015167.D  
 Acq: 10 Mar 2020 13:48

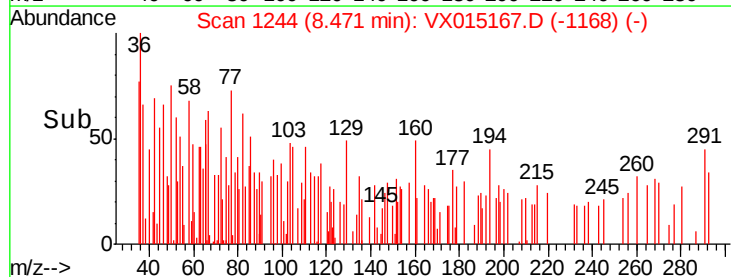
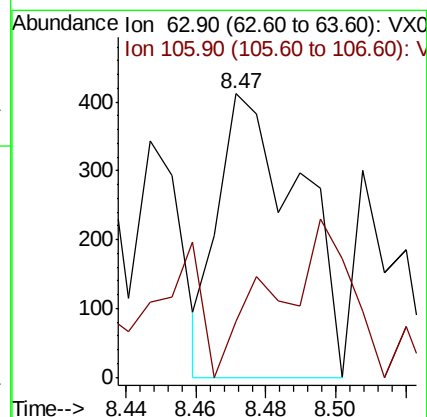
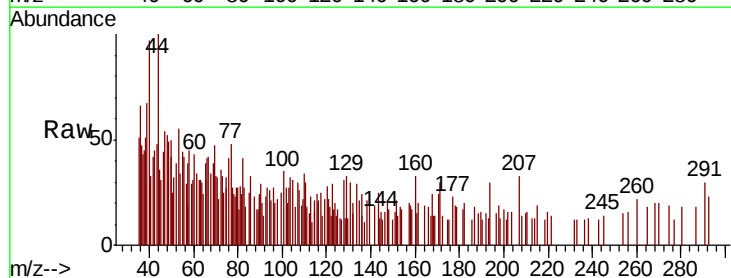
Instrument :  
 MSVOA\_X  
 ClientSampleId :

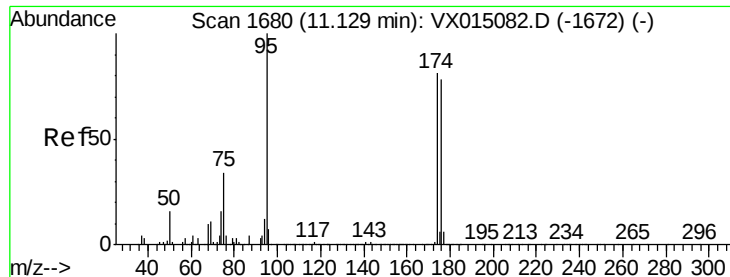
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 2640  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 78.1  | 66.4  | 99.6  |
| 85       | 56.5  | 43.5  | 65.3  |
| 99       | 48.1  | 50.7  | 76.1# |



#58  
 2-Chloroethyl Vinyl ether  
 Concen: 0.226 ug/l  
 RT: 8.47 min Scan# 1244  
 Delta R.T. 0.16 min  
 Lab File: VX015167.D  
 Acq: 10 Mar 2020 13:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 662   |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 106      | 23.4  | 22.8  | 34.2  |





#62

4-Bromofluorobenzene

Concen: 51.048 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.01 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :

MSVOA\_X

ClientSampleId :

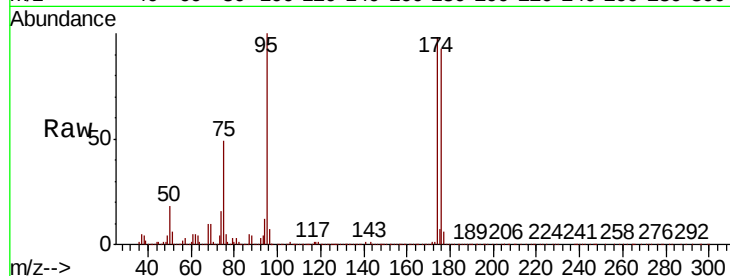
Tot Ion: 95 Resp: 238337

Ion Ratio Lower Upper

95 100

174 90.0 0.0 177.6

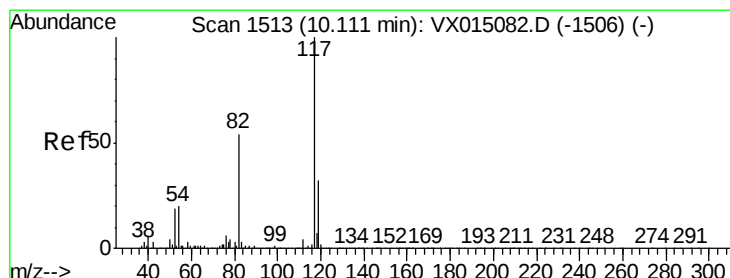
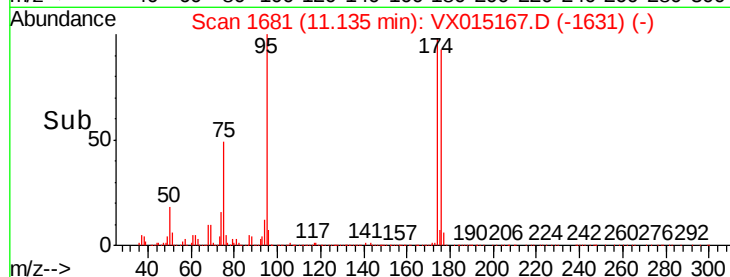
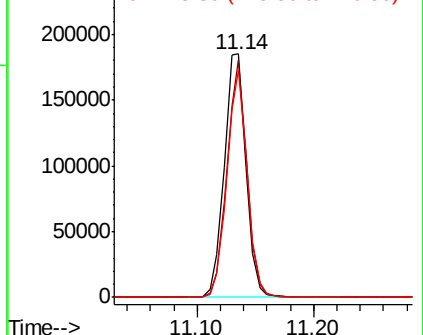
176 87.9 0.0 170.2



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: 10.11 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

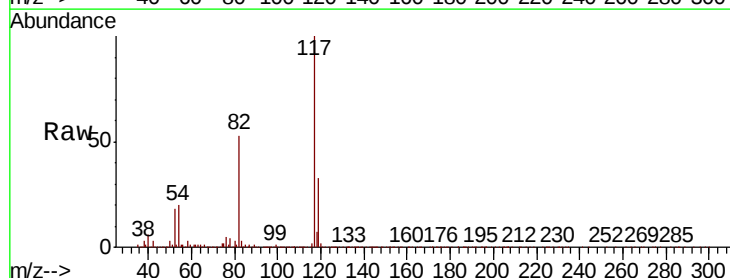
Tgt Ion: 117 Resp: 531757

Ion Ratio Lower Upper

117 100

82 53.1 43.3 64.9

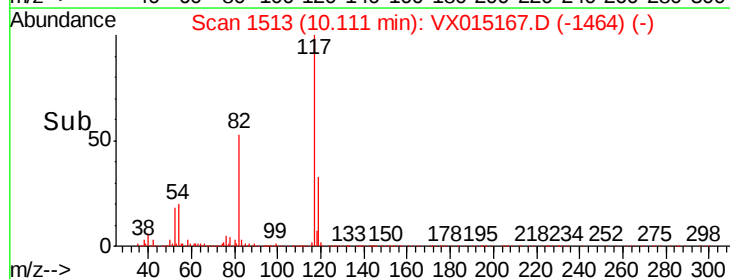
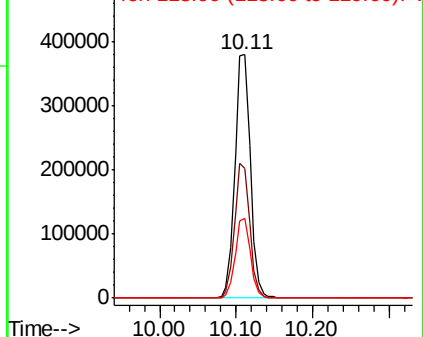
119 32.8 25.8 38.8

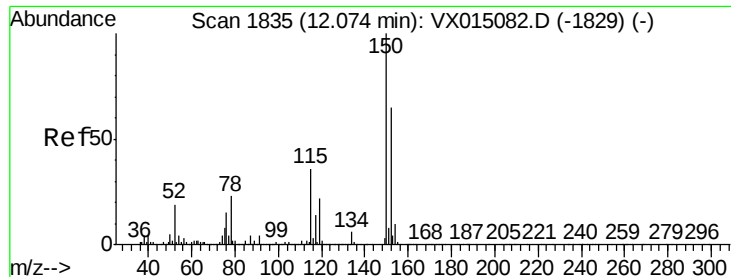


Abundance Ion 116.90 (116.60 to 117.60): V

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: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX015167.D

Acq: 10 Mar 2020 13:48

Instrument :

MSVOA\_X

ClientSampleId :

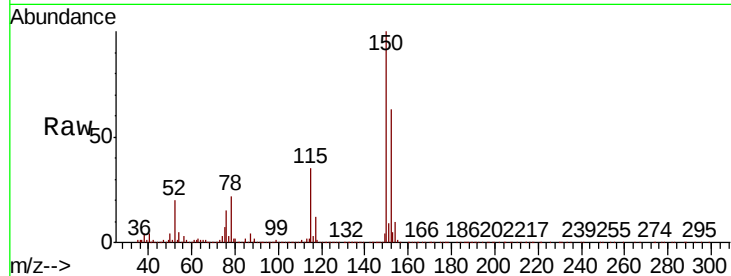
Tot Ion:152 Resp: 267724

Ion Ratio Lower Upper

152 100

115 55.9 38.2 114.6

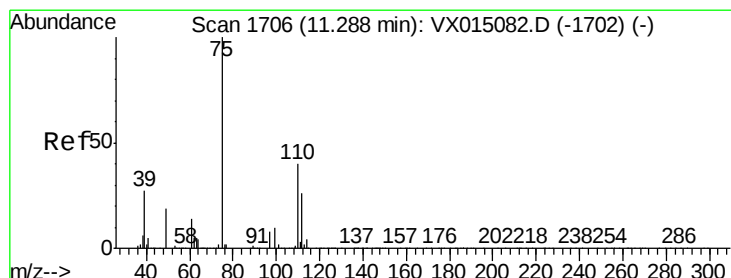
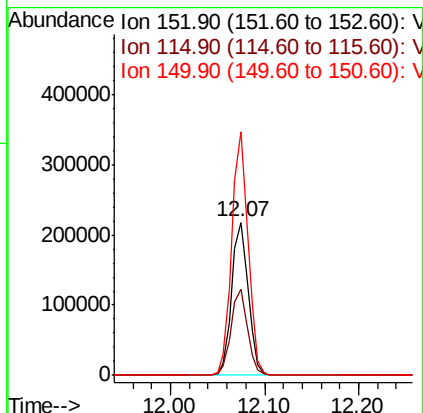
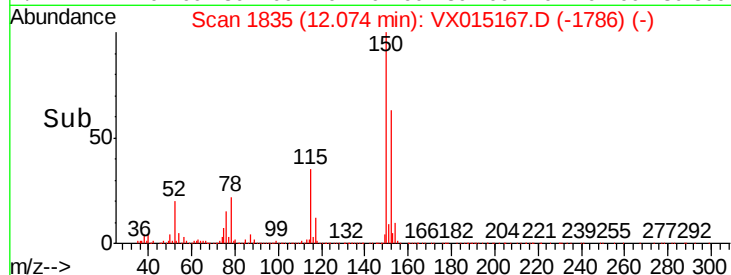
150 156.4 0.0 343.8



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: 22.703 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX015167.D

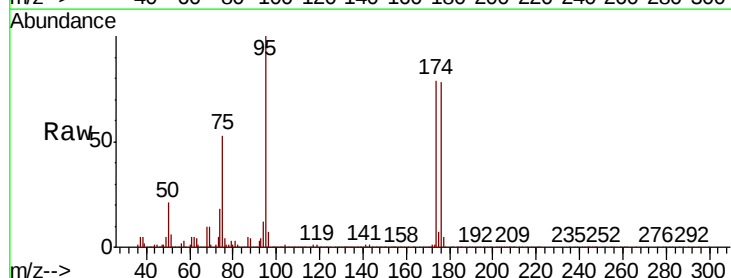
Acq: 10 Mar 2020 13:48

Tgt Ion: 75 Resp: 121240

Ion Ratio Lower Upper

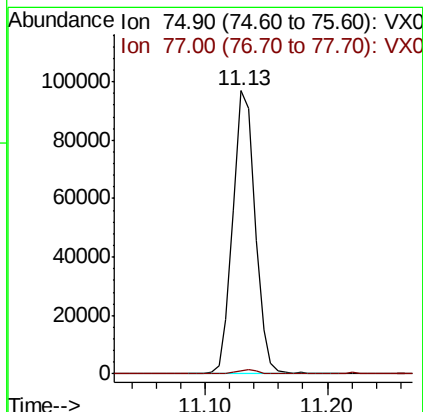
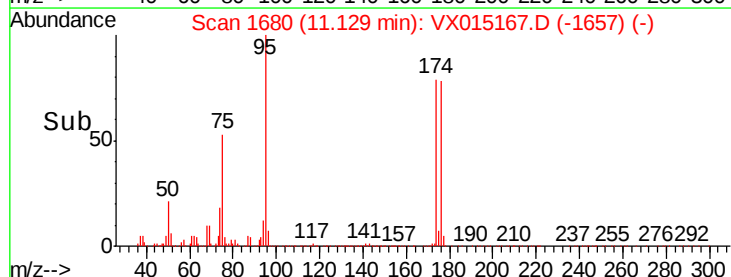
75 100

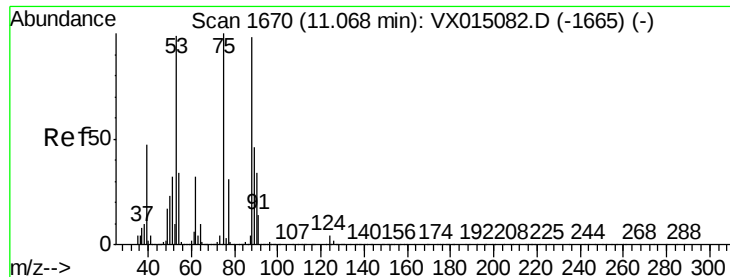
77 1.4 22.6 67.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

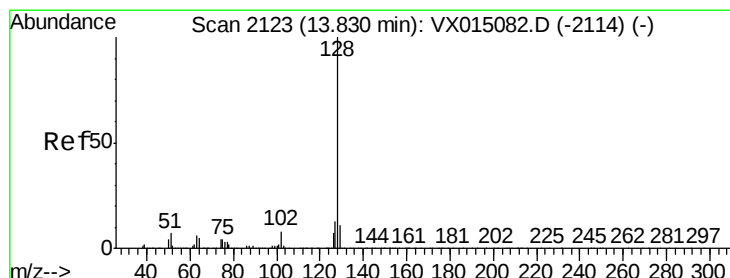
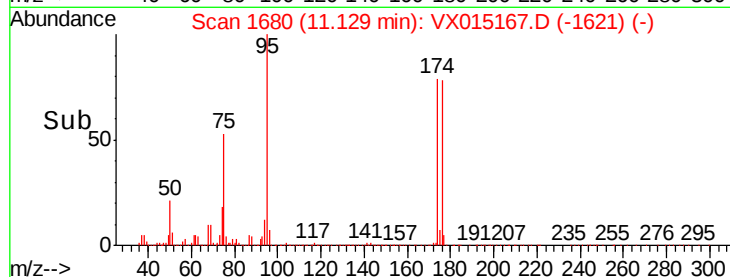
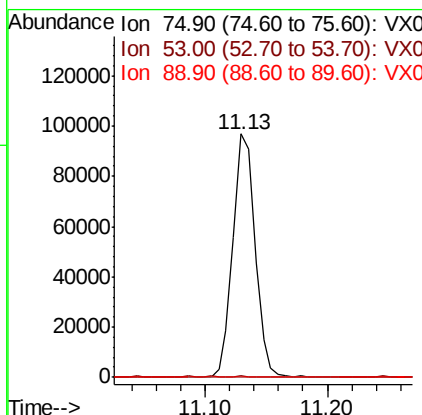
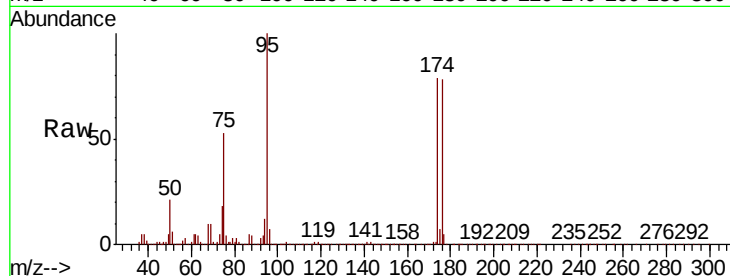




#81  
trans-1,4-Dichloro-2-butene  
Concen: 64.431 ug/l  
RT: 11.13 min Scan# 1680  
Delta R.T. 0.06 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 75 Resp: 121240  
Ion Ratio Lower Upper  
75 100  
53 0.4 77.9 116.9#  
89 0.2 36.2 54.2#



#95  
Naphthalene  
Concen: 1.471 ug/l  
RT: 13.83 min Scan# 2123  
Delta R.T. 0.00 min  
Lab File: VX015167.D  
Acq: 10 Mar 2020 13:48

Tgt Ion: 128 Resp: 937  
Ion Ratio Lower Upper  
128 100  
127 0.0 10.3 15.5#  
129 10.4 8.6 13.0

