

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031020\  
 Data File : VX015175.D  
 Acq On : 10 Mar 2020 16:49  
 Operator : JC/SP  
 Sample : L1842-10DL 20X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Mar 11 07:31:14 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

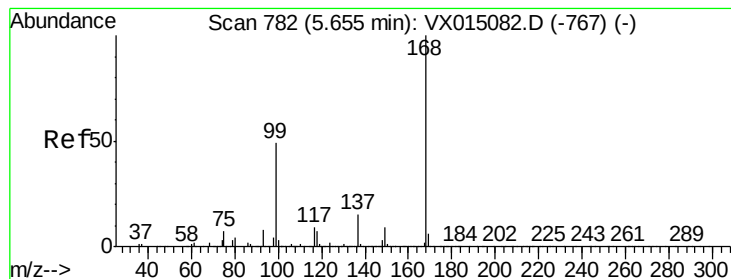
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 325629   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 534130   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 522392   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 268791   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 206922   | 53.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.12% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 171700   | 50.95 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.90% |          |
| 50) Toluene-d8              | 8.71  | 98   | 661337   | 51.60 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.20% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 242219   | 52.98 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.96% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 9) 1,1,2-Trichlorotrifluoroet  | 2.38  | 101  | 3534     | 1.153  | ug/l   | 96     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 897      | 1.338  | ug/l # | 87     |
| 12) 1,1-Dichloroethene         | 2.36  | 96   | 1188     | 0.375  | ug/l # | 44     |
| 13) Acrolein                   | 2.28  | 56   | 237      | 0.376  | ug/l # | 1      |
| 16) Acetone                    | 2.44  | 43   | 1030     | 0.658  | ug/l   | 99     |
| 20) Methylene Chloride         | 2.85  | 84   | 1293     | 0.353  | ug/l # | 59     |
| 29) Tetrahydrofuran            | 5.13  | 42   | 348      | 0.236  | ug/l # | 32     |
| 30) Chloroform                 | 5.21  | 83   | 1275     | 0.214  | ug/l # | 57     |
| 31) Cyclohexane                | 5.65  | 56   | 7187     | 1.321  | ug/l # | 18     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 23481    | 4.755  | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 29491    | 6.327  | ug/l # | 15     |
| 44) Trichloroethene            | 7.21  | 130  | 152959   | 37.491 | ug/l   | 94     |
| 49) 1,4-Dioxane                | 7.76  | 88   | 283      | 3.192  | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1073     | 0.225  | ug/l # | 36     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 121945   | 22.744 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 121945   | 64.548 | ug/l # | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 13.18 | 75   | 253      | 0.221  | ug/l   | 78     |
| 95) Naphthalene                | 13.84 | 128  | 481      | 1.446  | ug/l # | 46     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.00 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

Instrument :

MSVOA\_X

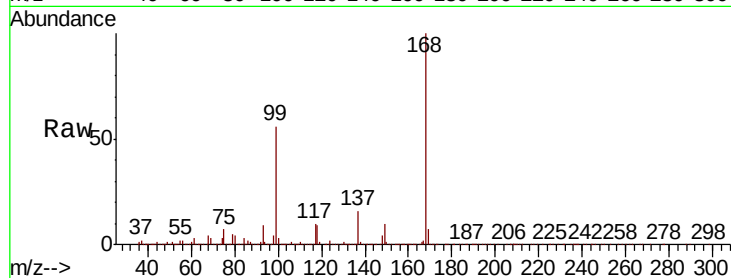
ClientSampleId :

Tot Ion:168 Resp: 325629

Ion Ratio Lower Upper

168 100

99 55.6 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

120000

100000

80000

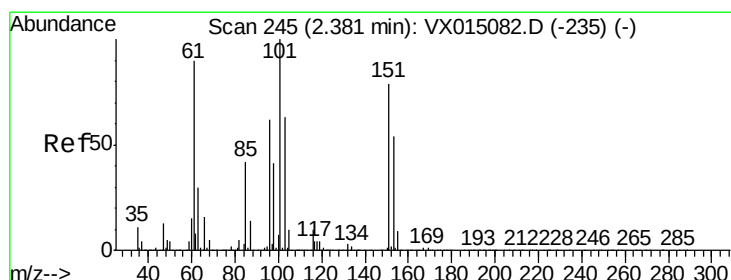
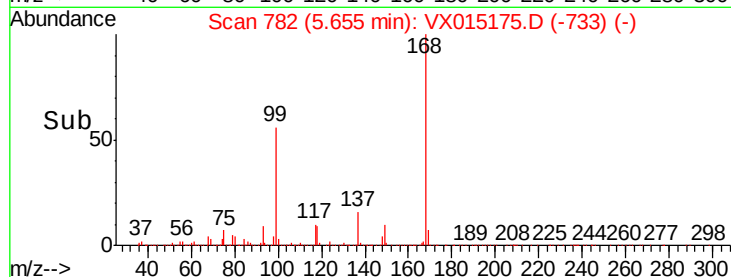
60000

40000

20000

0

Time-->



#9

1,1,2-Trichlorotrifluoroethane

Concen: 1.153 ug/l

RT: 2.38 min Scan# 245

Delta R.T. 0.00 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

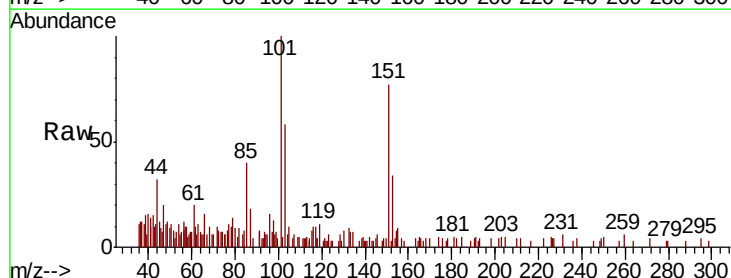
Tgt Ion:101 Resp: 3534

Ion Ratio Lower Upper

101 100

85 39.6 33.7 50.5

151 83.7 64.0 96.0



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V

2500

2000

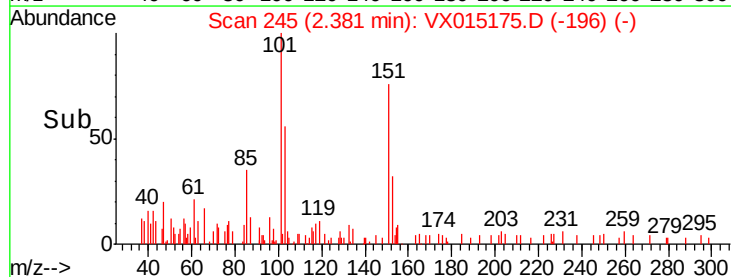
1500

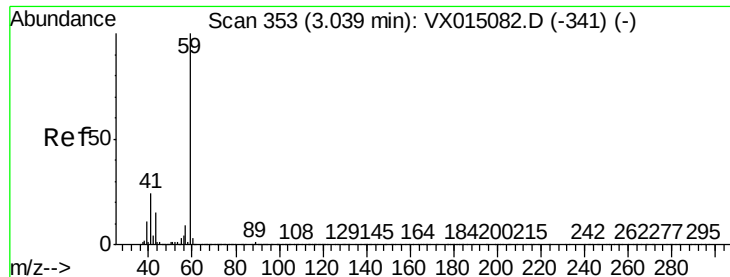
1000

500

0

Time-->

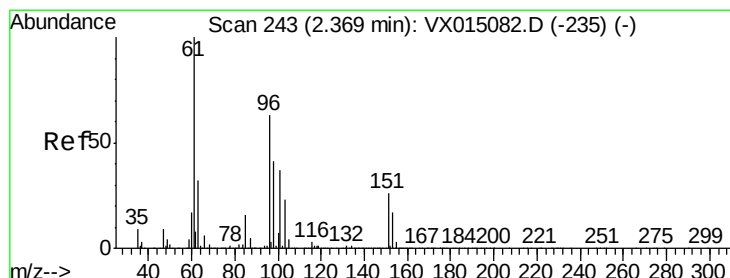
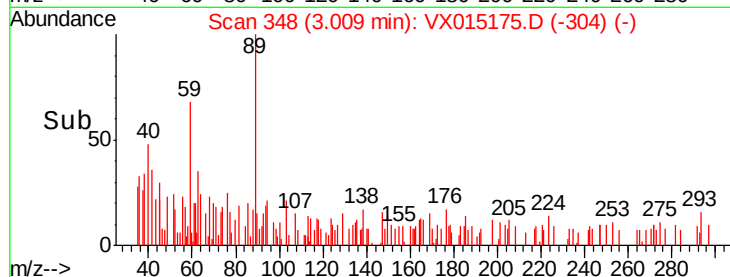
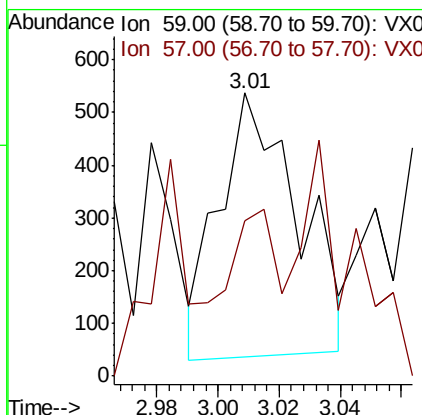
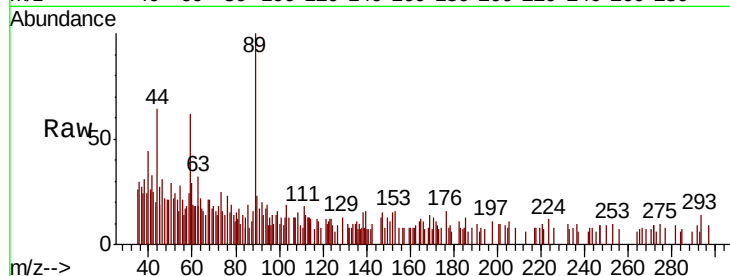




#11  
Tert butyl alcohol  
Concen: 1.338 ug/l  
RT: 3.01 min Scan# 348  
Delta R.T. -0.03 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

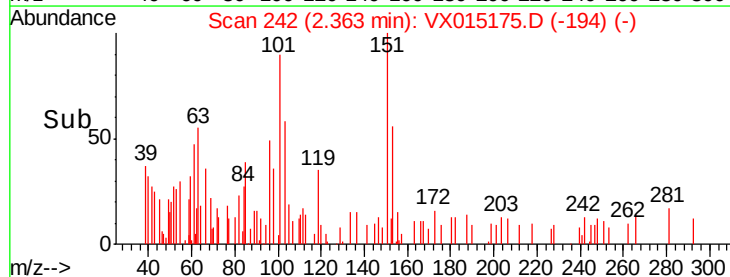
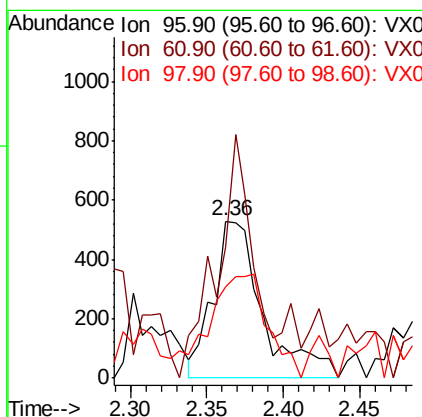
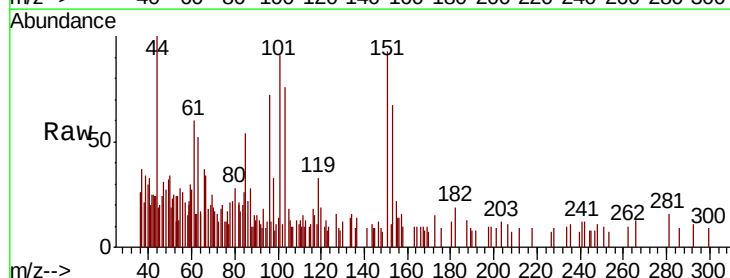
Instrument :  
MSVOA\_X  
ClientSampled :

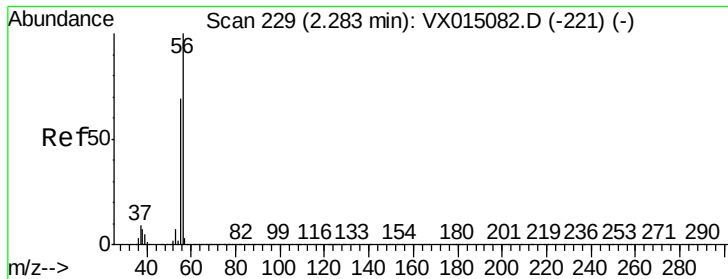
Tot Ion: 59 Resp: 897  
Ion Ratio Lower Upper  
59 100  
57 15.2 8.2 12.4#



#12  
1,1-Dichloroethene  
Concen: 0.375 ug/l  
RT: 2.36 min Scan# 242  
Delta R.T. -0.01 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

Tgt Ion: 96 Resp: 1188  
Ion Ratio Lower Upper  
96 100  
61 59.1 126.2 189.4#  
98 58.3 51.4 77.0

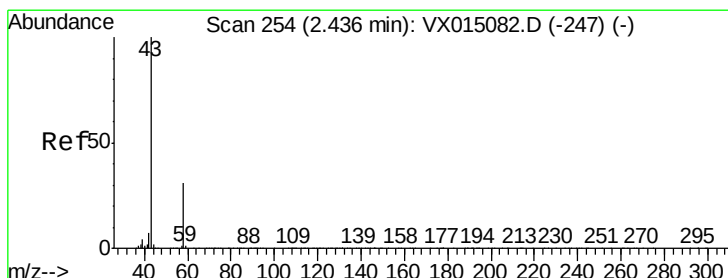
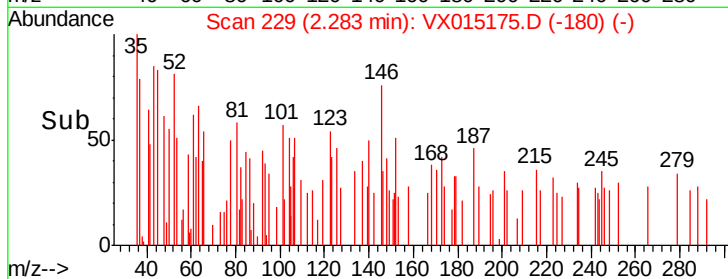
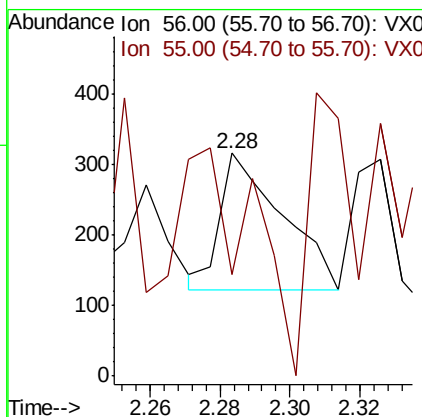
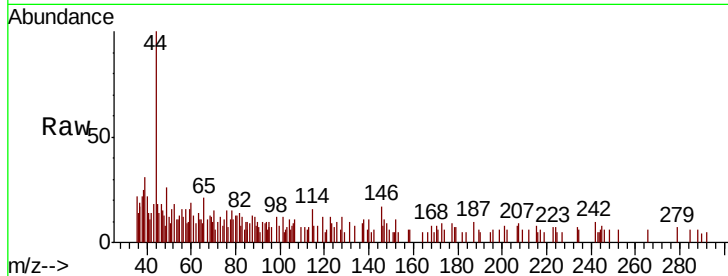




#13  
Acrolein  
Concen: 0.376 ug/l  
RT: 2.28 min Scan# 229  
Delta R.T. 0.00 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

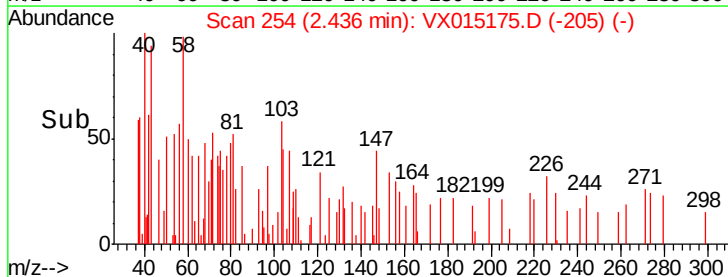
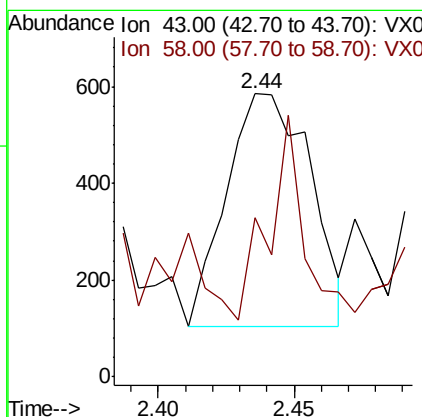
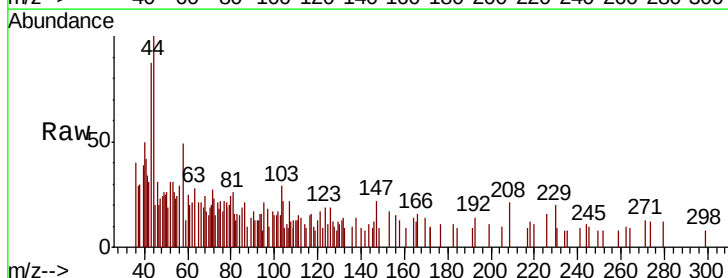
Instrument :  
MSVOA\_X  
ClientSampled :

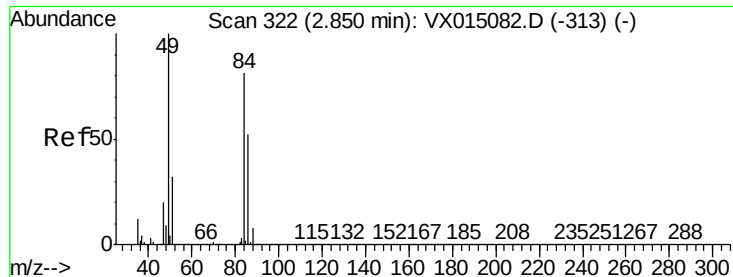
Tot Ion: 56 Resp: 237  
Ion Ratio Lower Upper  
56 100  
55 189.5 55.4 83.0#



#16  
Acetone  
Concen: 0.658 ug/l  
RT: 2.44 min Scan# 254  
Delta R.T. 0.00 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

Tgt Ion: 43 Resp: 1030  
Ion Ratio Lower Upper  
43 100  
58 31.7 24.8 37.2

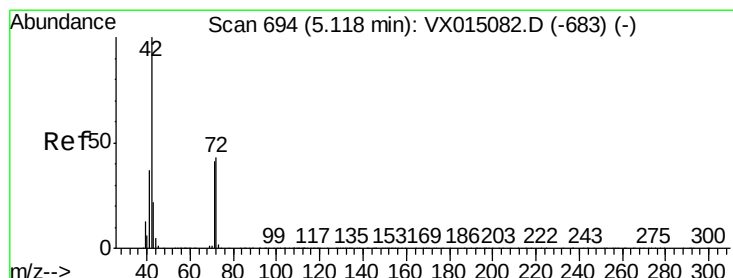
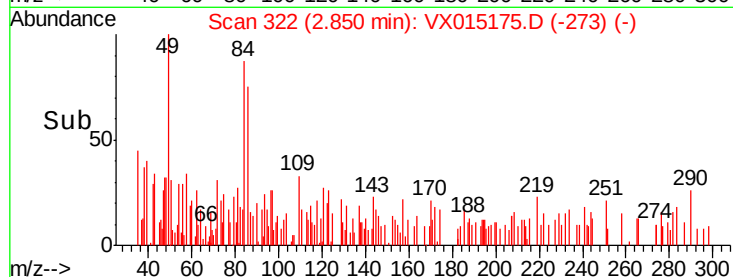
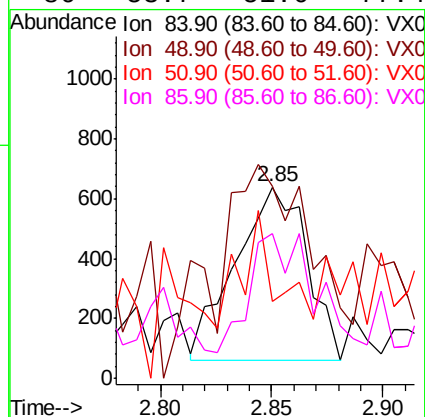
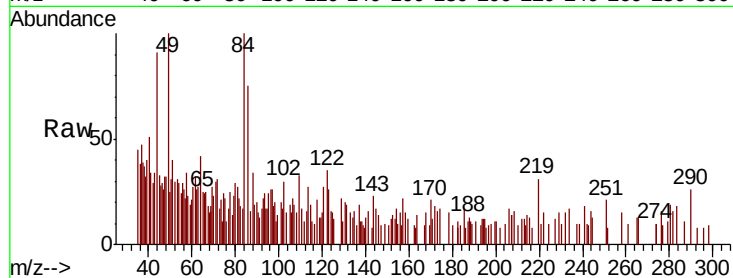




#20  
Methylene Chloride  
Concen: 0.353 ug/l  
RT: 2.85 min Scan# 322  
Delta R.T. 0.00 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

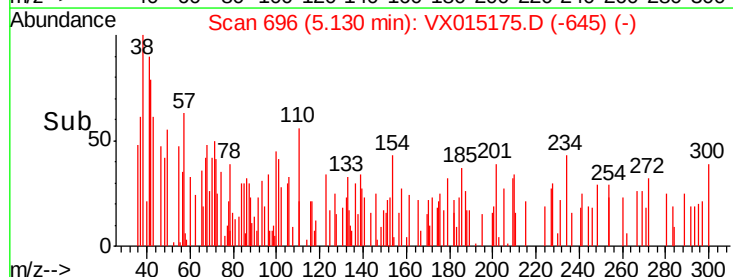
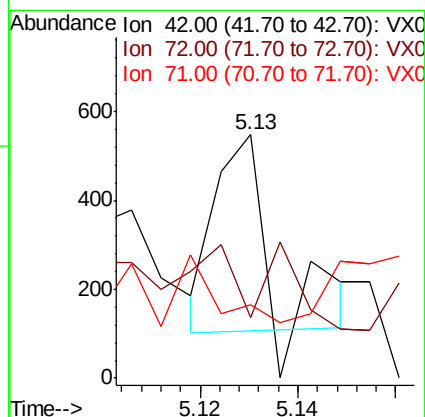
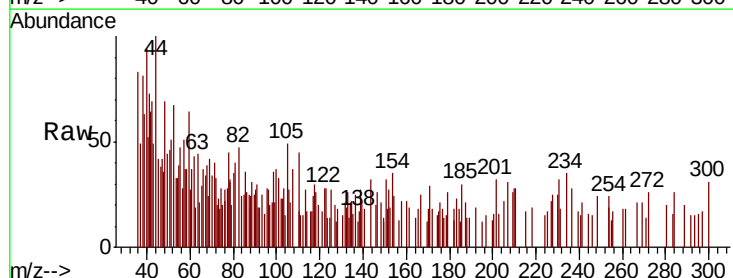
Instrument :  
MSVOA\_X  
ClientSampleId :

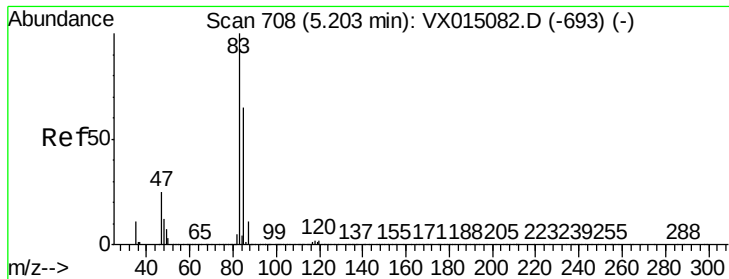
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 84    | Resp: | 1293   |
| Ion      | Ratio | Lower | Upper  |
| 84       | 100   |       |        |
| 49       | 69.9  | 99.4  | 149.2# |
| 51       | 0.3   | 31.5  | 47.3#  |
| 86       | 53.7  | 51.6  | 77.4   |



#29  
Tetrahydrofuran  
Concen: 0.236 ug/l  
RT: 5.13 min Scan# 696  
Delta R.T. 0.01 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 348   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 36.4  | 54.6# |
| 71       | 0.0   | 33.3  | 49.9# |

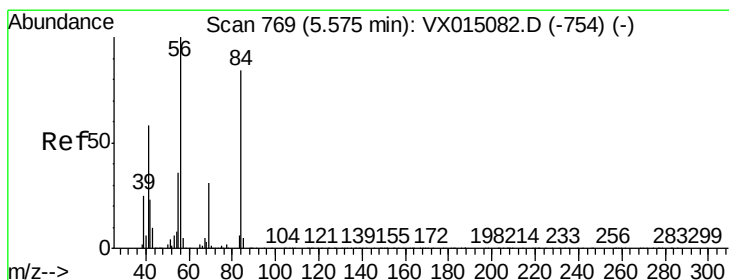
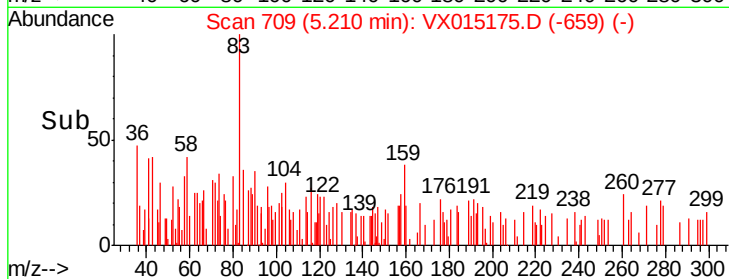
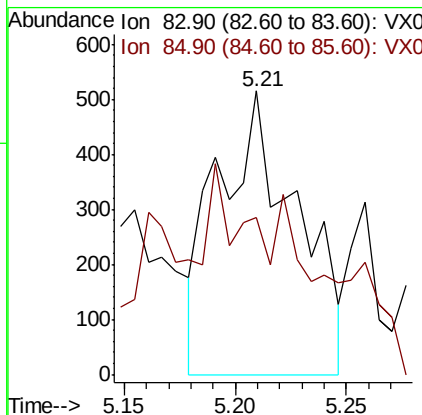
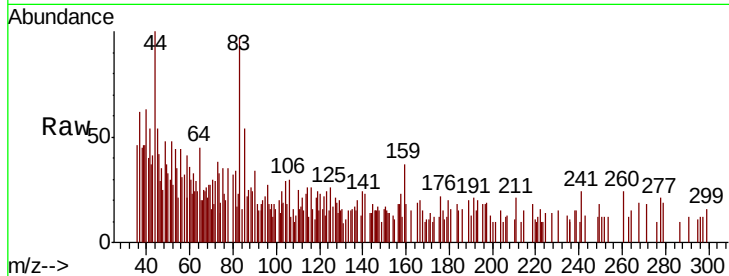




#30  
Chloroform  
Concen: 0.214 ug/l  
RT: 5.21 min Scan# 709  
Delta R.T. 0.01 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

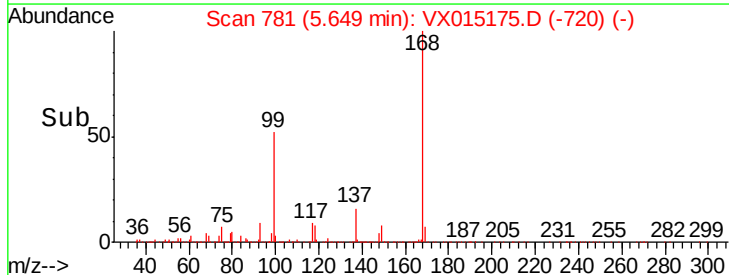
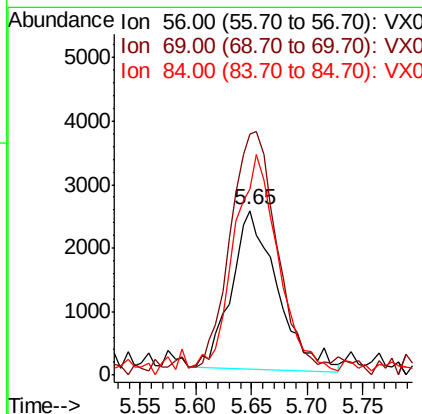
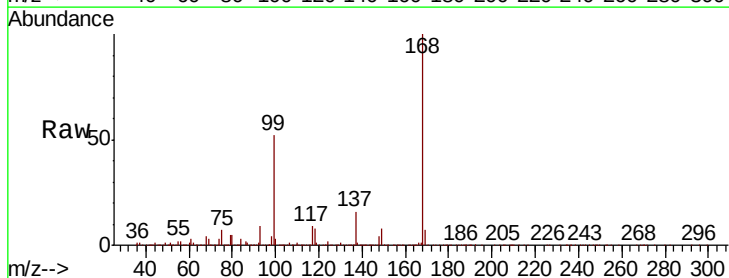
Instrument :  
MSVOA\_X  
ClientSampled :

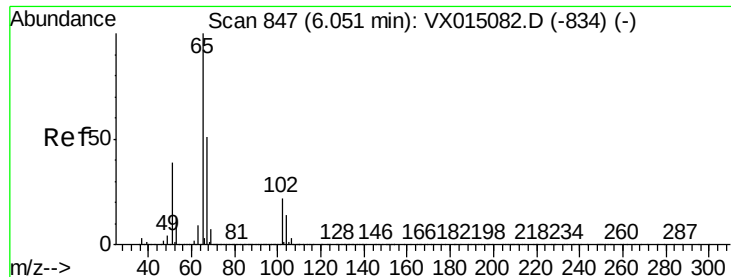
Tot Ion: 83 Resp: 1275  
Ion Ratio Lower Upper  
83 100  
85 31.0 52.0 78.0#



#31  
Cyclohexane  
Concen: 1.321 ug/l  
RT: 5.65 min Scan# 781  
Delta R.T. 0.07 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

Tgt Ion: 56 Resp: 7187  
Ion Ratio Lower Upper  
56 100  
69 144.3 25.0 37.6#  
84 117.9 67.6 101.4#

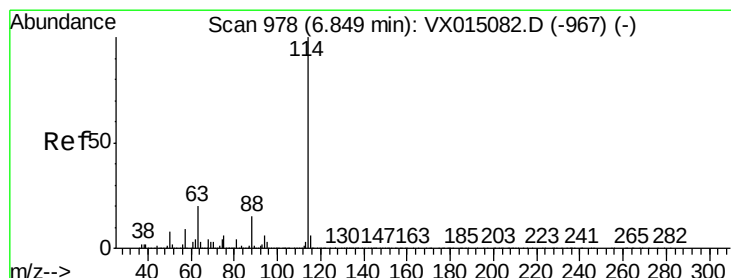
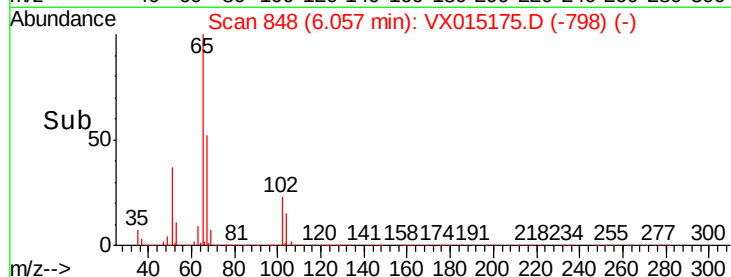
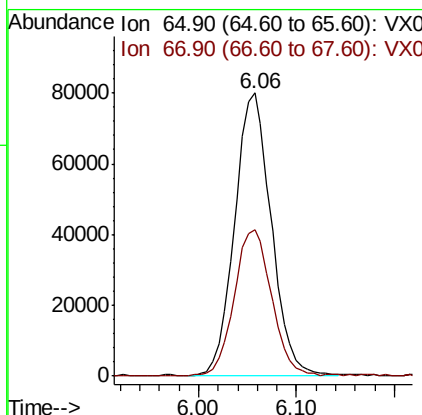
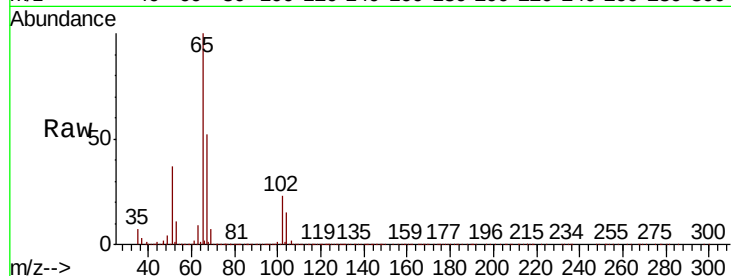




#33  
 1,2-Dichloroethane-d4  
 Concen: 53.563 ug/l  
 RT: 6.06 min Scan# 848  
 Delta R.T. 0.01 min  
 Lab File: VX015175.D  
 Acq: 10 Mar 2020 16:49

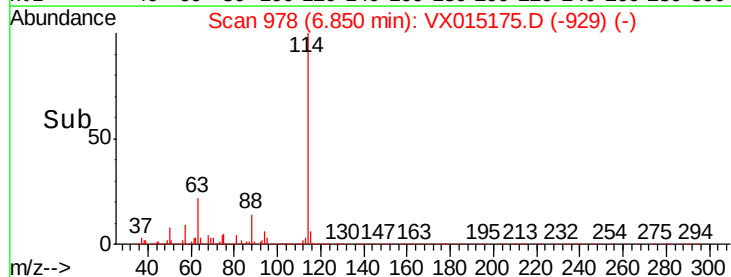
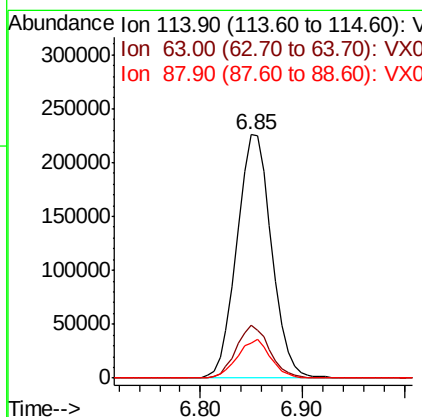
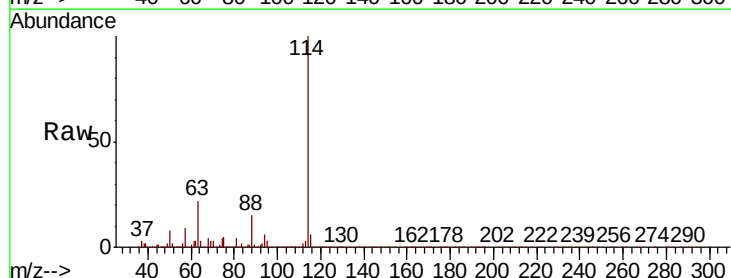
Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion: 65 Resp: 206922  
 Ion Ratio Lower Upper  
 65 100  
 67 52.6 0.0 105.6

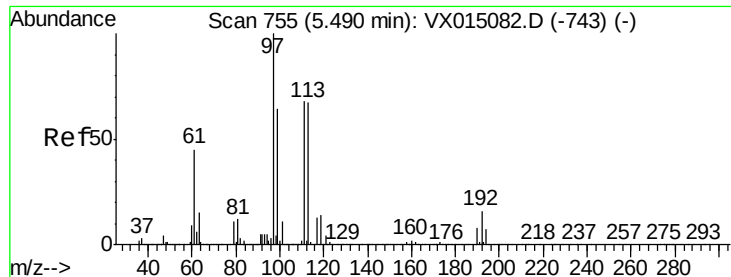


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. 0.00 min  
 Lab File: VX015175.D  
 Acq: 10 Mar 2020 16:49

Tgt Ion: 114 Resp: 534130  
 Ion Ratio Lower Upper  
 114 100  
 63 21.7 0.0 40.0  
 88 14.4 0.0 30.6



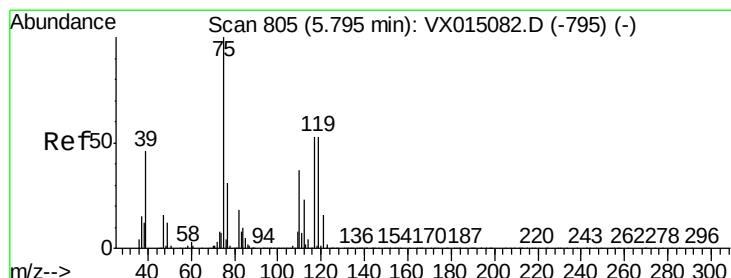
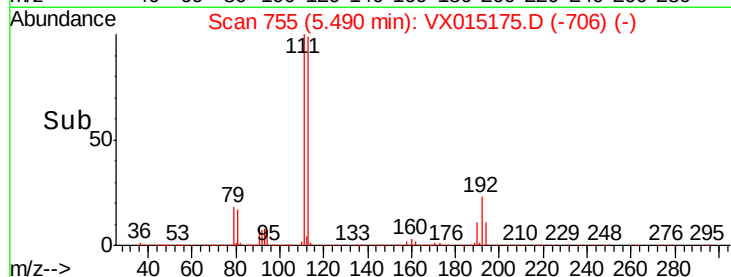
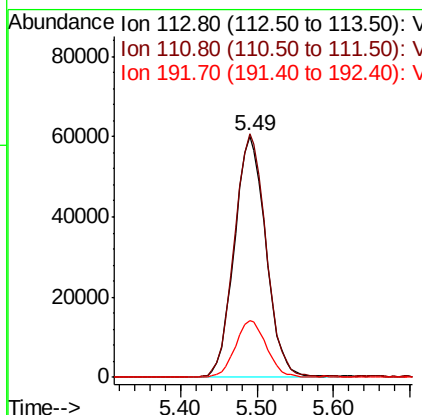
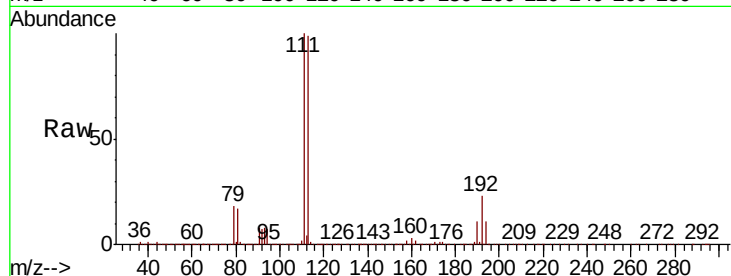




#35  
 Dibromofluoromethane  
 Concen: 50.955 ug/l  
 RT: 5.49 min Scan# 755  
 Delta R.T. 0.00 min  
 Lab File: VX015175.D  
 Acq: 10 Mar 2020 16:49

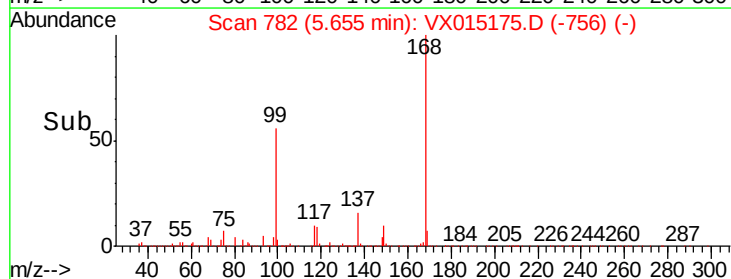
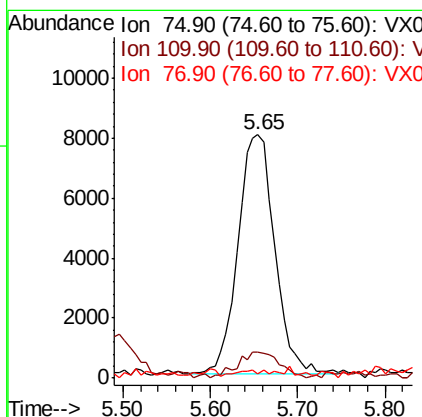
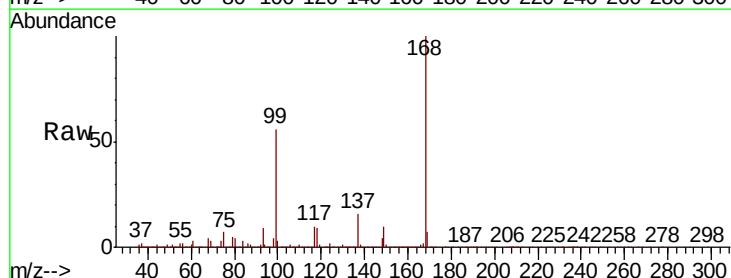
Instrument :  
 MSVOA\_X  
 ClientSampleId :

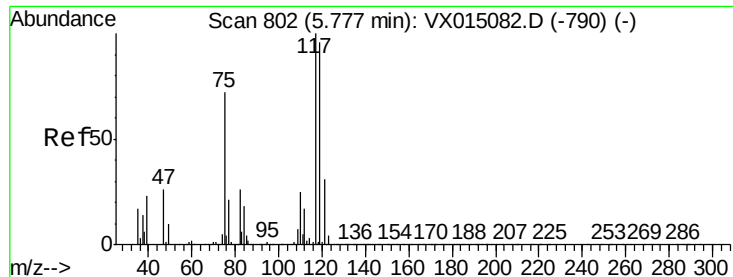
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.6 | 82.6  | 123.8 |
| 192     | 23.4  | 18.6  | 28.0  |



#36  
 1,1-Dichloropropene  
 Concen: 4.755 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.14 min  
 Lab File: VX015175.D  
 Acq: 10 Mar 2020 16:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 12.2  | 17.9  | 53.8# |
| 77      | 1.5   | 24.8  | 37.2# |





#38

Carbon Tetrachloride

Concen: 6.327 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

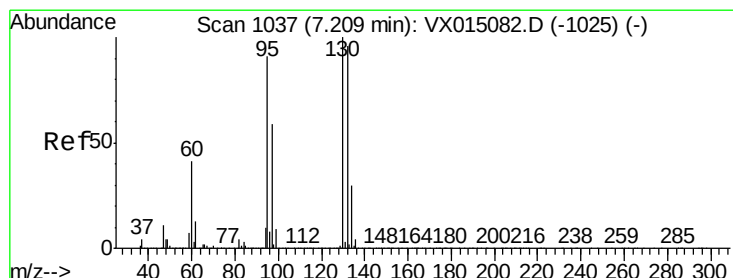
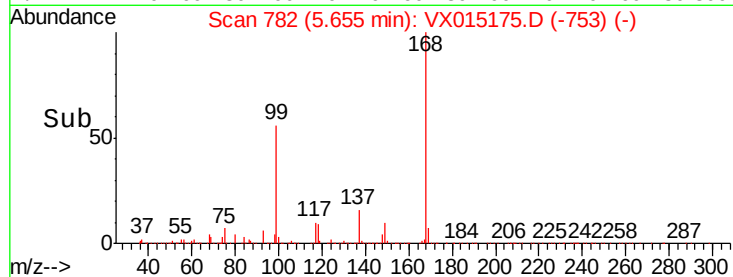
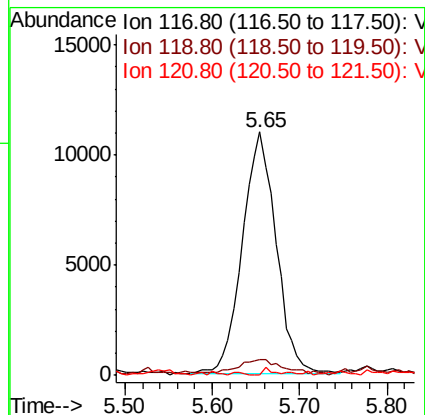
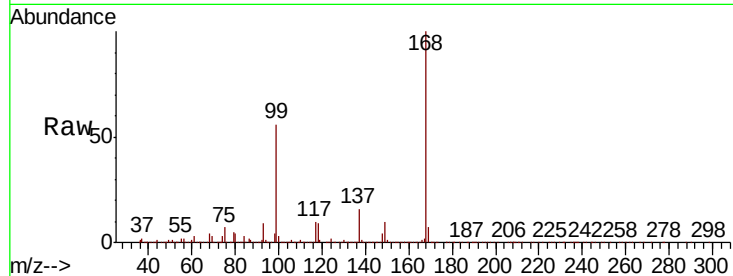
Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion:117 Resp: 29491

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 117 | 100   |       |        |
| 119 | 4.5   | 76.9  | 115.3# |
| 121 | 0.0   | 24.6  | 37.0#  |



#44

Trichloroethene

Concen: 37.491 ug/l

RT: 7.21 min Scan# 1037

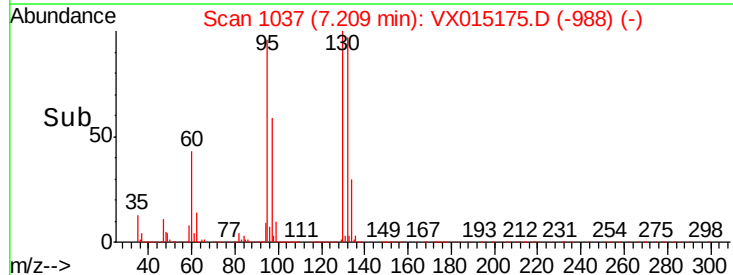
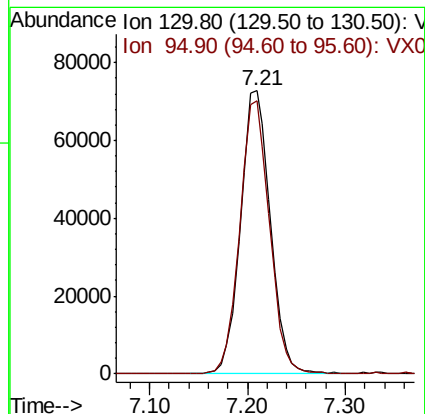
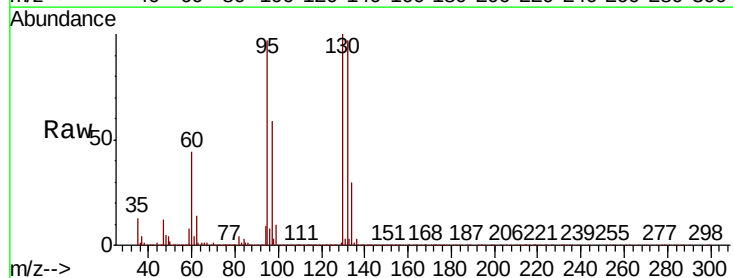
Delta R.T. 0.00 min

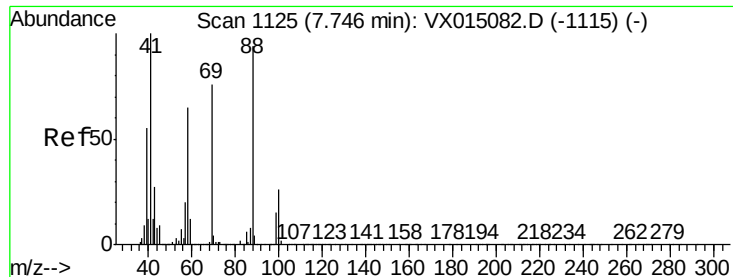
Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

Tgt Ion:130 Resp: 152959

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 130 | 100   |       |       |
| 95  | 96.6  | 0.0   | 181.2 |

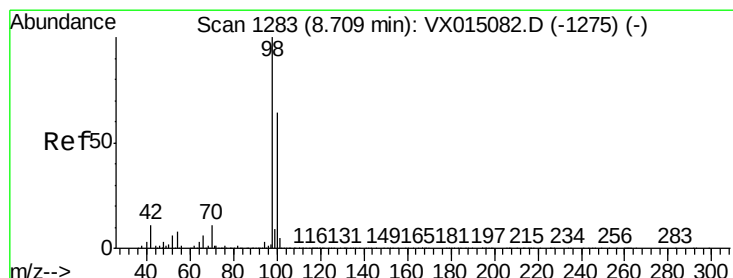
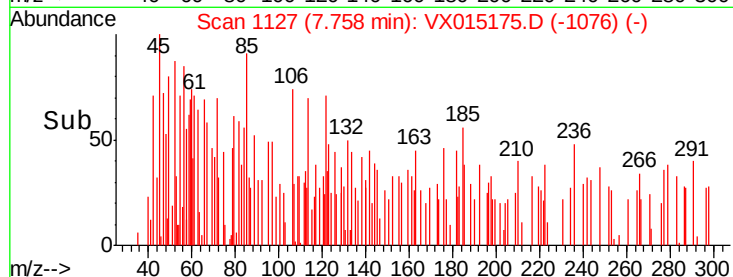
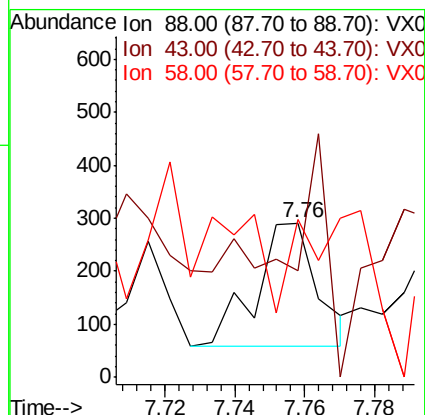
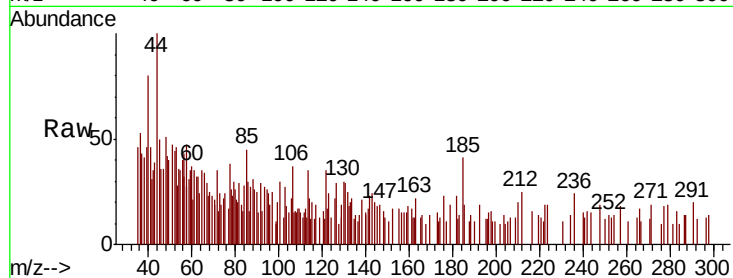




#49  
1,4-Dioxane  
Concen: 3.192 ug/l  
RT: 7.76 min Scan# 1127  
Delta R.T. 0.01 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

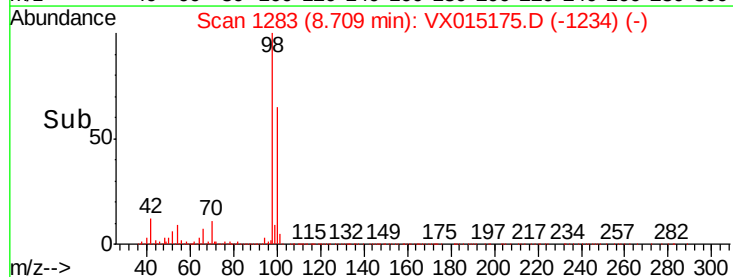
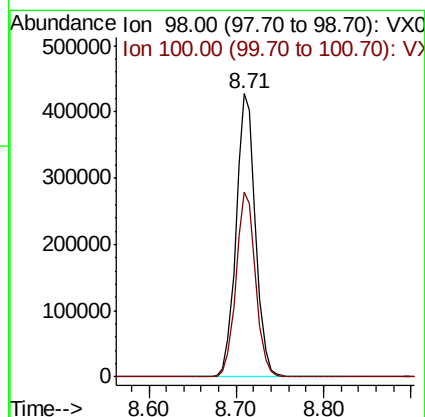
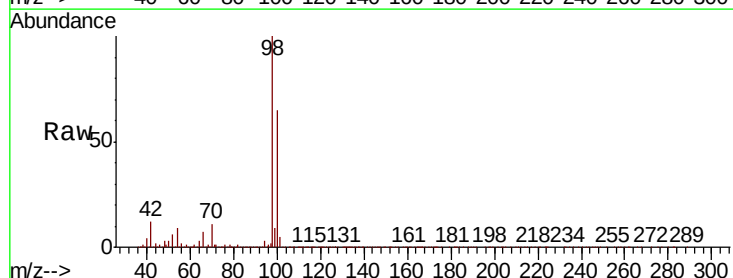
Instrument :  
MSVOA\_X  
ClientSampleId :

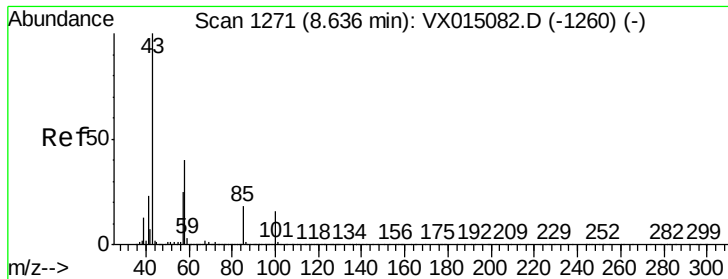
Tot Ion: 88 Resp: 283  
Ion Ratio Lower Upper  
88 100  
43 114.1 27.0 40.4#  
58 0.0 55.6 83.4#



#50  
Toluene-d8  
Concen: 51.596 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

Tgt Ion: 98 Resp: 661337  
Ion Ratio Lower Upper  
98 100  
100 65.9 52.4 78.6

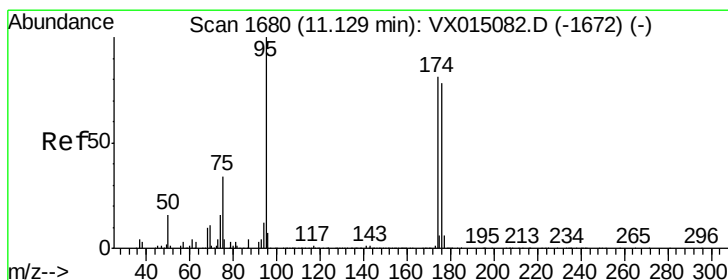
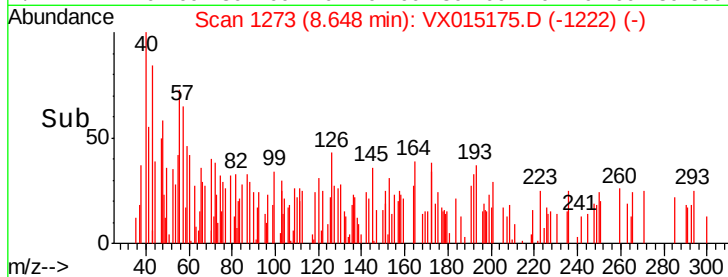
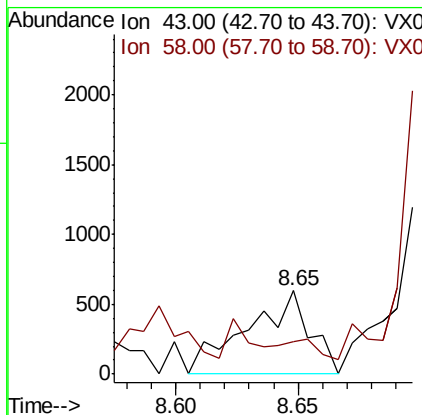
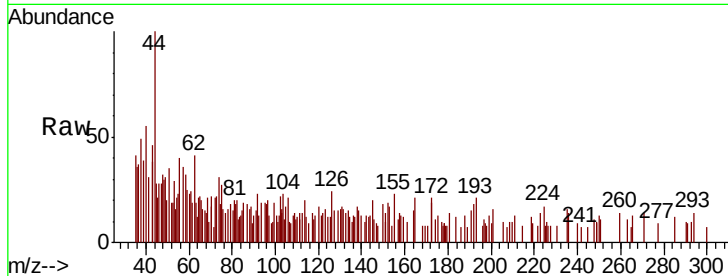




#51  
4-Methyl-2-Pentanone  
Concen: 0.225 ug/l  
RT: 8.65 min Scan# 1273  
Delta R.T. 0.01 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

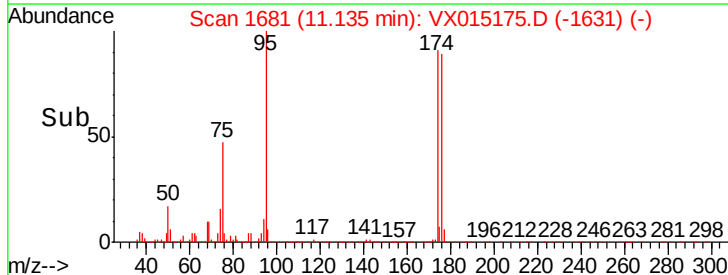
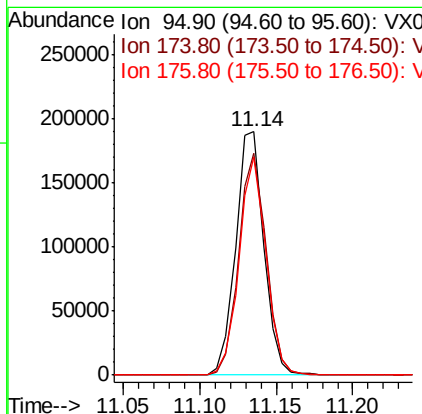
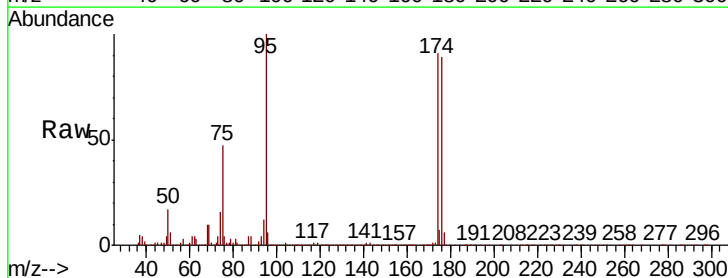
Instrument :  
MSVOA\_X  
ClientSampleId :

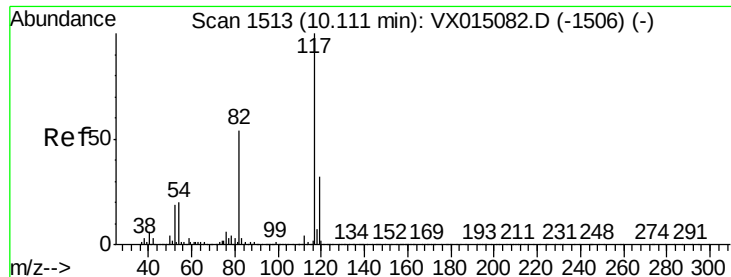
Tot Ion: 43 Resp: 1073  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.6 47.4#



#62  
4-Bromofluorobenzene  
Concen: 52.979 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.01 min  
Lab File: VX015175.D  
Acq: 10 Mar 2020 16:49

Tgt Ion: 95 Resp: 242219  
Ion Ratio Lower Upper  
95 100  
174 89.3 0.0 177.6  
176 85.4 0.0 170.2





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

Instrument :

MSVOA\_X

ClientSampled :

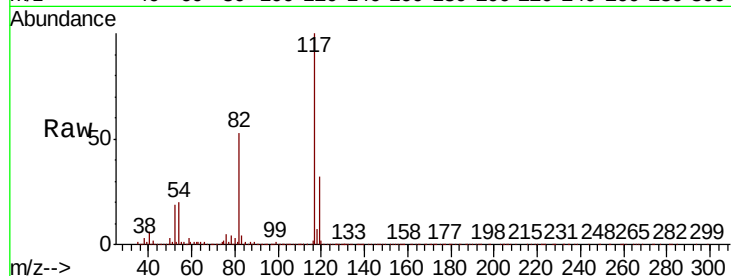
Tot Ion:117 Resp: 522392

Ion Ratio Lower Upper

117 100

82 53.4 43.3 64.9

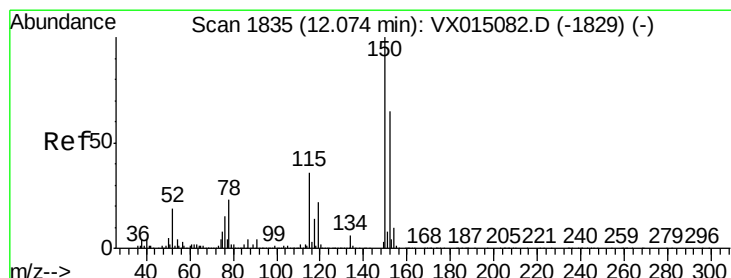
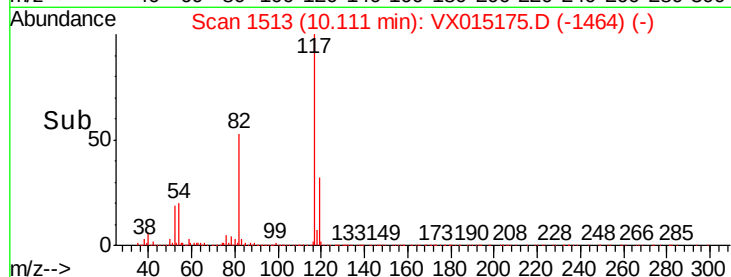
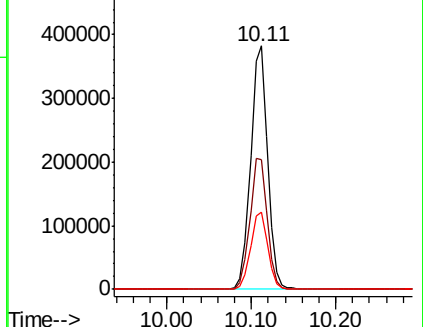
119 31.8 25.8 38.8



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: VX015175.D

Acq: 10 Mar 2020 16:49

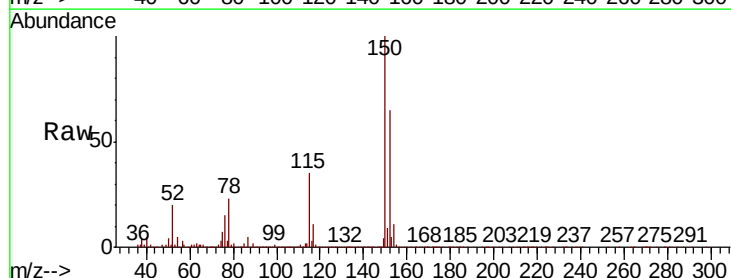
Tgt Ion:152 Resp: 268791

Ion Ratio Lower Upper

152 100

115 55.5 38.2 114.6

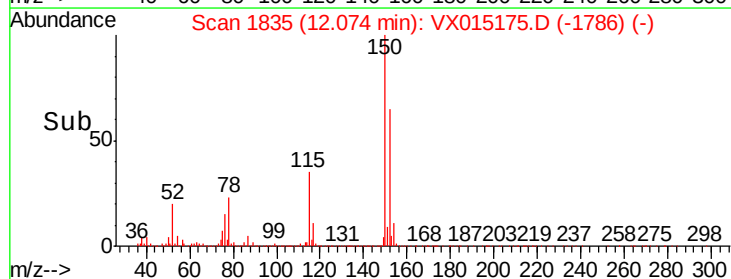
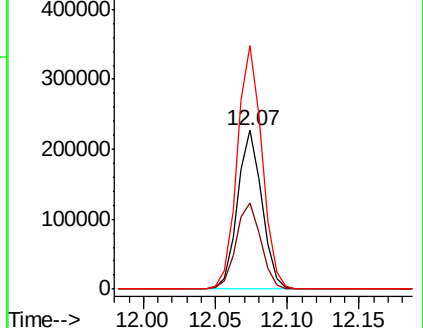
150 155.3 0.0 343.8

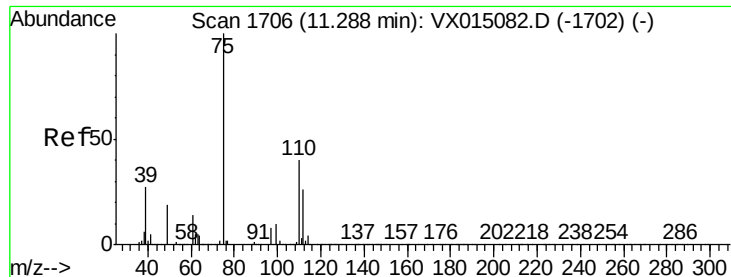


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 22.744 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

Instrument :

MSVOA\_X

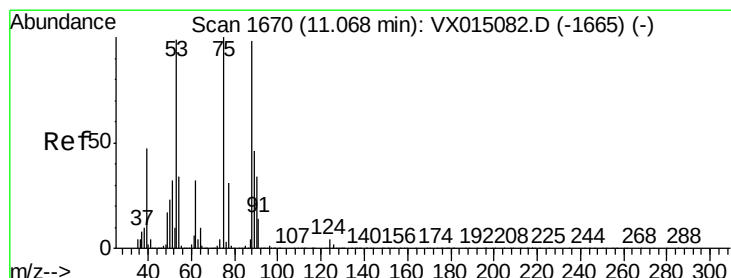
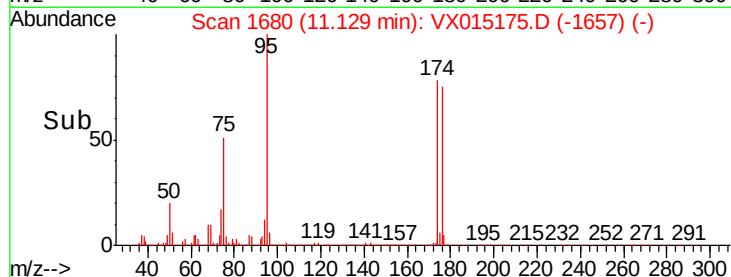
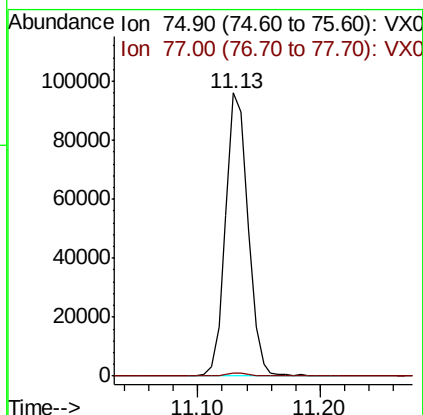
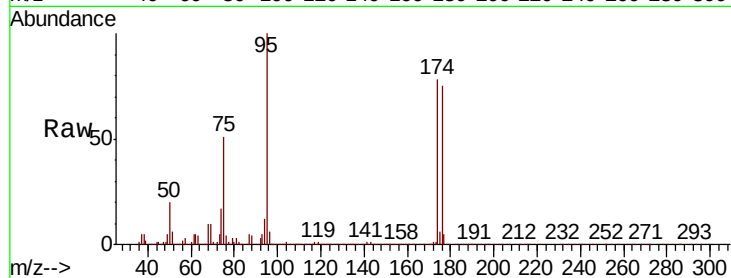
ClientSampled :

Tot Ion: 75 Resp: 121945

Ion Ratio Lower Upper

75 100

77 1.5 22.6 67.8#



#81

trans-1,4-Dichloro-2-butene

Concen: 64.548 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

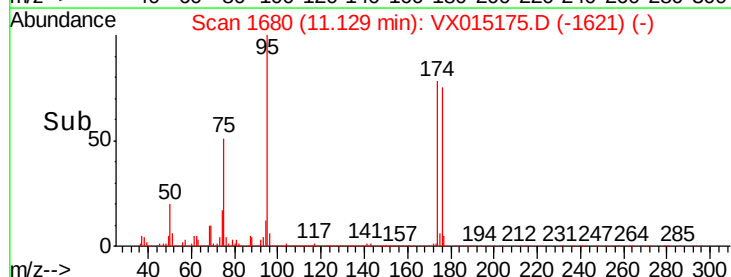
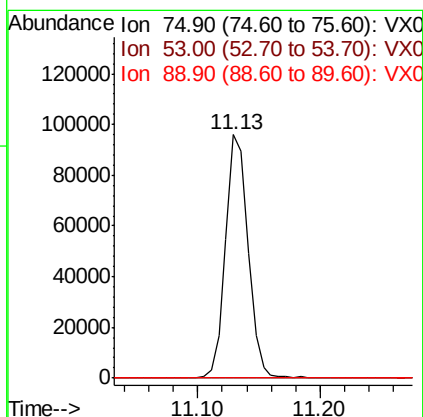
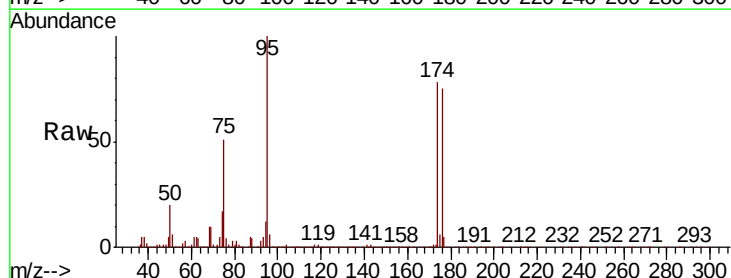
Tgt Ion: 75 Resp: 121945

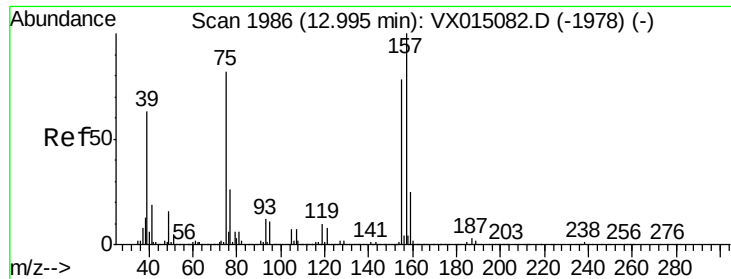
Ion Ratio Lower Upper

75 100

53 0.5 77.9 116.9#

89 0.1 36.2 54.2#





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.221 ug/l

RT: 13.18 min Scan# 2016

Delta R.T. 0.18 min

Lab File: VX015175.D

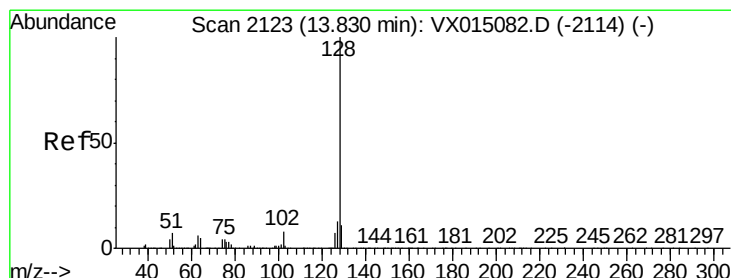
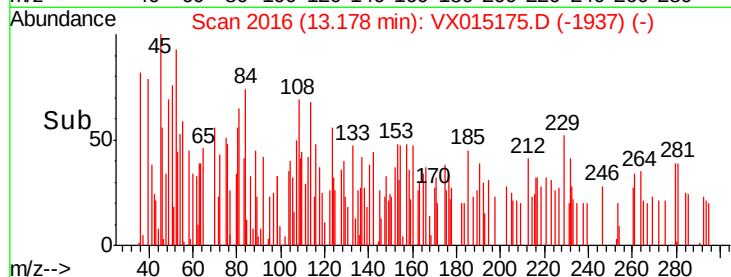
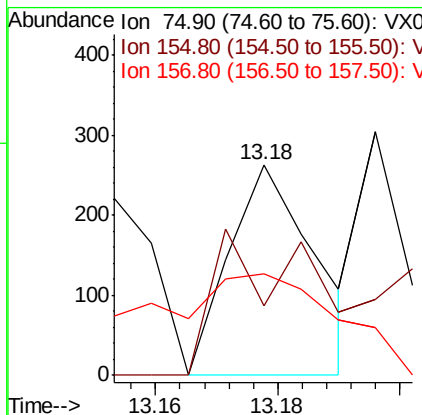
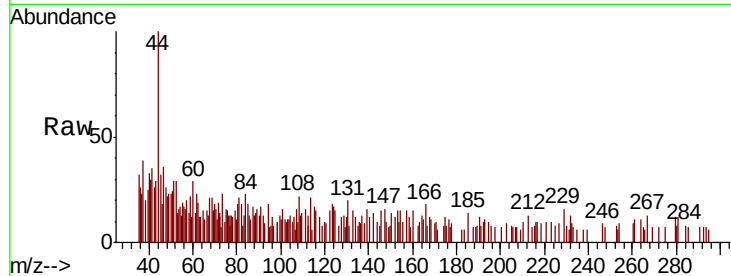
Acq: 10 Mar 2020 16:49

Instrument :

MSVOA\_X

ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 75    | Resp: | 253   |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 155      | 88.5  | 46.6  | 139.7 |
| 157      | 78.3  | 59.2  | 177.5 |



#95

Naphthalene

Concen: 1.446 ug/l

RT: 13.84 min Scan# 2125

Delta R.T. 0.01 min

Lab File: VX015175.D

Acq: 10 Mar 2020 16:49

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 481   |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 0.0   | 10.3  | 15.5# |
| 129      | 40.5  | 8.6   | 13.0# |

