

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031020\  
 Data File : VX015173.D  
 Acq On : 10 Mar 2020 16:04  
 Operator : JC/SP  
 Sample : L1842-02DL 10X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Mar 11 07:30:44 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  | 353164   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 553118   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 536623   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 276675   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 209985   | 50.12 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.24% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 172424   | 49.41 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.82%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 673846   | 50.77 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.54% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 244103   | 51.56 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.12% |      |

## Target Compounds

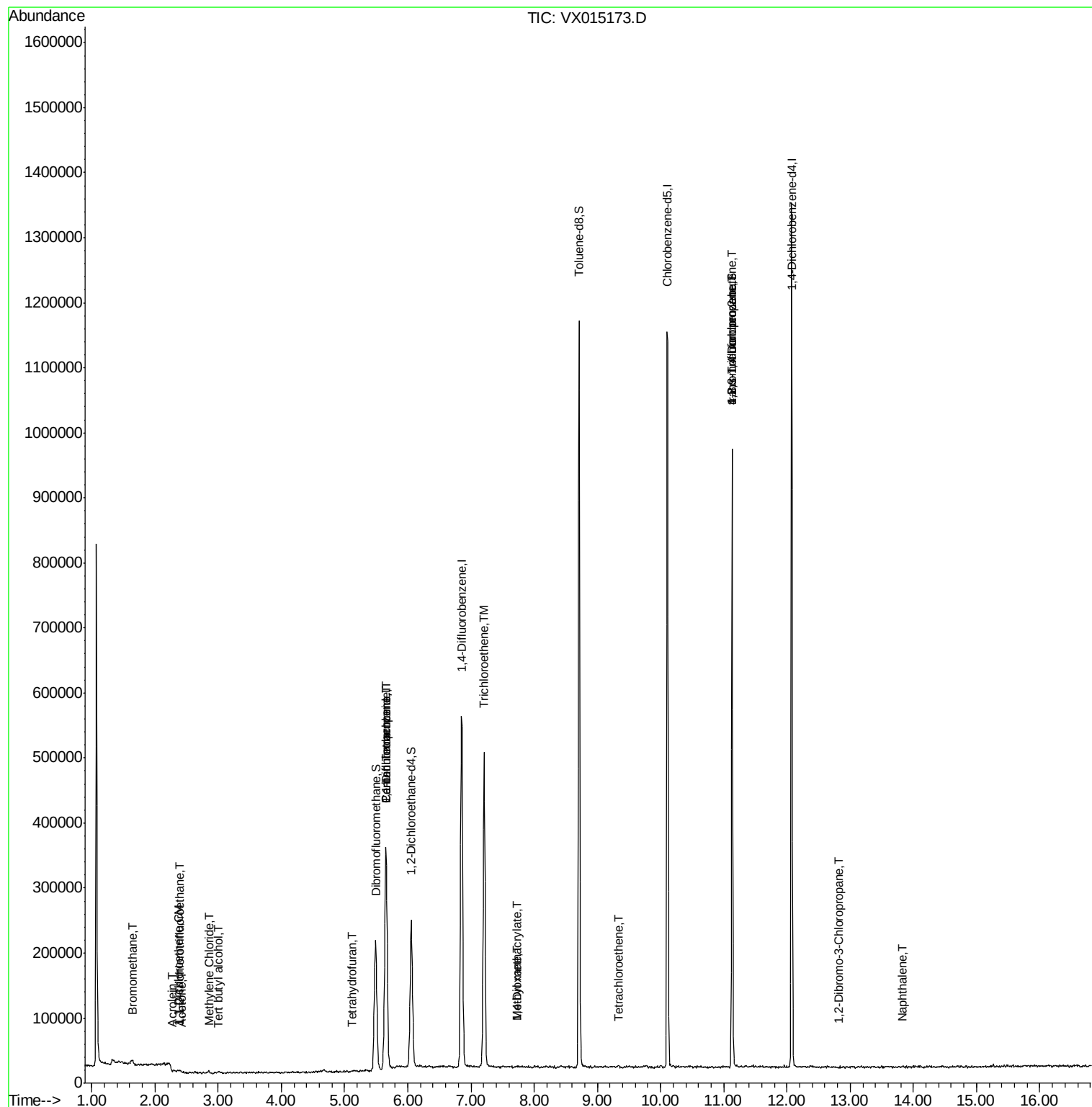
|                                |       |     |        |        |        | Qvalue |
|--------------------------------|-------|-----|--------|--------|--------|--------|
| 5) Bromomethane                | 1.66  | 94  | 607    | 0.222  | ug/l # | 59     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.38  | 101 | 1032   | 0.310  | ug/l # | 77     |
| 11) Tert butyl alcohol         | 3.00  | 59  | 1564   | 2.152  | ug/l # | 58     |
| 12) 1,1-Dichloroethene         | 2.37  | 96  | 724    | 0.211  | ug/l # | 43     |
| 13) Acrolein                   | 2.27  | 56  | 340    | 0.498  | ug/l # | 62     |
| 16) Acetone                    | 2.43  | 43  | 1600   | 0.943  | ug/l # | 48     |
| 20) Methylene Chloride         | 2.84  | 84  | 1439   | 0.362  | ug/l # | 53     |
| 29) Tetrahydrofuran            | 5.11  | 42  | 615    | 0.384  | ug/l # | 65     |
| 36) 1,1-Dichloropropene        | 5.65  | 75  | 23135  | 4.524  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117 | 30737  | 6.368  | ug/l # | 17     |
| 44) Trichloroethene            | 7.21  | 130 | 188726 | 44.670 | ug/l   | 100    |
| 48) Methyl methacrylate        | 7.74  | 41  | 1131   | 0.266  | ug/l # | 53     |
| 49) 1,4-Dioxane                | 7.73  | 88  | 57     | 0.621  | ug/l # | 1      |
| 64) Tetrachloroethene          | 9.33  | 164 | 979    | 0.221  | ug/l # | 55     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 123944 | 22.458 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 123944 | 63.737 | ug/l # | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 12.82 | 75  | 291    | 0.247  | ug/l   | 66     |
| 95) Naphthalene                | 13.82 | 128 | 177    | 1.429  | ug/l # | 1      |

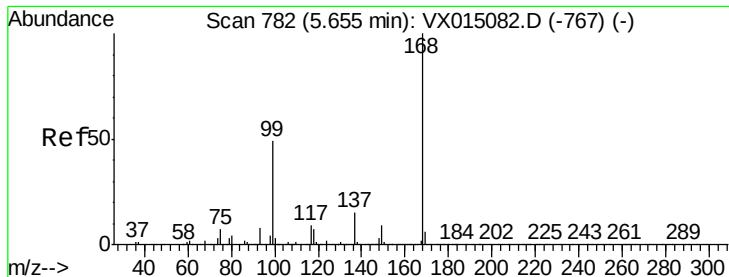
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX031020\  
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ALS Vial : 19 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Mar 11 07:30:44 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



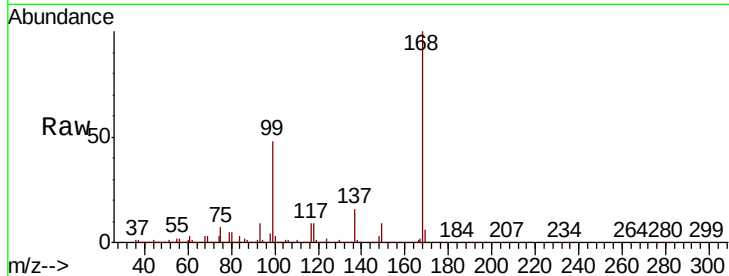


#1

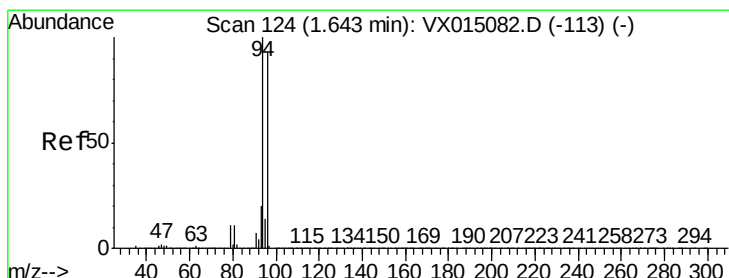
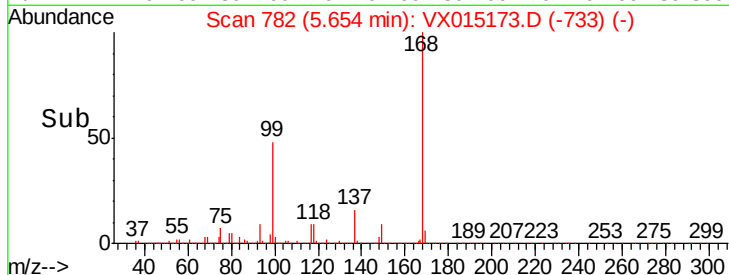
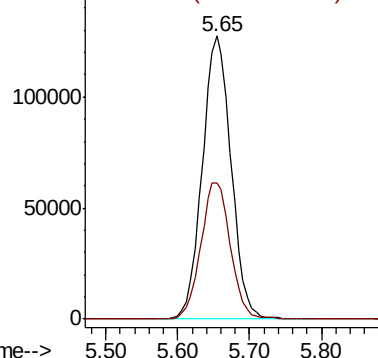
Pentafluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.00 min  
 Lab File: VX015173.D  
 Acq: 10 Mar 2020 16:04

Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion:168 Resp: 353164  
 Ion Ratio Lower Upper  
 168 100  
 99 48.0 39.4 59.2



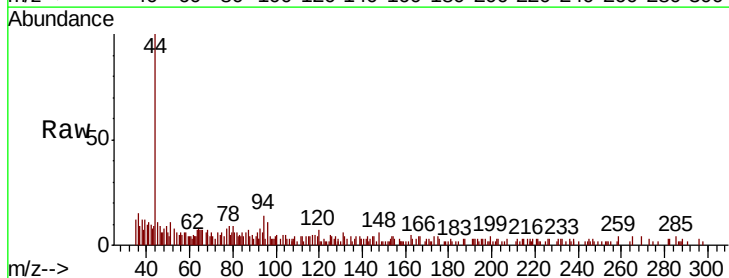
Abundance Ion 167.90 (167.60 to 168.60): V  
 Ion 98.90 (98.60 to 99.60): VX0



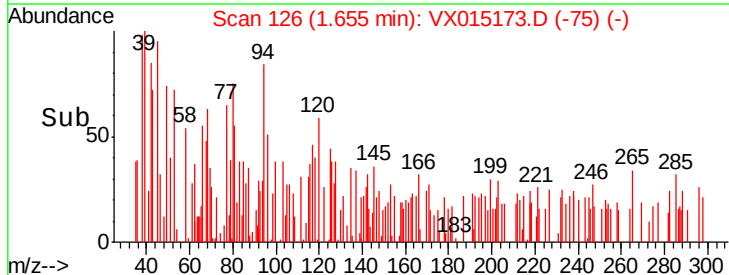
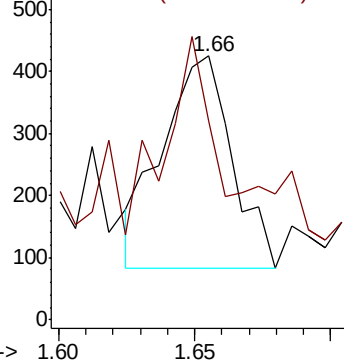
#5

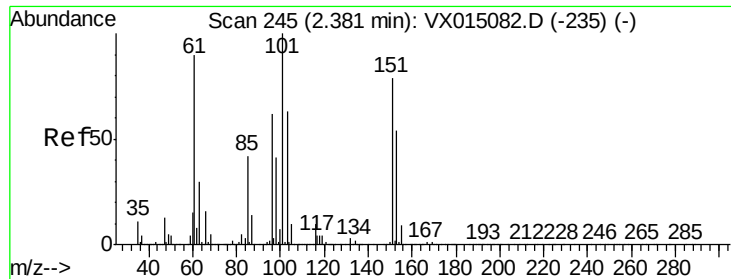
Bromomethane  
 Concen: 0.222 ug/l  
 RT: 1.66 min Scan# 126  
 Delta R.T. 0.01 min  
 Lab File: VX015173.D  
 Acq: 10 Mar 2020 16:04

Tgt Ion: 94 Resp: 607  
 Ion Ratio Lower Upper  
 94 100  
 96 54.1 74.6 111.8#



Abundance Ion 93.90 (93.60 to 94.60): VX0  
 Ion 95.90 (95.60 to 96.60): VX0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.310 ug/l

RT: 2.38 min Scan# 245

Delta R.T. -0.00 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

Instrument :

MSVOA\_X

ClientSampled :

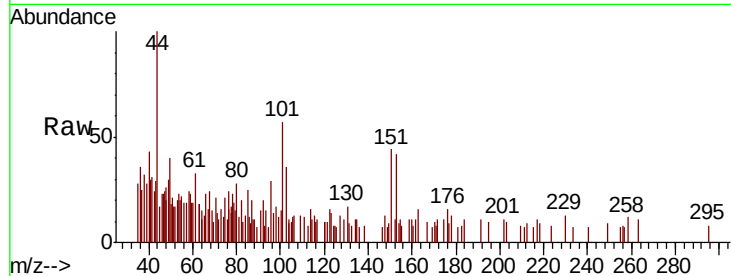
Tot Ion:101 Resp: 1032

Ion Ratio Lower Upper

101 100

85 0.0 33.7 50.5#

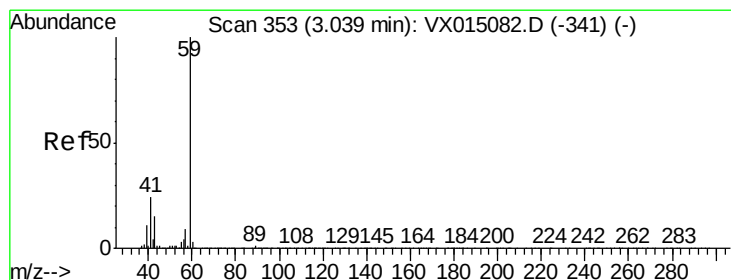
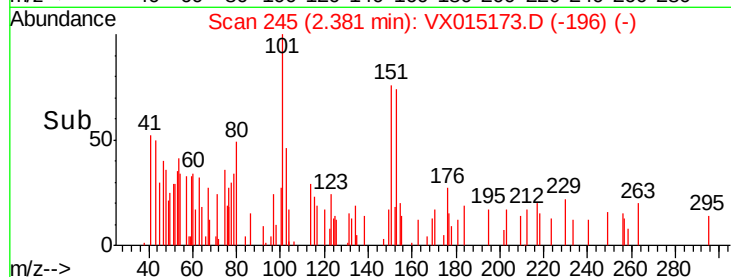
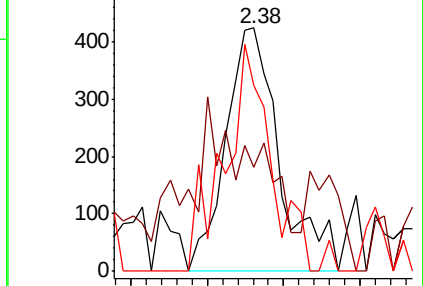
151 80.6 64.0 96.0



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



#11

Tert butyl alcohol

Concen: 2.152 ug/l

RT: 3.00 min Scan# 347

Delta R.T. -0.04 min

Lab File: VX015173.D

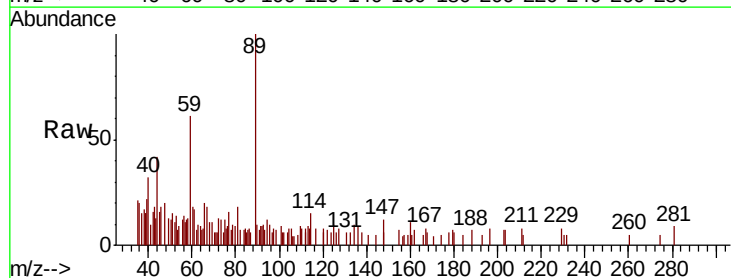
Acq: 10 Mar 2020 16:04

Tgt Ion: 59 Resp: 1564

Ion Ratio Lower Upper

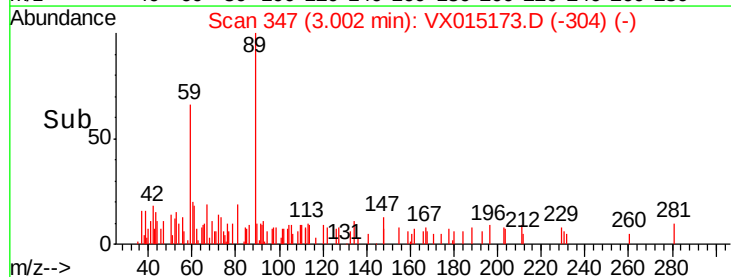
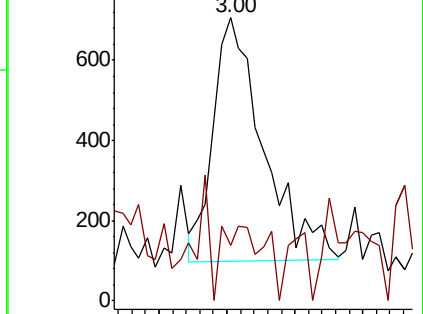
59 100

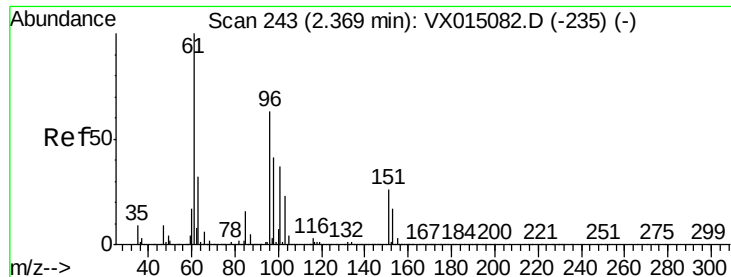
57 26.2 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#12

1,1-Dichloroethene

Concen: 0.211 ug/l

RT: 2.37 min Scan# 244

Delta R.T. 0.01 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

Instrument :

MSVOA\_X

ClientSampled :

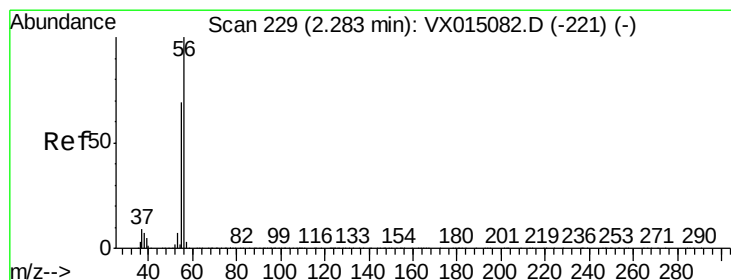
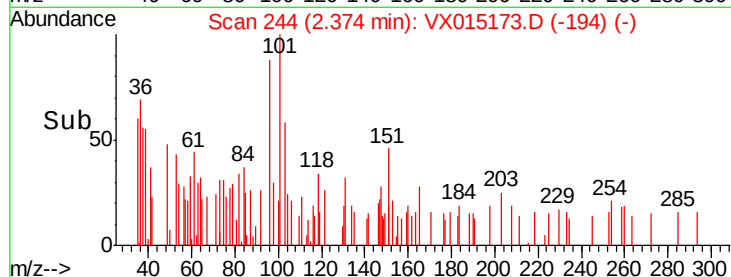
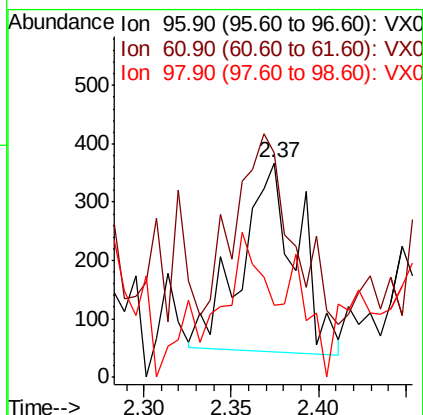
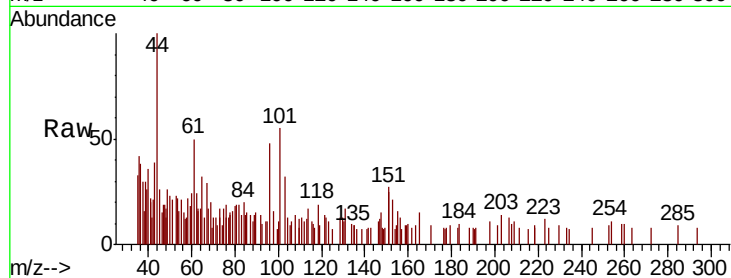
Tot Ion: 96 Resp: 724

Ion Ratio Lower Upper

96 100

61 97.4 126.2 189.4#

98 0.0 51.4 77.0#



#13

Acrolein

Concen: 0.498 ug/l

RT: 2.27 min Scan# 227

Delta R.T. -0.01 min

Lab File: VX015173.D

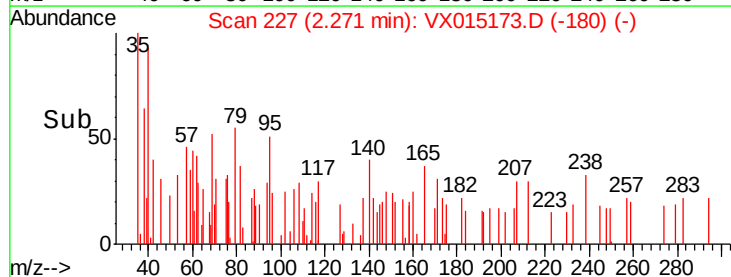
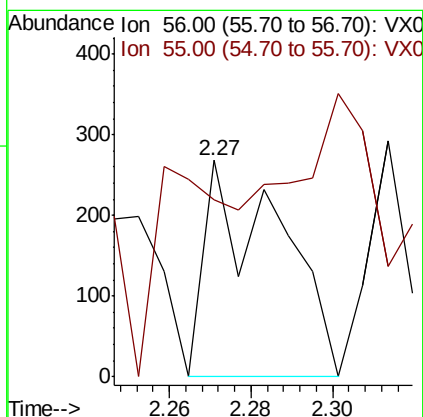
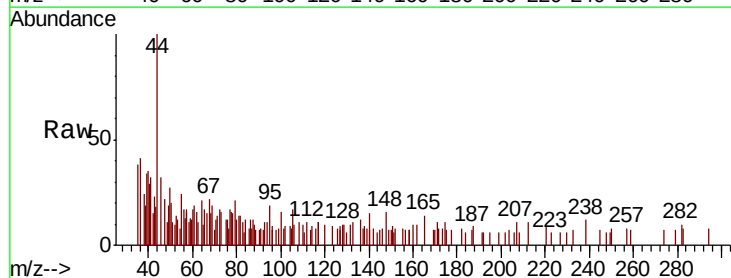
Acq: 10 Mar 2020 16:04

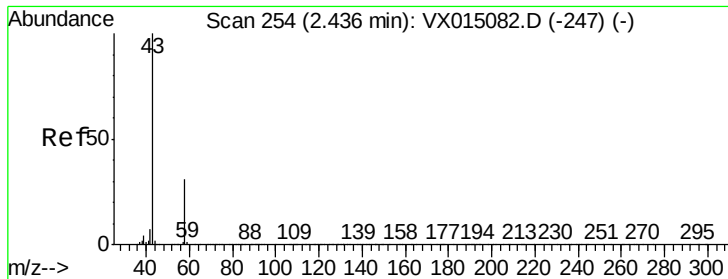
Tgt Ion: 56 Resp: 340

Ion Ratio Lower Upper

56 100

55 100.3 55.4 83.0#

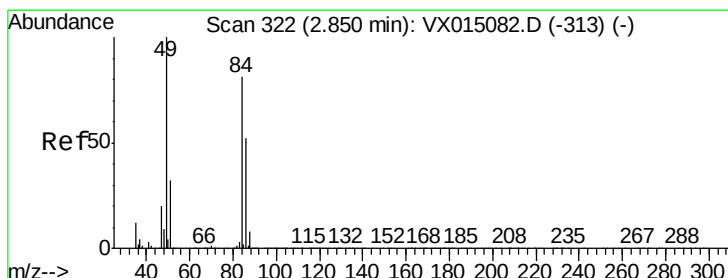
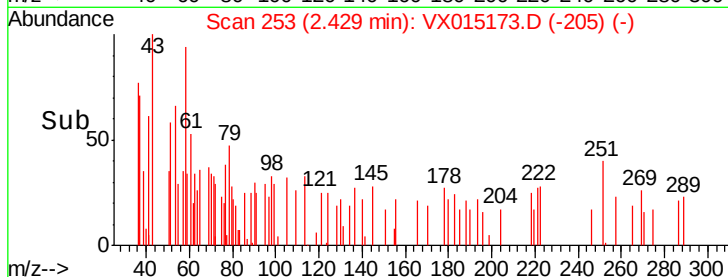
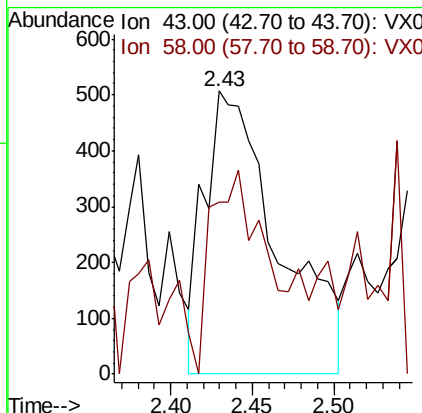
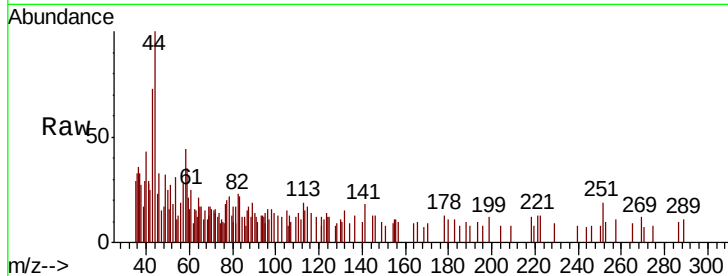




#16  
Acetone  
Concen: 0.943 ug/l  
RT: 2.43 min Scan# 253  
Delta R.T. -0.01 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

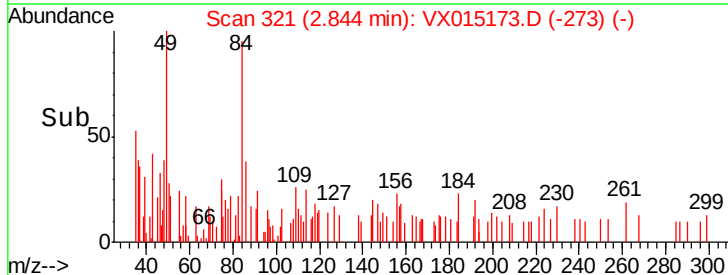
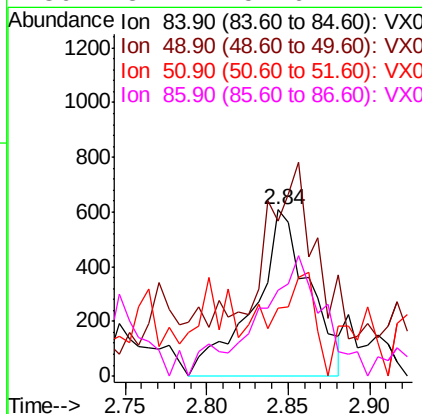
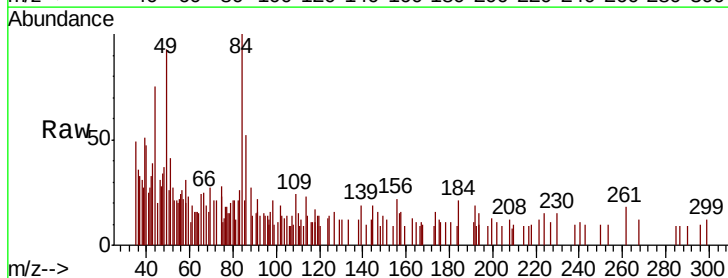
Instrument :  
MSVOA\_X  
ClientSampled :

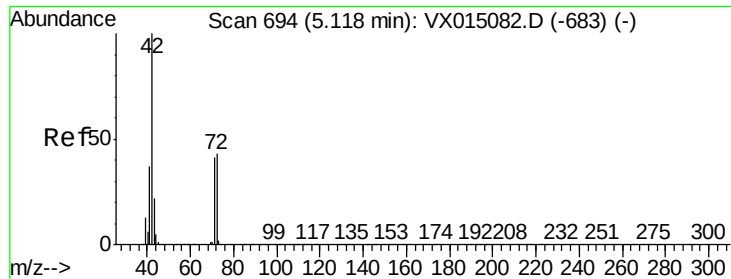
Tot Ion: 43 Resp: 1600  
Ion Ratio Lower Upper  
43 100  
58 59.7 24.8 37.2#



#20  
Methylene Chloride  
Concen: 0.362 ug/l  
RT: 2.84 min Scan# 321  
Delta R.T. -0.01 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

Tgt Ion: 84 Resp: 1439  
Ion Ratio Lower Upper  
84 100  
49 60.8 99.4 149.2#  
51 14.5 31.5 47.3#  
86 37.1 51.6 77.4#

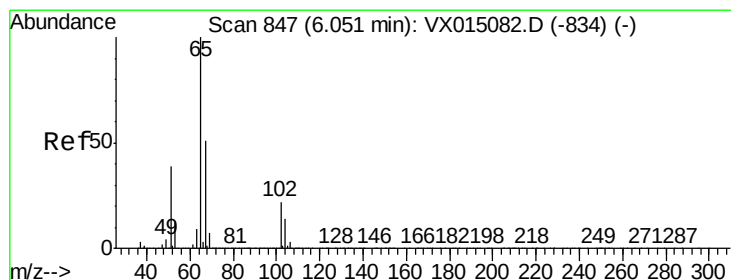
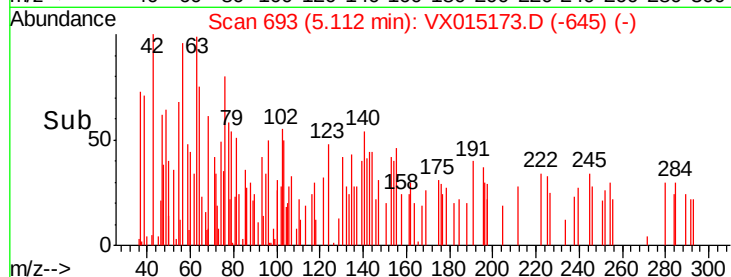
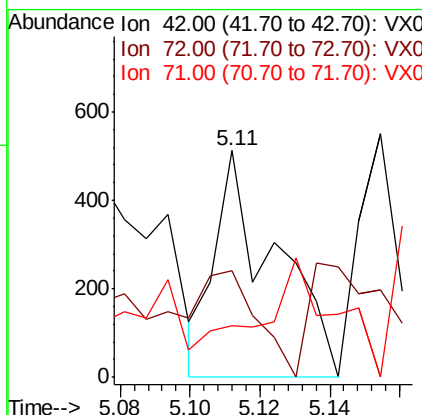
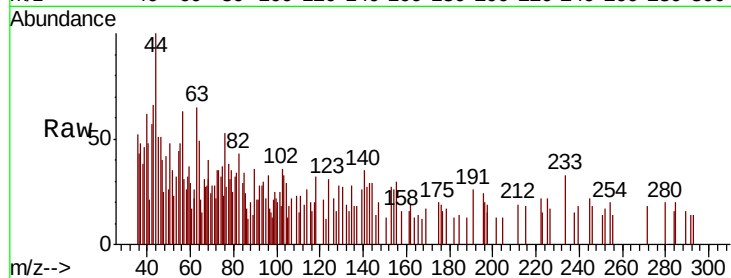




#29  
Tetrahydrofuran  
Concen: 0.384 ug/l  
RT: 5.11 min Scan# 693  
Delta R.T. -0.01 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

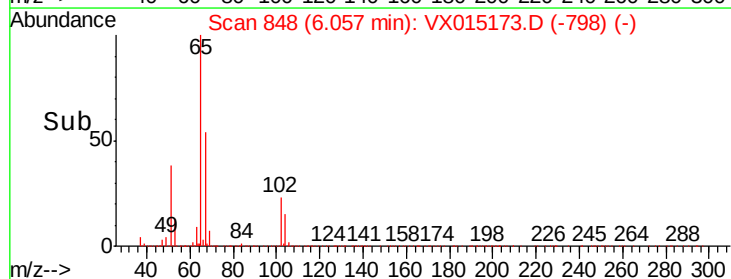
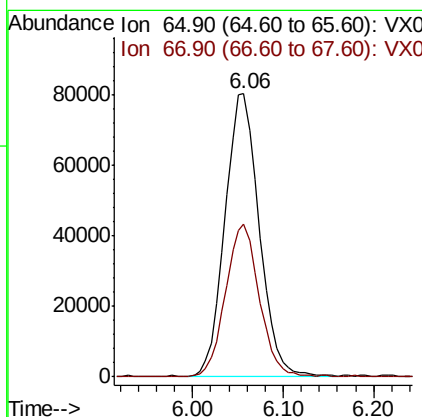
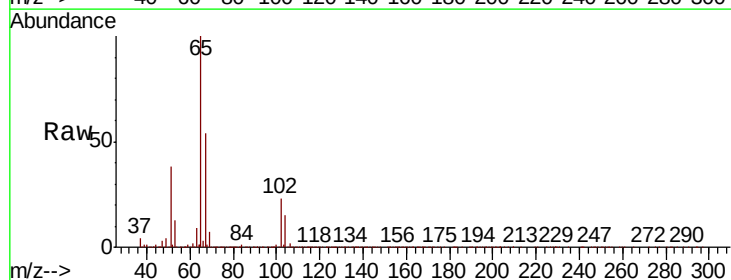
Instrument :  
MSVOA\_X  
ClientSampled :

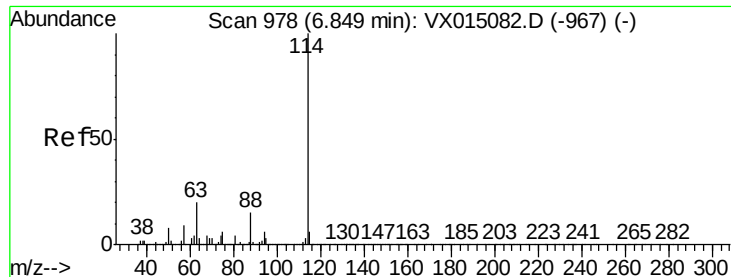
Tot Ion: 42 Resp: 615  
Ion Ratio Lower Upper  
42 100  
72 41.6 36.4 54.6  
71 0.0 33.3 49.9#



#33  
1,2-Dichloroethane-d4  
Concen: 50.118 ug/l  
RT: 6.06 min Scan# 848  
Delta R.T. 0.01 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

Tgt Ion: 65 Resp: 209985  
Ion Ratio Lower Upper  
65 100  
67 52.8 0.0 105.6

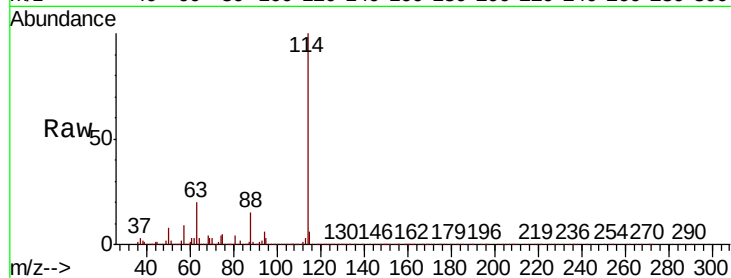




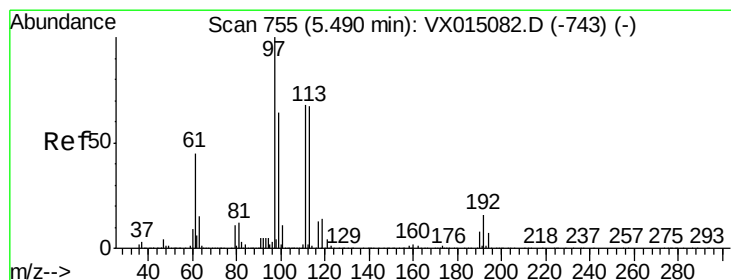
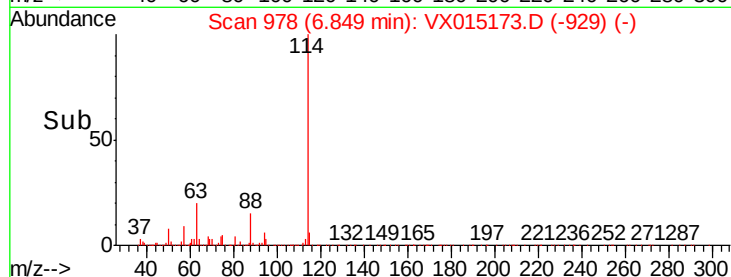
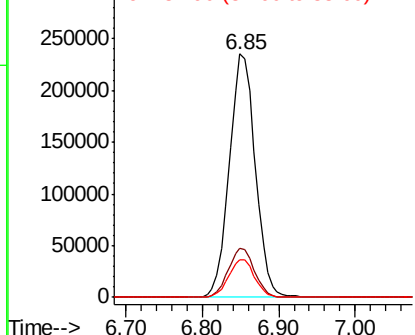
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.85 min Scan# 978  
Delta R.T. -0.00 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

Instrument :  
MSVOA\_X  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 20.1  | 0.0   | 40.0  |
| 88      | 15.2  | 0.0   | 30.6  |

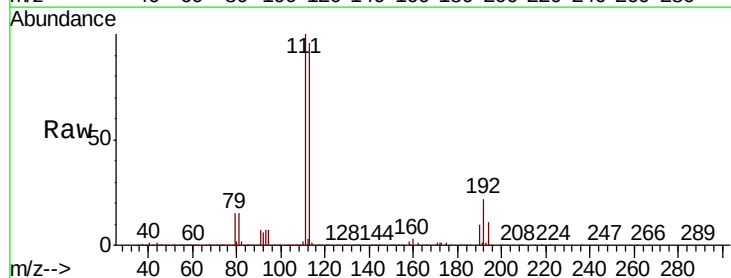


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VX0  
Ion 87.90 (87.60 to 88.60): VX0

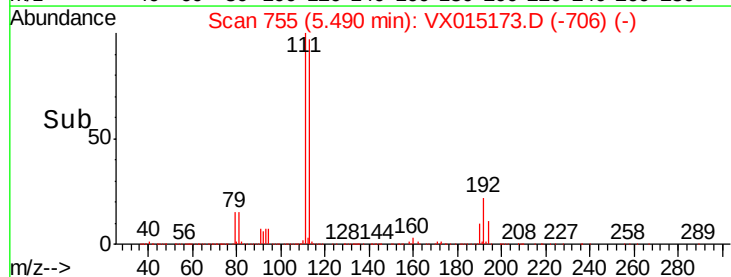
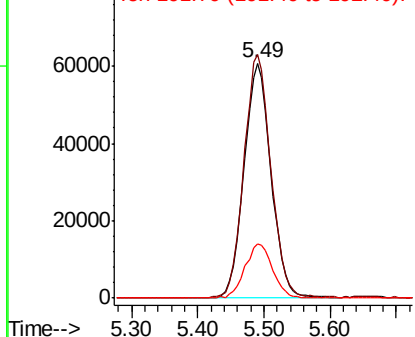


#35  
Dibromofluoromethane  
Concen: 49.413 ug/l  
RT: 5.49 min Scan# 755  
Delta R.T. -0.00 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

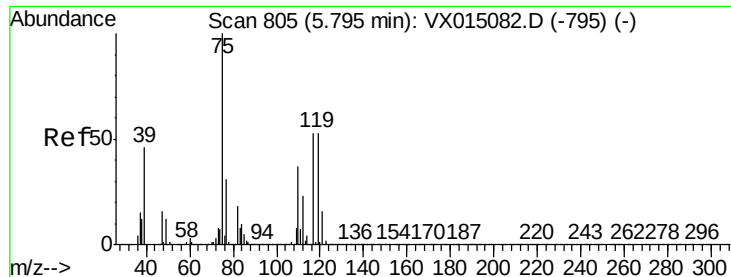
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.5 | 82.6  | 123.8 |
| 192     | 23.7  | 18.6  | 28.0  |



Abundance Ion 112.80 (112.50 to 113.50): V  
Ion 110.80 (110.50 to 111.50): V  
Ion 191.70 (191.40 to 192.40): V



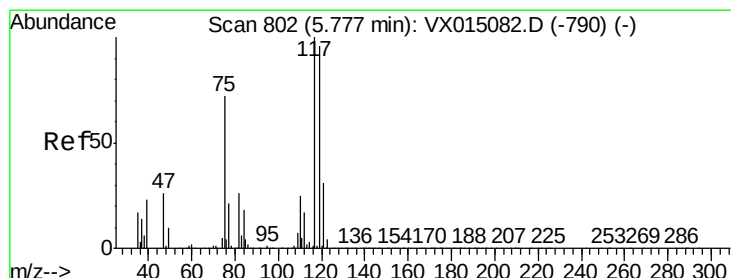
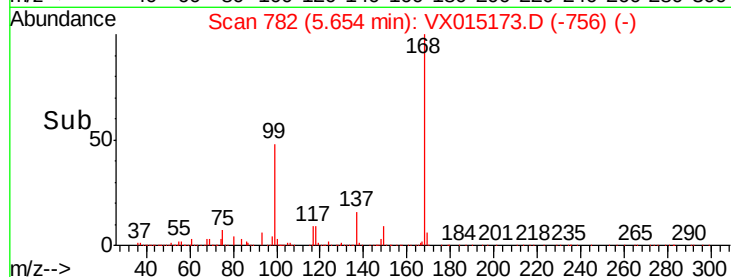
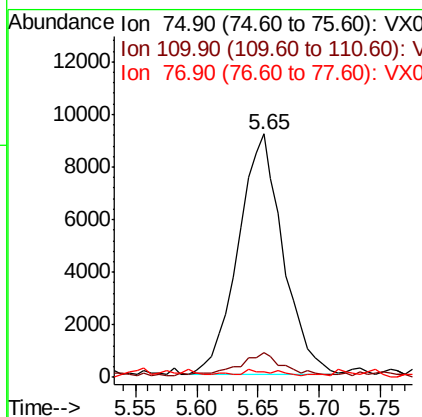
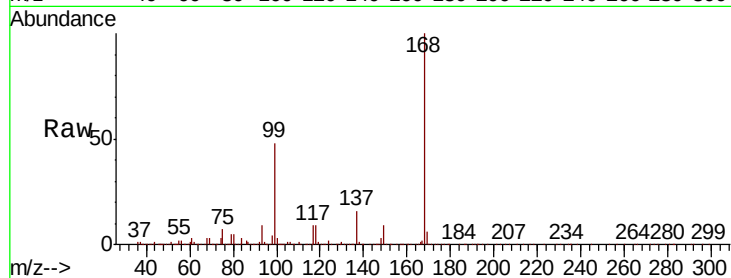




#36  
 1,1-Dichloropropene  
 Concen: 4.524 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.14 min  
 Lab File: VX015173.D  
 Acq: 10 Mar 2020 16:04

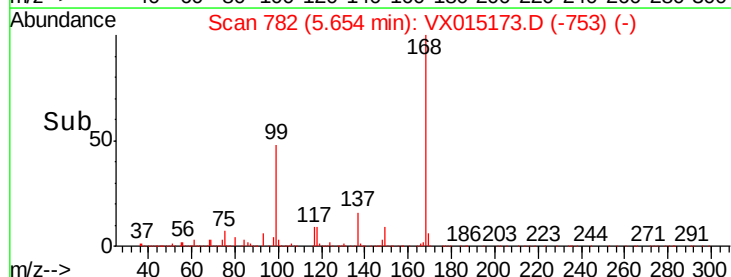
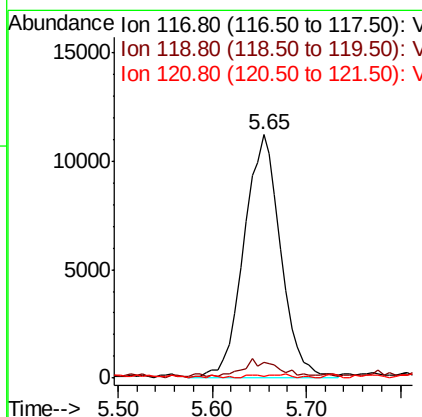
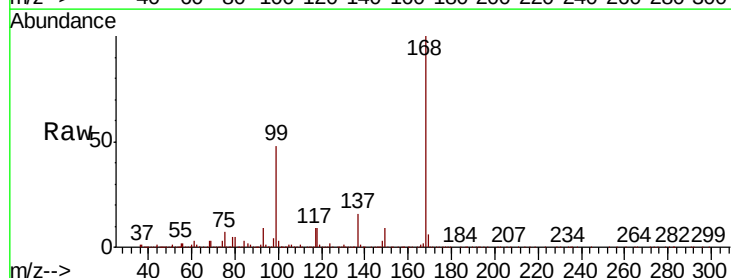
Instrument :  
 MSVOA\_X  
 ClientSampleId :

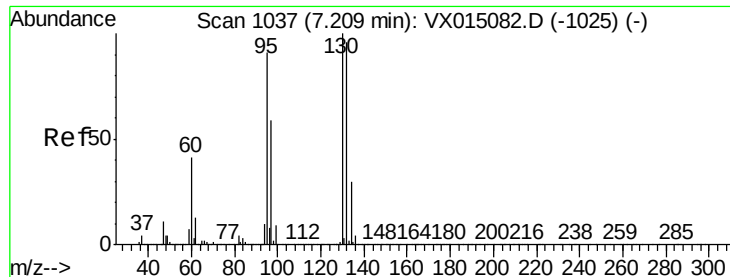
| Tot Ion   | 75   | Resp  | 23135 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 75        | 100  |       |       |
| 110       | 10.1 | 17.9  | 53.8# |
| 77        | 0.6  | 24.8  | 37.2# |



#38  
 Carbon Tetrachloride  
 Concen: 6.368 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.12 min  
 Lab File: VX015173.D  
 Acq: 10 Mar 2020 16:04

| Tgt Ion                                              | 117 | Resp  | 30737  |
|------------------------------------------------------|-----|-------|--------|
| Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td> | 100 | Lower | Upper  |
| 117                                                  | 100 |       |        |
| 119                                                  | 5.6 | 76.9  | 115.3# |
| 121                                                  | 0.8 | 24.6  | 37.0#  |





#44

Trichloroethene

Concen: 44.670 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. -0.00 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

Instrument :

MSVOA\_X

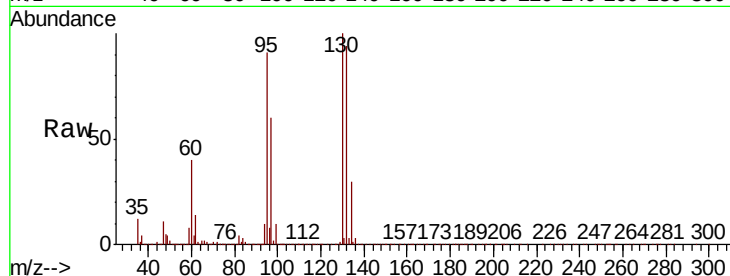
ClientSampled :

Tot Ion:130 Resp: 188726

Ion Ratio Lower Upper

130 100

95 90.7 0.0 181.2



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

7.21

100000

80000

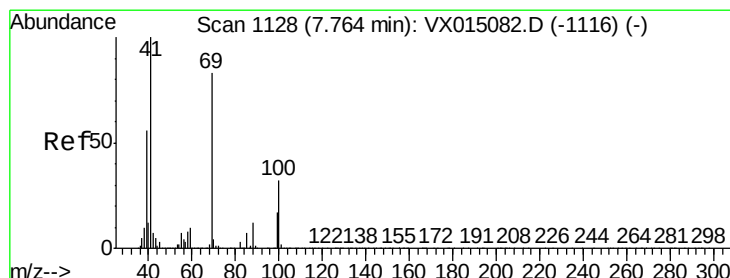
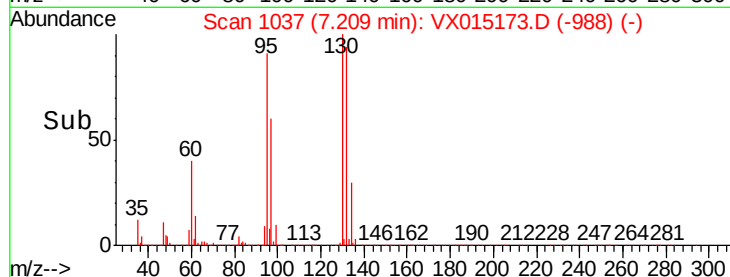
60000

40000

20000

0

Time-->



#48

Methyl methacrylate

Concen: 0.266 ug/l

RT: 7.74 min Scan# 1124

Delta R.T. -0.02 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

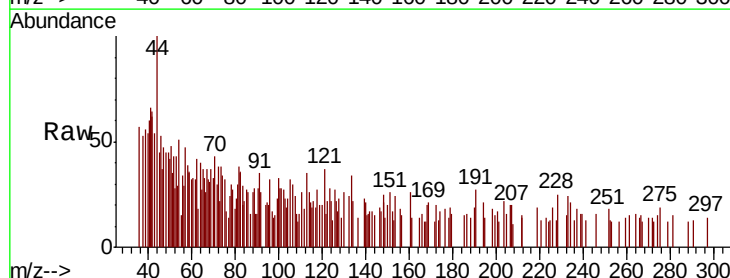
Tgt Ion: 41 Resp: 1131

Ion Ratio Lower Upper

41 100

69 14.6 65.4 98.2#

39 52.3 44.6 67.0



Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

1200

1000

800

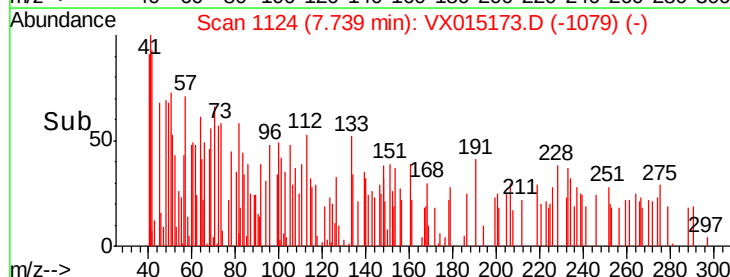
600

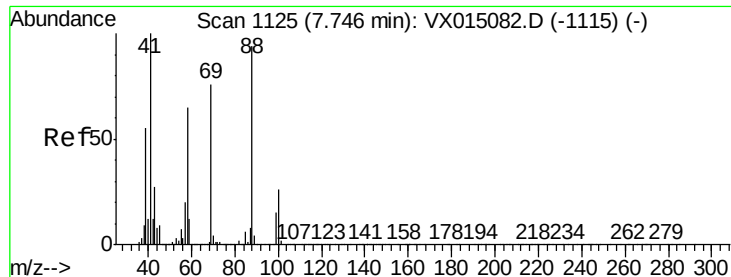
400

200

0

Time-->

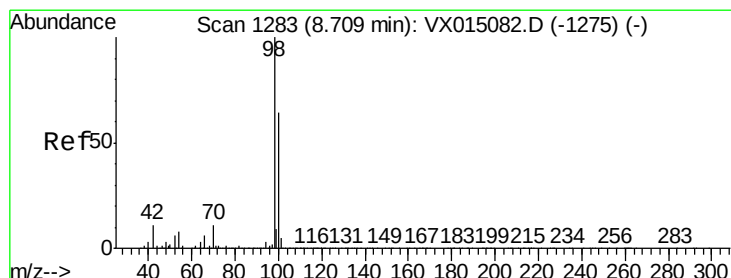
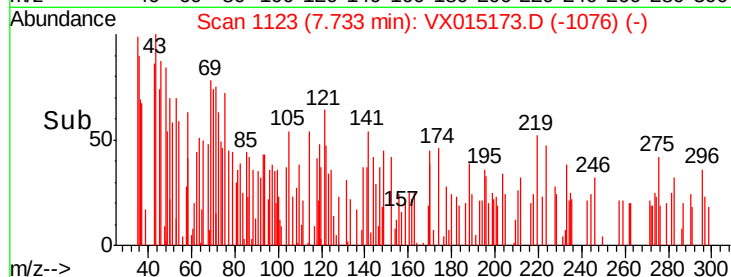
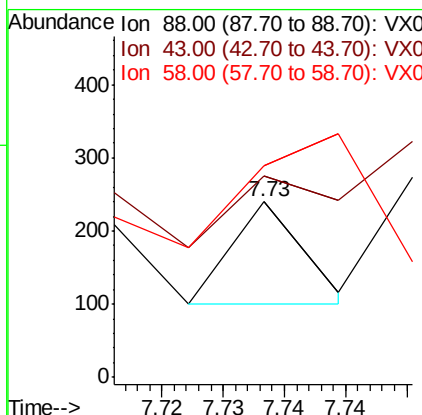
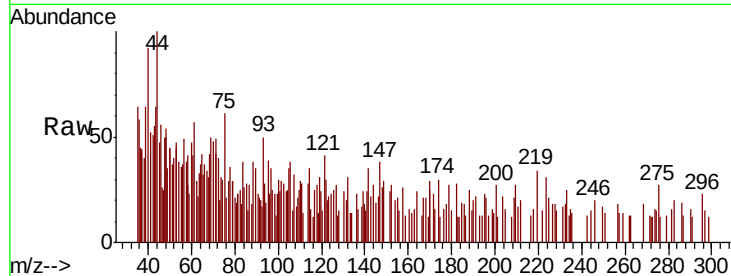




#49  
1,4-Dioxane  
Concen: 0.621 ug/l  
RT: 7.73 min Scan# 1123  
Delta R.T. -0.01 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

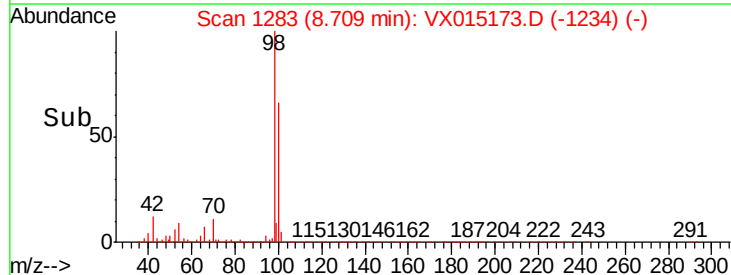
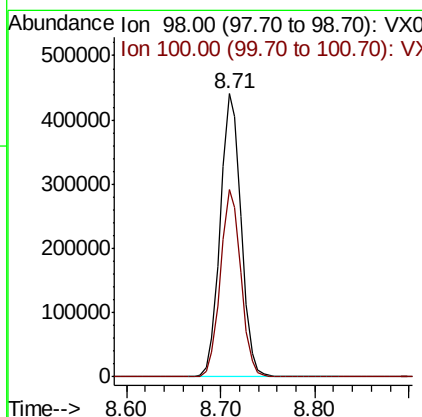
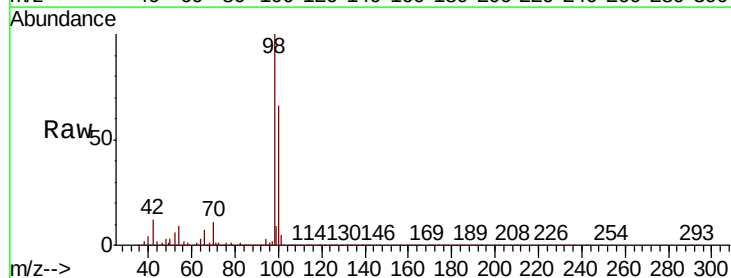
Instrument :  
MSVOA\_X  
ClientSampleId :

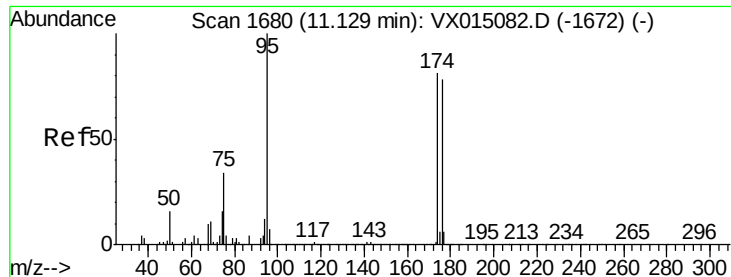
Tot Ion: 88 Resp: 57  
Ion Ratio Lower Upper  
88 100  
43 1119.3 27.0 40.4#  
58 659.6 55.6 83.4#



#50  
Toluene-d8  
Concen: 50.767 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. -0.00 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

Tgt Ion: 98 Resp: 673846  
Ion Ratio Lower Upper  
98 100  
100 65.1 52.4 78.6

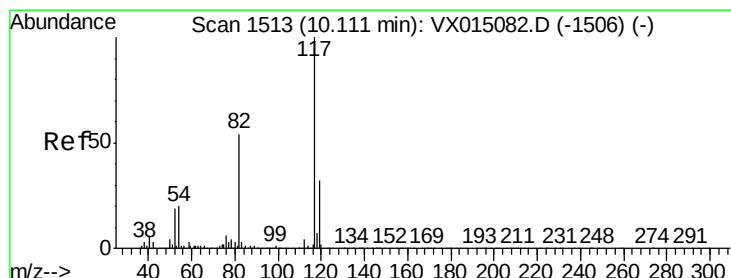
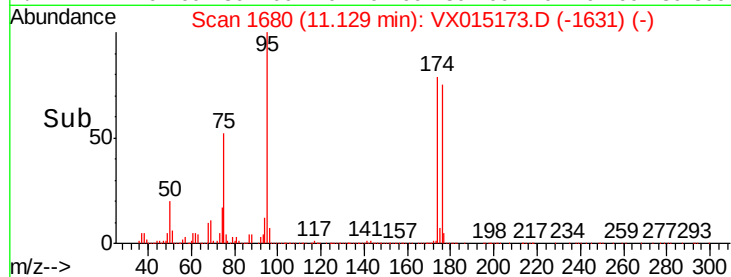
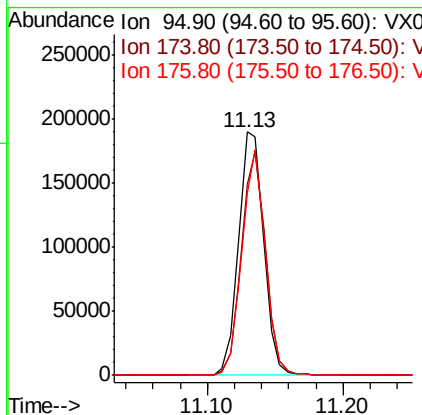
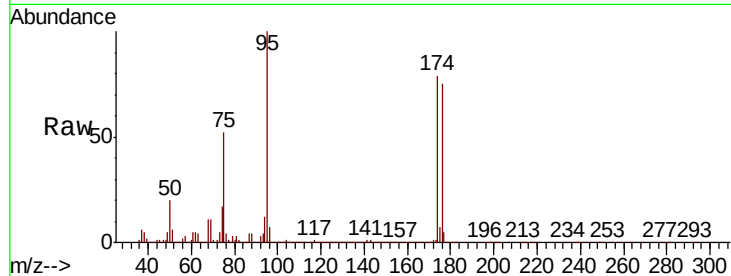




#62  
4-Bromofluorobenzene  
Concen: 51.559 ug/l  
RT: 11.13 min Scan# 1680  
Delta R.T. -0.00 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

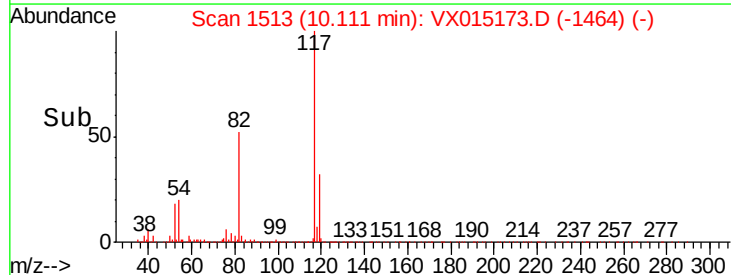
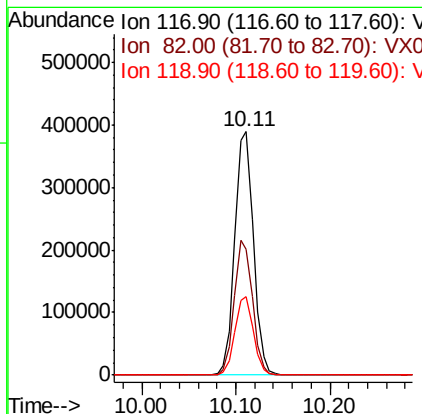
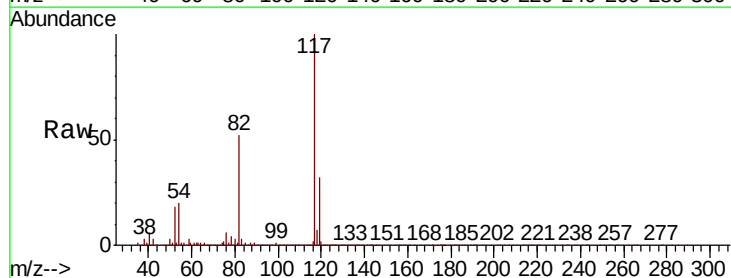
Instrument :  
MSVOA\_X  
ClientSampleId :

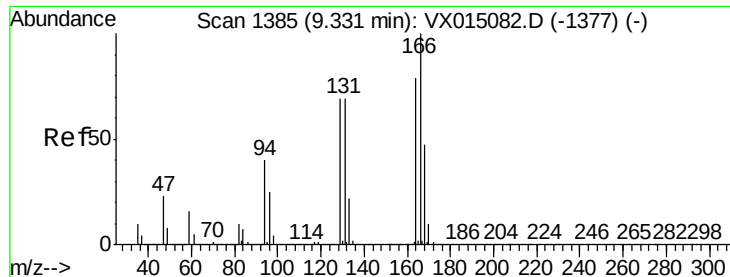
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 89.1  | 0.0   | 177.6 |
| 176     | 87.0  | 0.0   | 170.2 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. -0.00 min  
Lab File: VX015173.D  
Acq: 10 Mar 2020 16:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 51.9  | 43.3  | 64.9  |
| 119     | 32.0  | 25.8  | 38.8  |





#64

Tetrachloroethene

Concen: 0.221 ug/l

RT: 9.33 min Scan# 1385

Delta R.T. -0.00 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion:164 Resp: 979

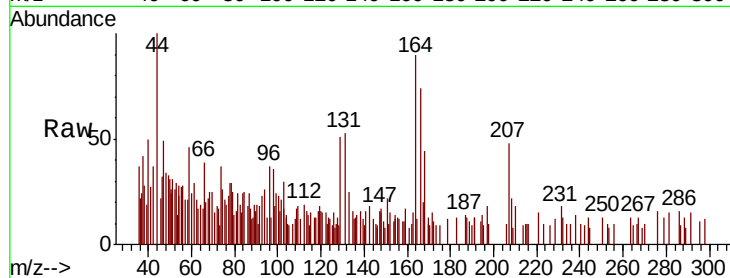
Ion Ratio Lower Upper

164 100

166 82.4 101.1 151.7#

129 41.1 69.4 104.0#

131 42.0 69.8 104.8#

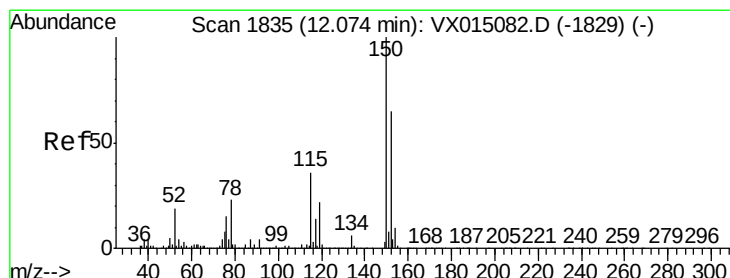
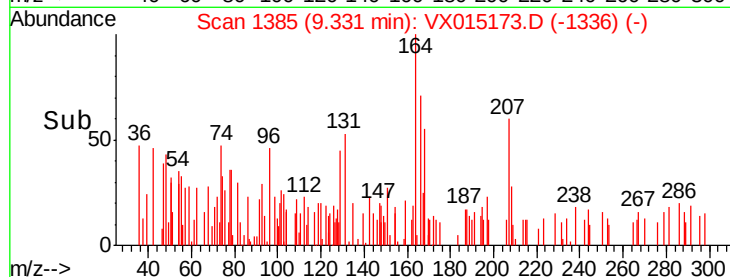
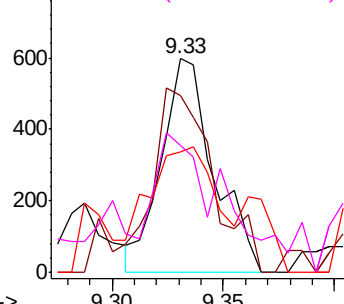


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): 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: VX015173.D

Acq: 10 Mar 2020 16:04

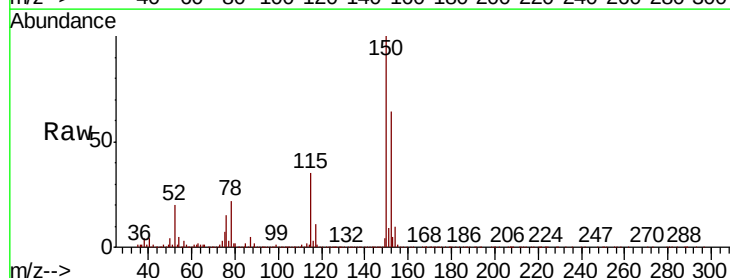
Tgt Ion:152 Resp: 276675

Ion Ratio Lower Upper

152 100

115 55.4 38.2 114.6

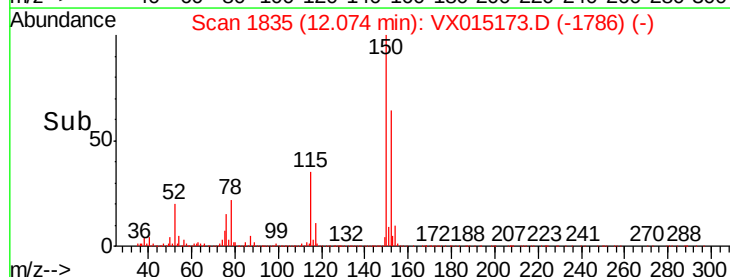
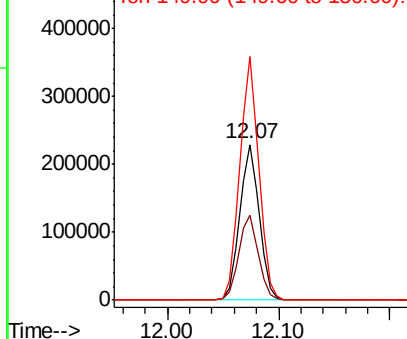
150 153.7 0.0 343.8

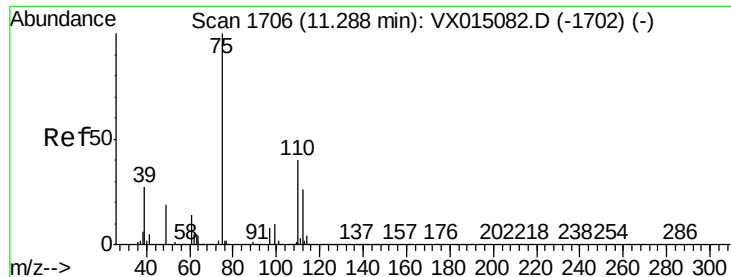


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 22.458 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

Instrument :

MSVOA\_X

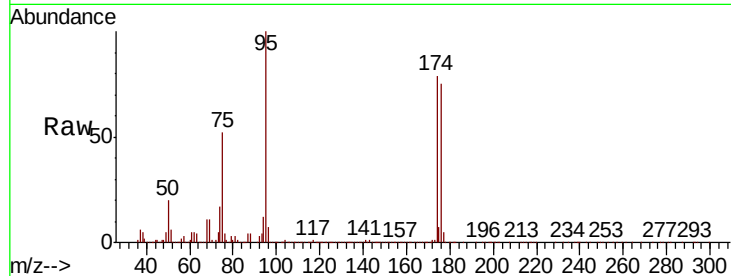
ClientSampled :

Tot Ion: 75 Resp: 123944

Ion Ratio Lower Upper

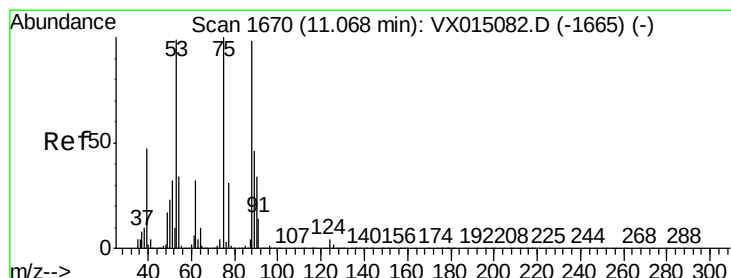
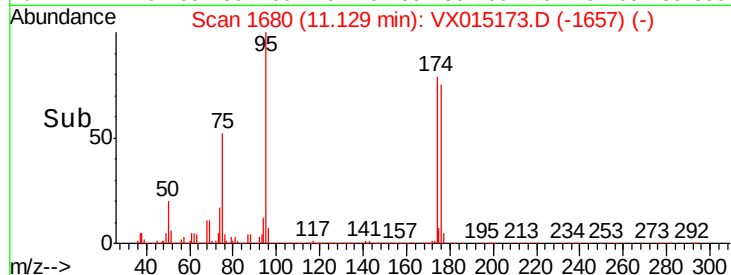
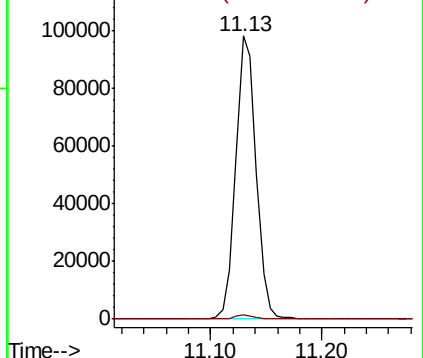
75 100

77 1.5 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: 63.737 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

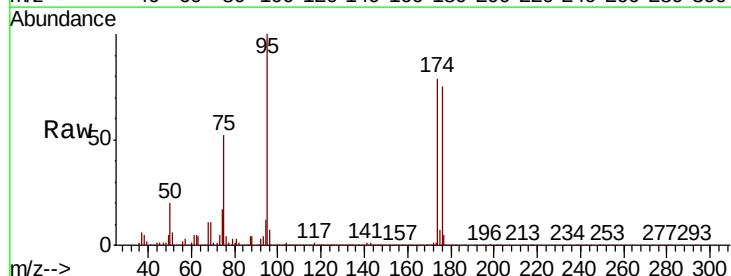
Tgt Ion: 75 Resp: 123944

Ion Ratio Lower Upper

75 100

53 0.6 77.9 116.9#

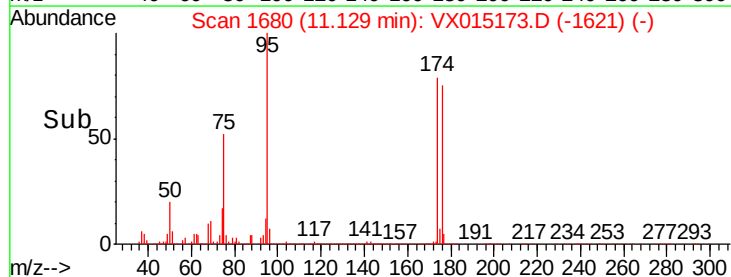
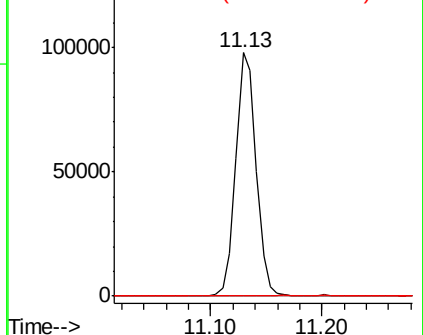
89 0.2 36.2 54.2#

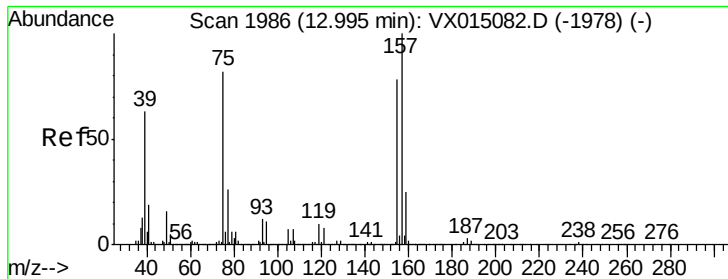


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.247 ug/l

RT: 12.82 min Scan# 1957

Delta R.T. -0.18 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

Instrument :

MSVOA\_X

ClientSampled :

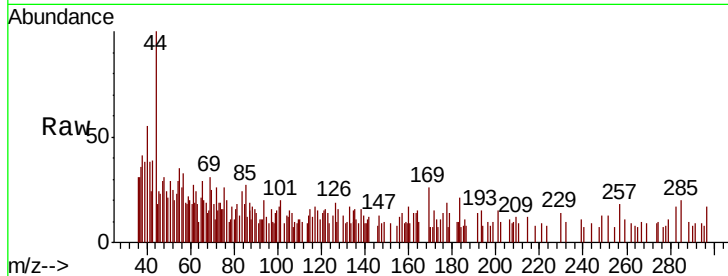
Tot Ion: 75 Resp: 291

Ion Ratio Lower Upper

75 100

155 50.9 46.6 139.7

157 90.0 59.2 177.5

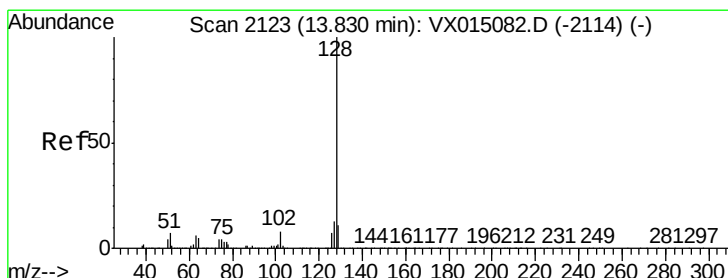
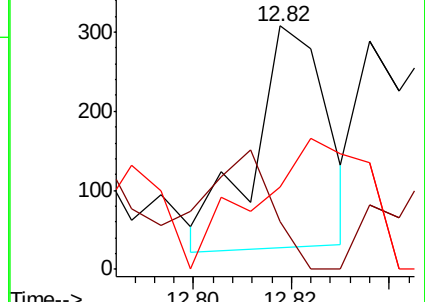
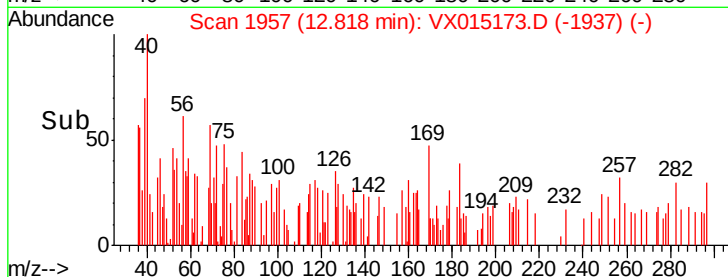


Abundance Ion 74.90 (74.60 to 75.60): VX015082.D (-1978) (-)

Ion 154.80 (154.50 to 155.50): VX015082.D (-1978) (-)

Ion 156.80 (156.50 to 157.50): VX015082.D (-1978) (-)

Time-->



#95

Naphthalene

Concen: 1.429 ug/l

RT: 13.82 min Scan# 2121

Delta R.T. -0.01 min

Lab File: VX015173.D

Acq: 10 Mar 2020 16:04

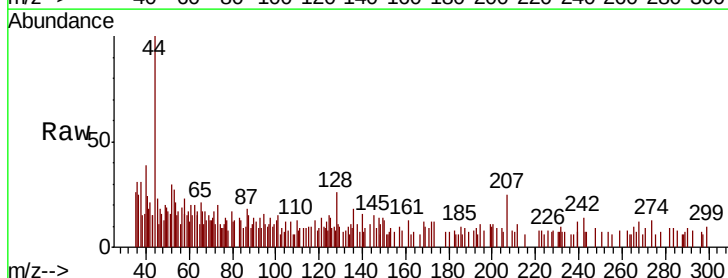
Tgt Ion: 128 Resp: 177

Ion Ratio Lower Upper

128 100

127 98.3 10.3 15.5#

129 166.7 8.6 13.0#



Abundance Ion 128.00 (127.70 to 128.70): VX015082.D (-2114) (-)

Ion 127.00 (126.70 to 127.70): VX015082.D (-2114) (-)

Ion 129.00 (128.70 to 129.70): VX015082.D (-2114) (-)

Time-->

