

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX112219\  
 Data File : VX013571.D  
 Acq On : 23 Nov 2019 06:43  
 Operator : JC/SP  
 Sample : K5968-11 50X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 MH-140N-20191121

Quant Time: Nov 25 00:38:04 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X103119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 02 07:06:38 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 629239   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 1033088  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 926608   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 429529   | 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   | 379058   | 50.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.70% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 311846   | 48.13 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.26%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 1245193  | 50.97 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.94% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 417086   | 47.31 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.62%  |          |

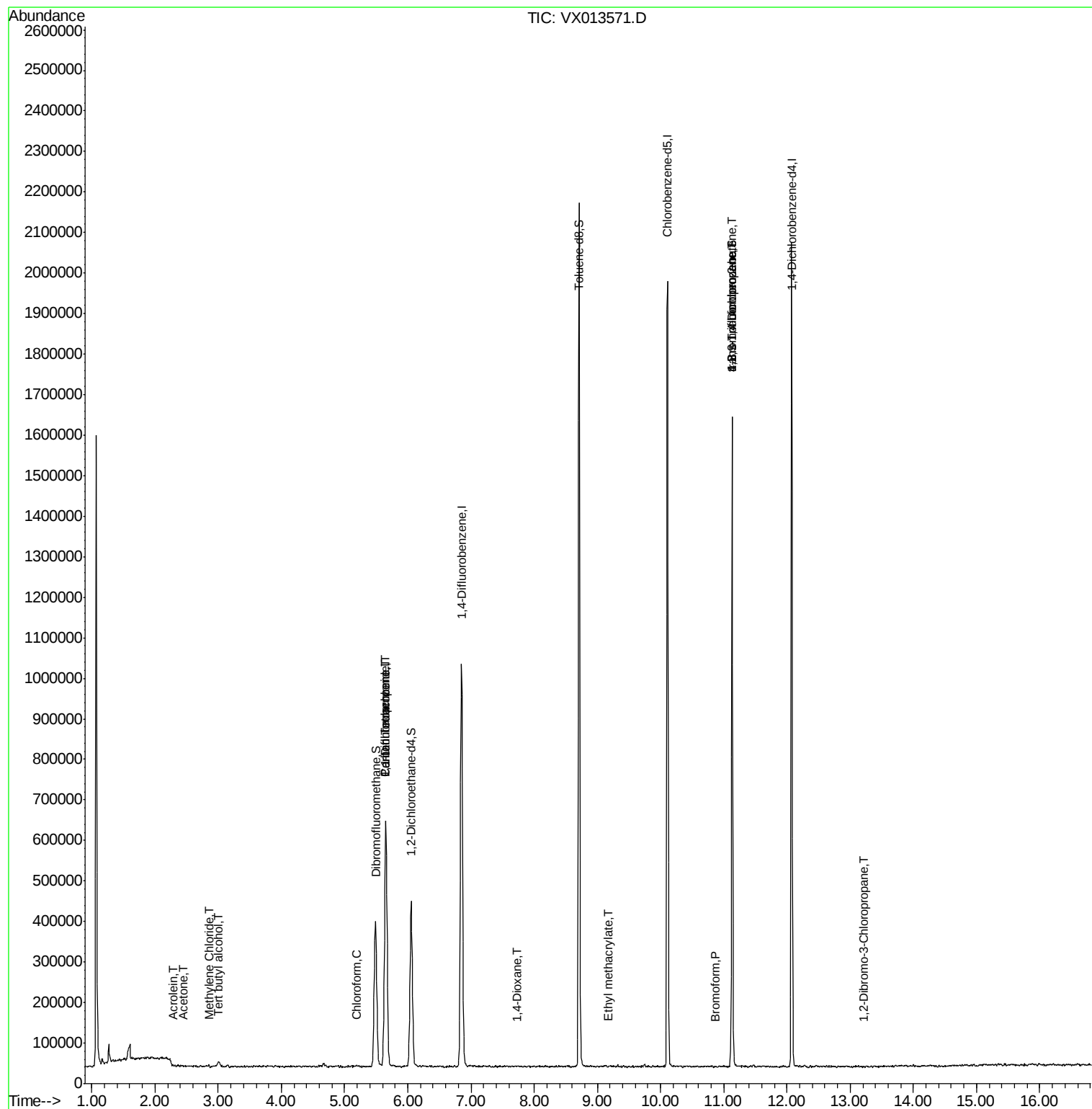
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 6) Chloroethane                | 1.69  | 64   | 465      | Below Cal | #      | 63     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 10541    | 5.365     | ug/l # | 84     |
| 13) Acrolein                   | 2.29  | 56   | 493      | 0.463     | ug/l # | 75     |
| 16) Acetone                    | 2.44  | 43   | 2374     | 0.638     | ug/l # | 77     |
| 20) Methylene Chloride         | 2.85  | 84   | 1811     | 0.264     | ug/l # | 66     |
| 30) Chloroform                 | 5.19  | 83   | 5072     | 0.454     | ug/l # | 79     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 42401    | 4.784     | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 55794    | 6.438     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 274      | 1.406     | ug/l # | 24     |
| 56) Ethyl methacrylate         | 9.18  | 69   | 154      | 1.575     | ug/l # | 1      |
| 71) Bromoform                  | 10.87 | 173  | 176      | 3.228     | ug/l # | 28     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 199428   | 22.859    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 199428   | 58.838    | ug/l # | 10     |
| 92) 1,2-Dibromo-3-Chloropropan | 13.20 | 75   | 607      | 0.240     | ug/l   | 61     |

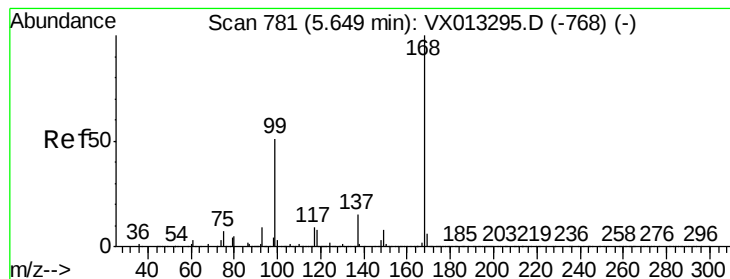
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX112219\  
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Sample : K5968-11 50X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 55 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
MH-140N-20191121

Quant Time: Nov 25 00:38:04 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X103119W.M  
Quant Title : SW846 8260  
QLast Update : Sat Nov 02 07:06:38 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Instrument :

MSVOA\_X

ClientSampleId :

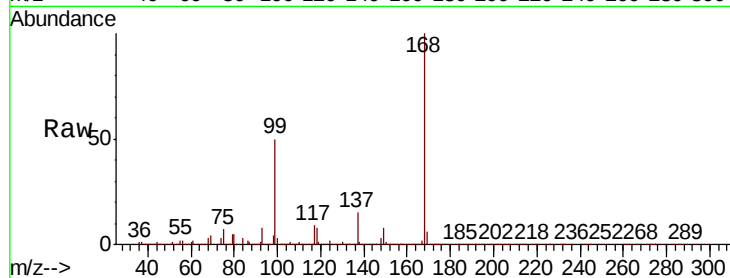
MH-140N-20191121

Tot Ion:168 Resp: 629239

Ion Ratio Lower Upper

168 100

99 49.7 40.8 61.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

250000

200000

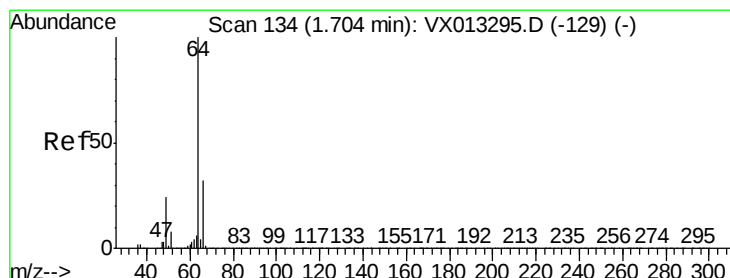
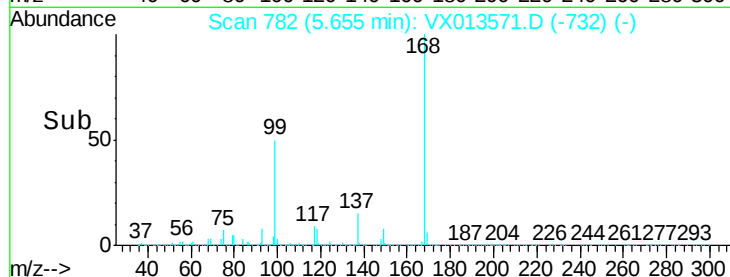
150000

100000

50000

0

Time-->



#6

Chloroethane

Concen: Below Cal

RT: 1.69 min Scan# 132

Delta R.T. -0.01 min

Lab File: VX013571.D

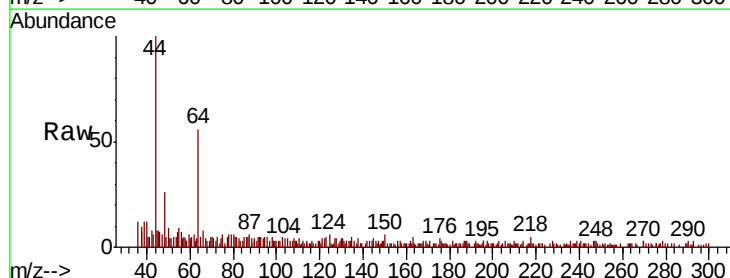
Acq: 23 Nov 2019 06:43

Tgt Ion: 64 Resp: 465

Ion Ratio Lower Upper

64 100

66 11.3 25.6 38.4#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.69

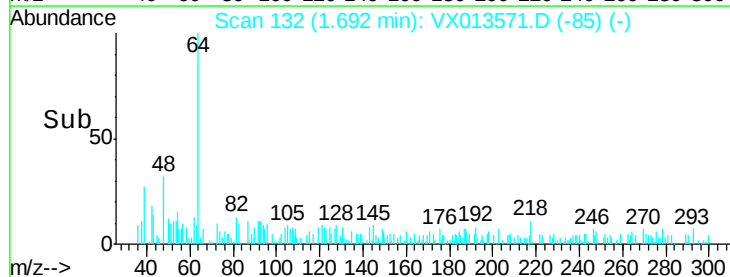
3000

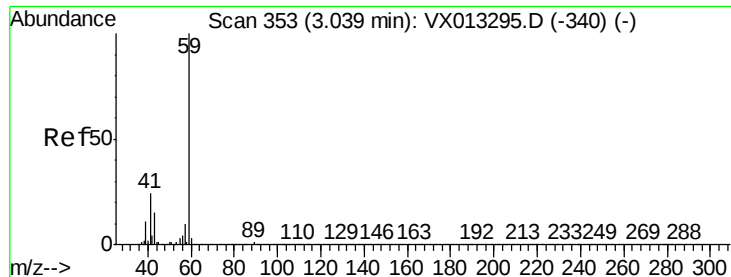
2000

1000

0

Time-->



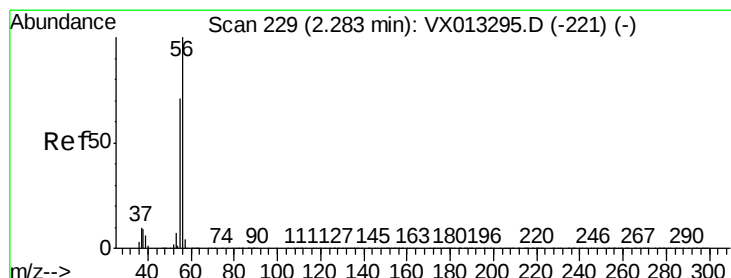
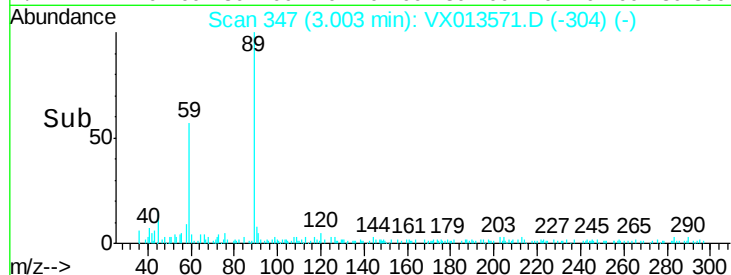
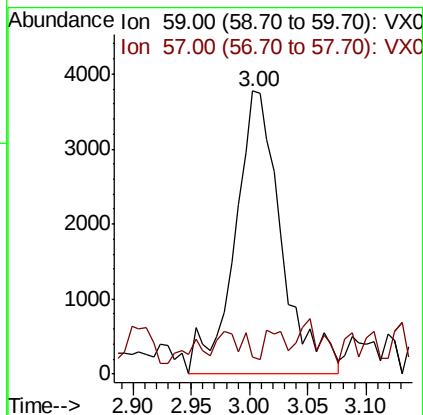
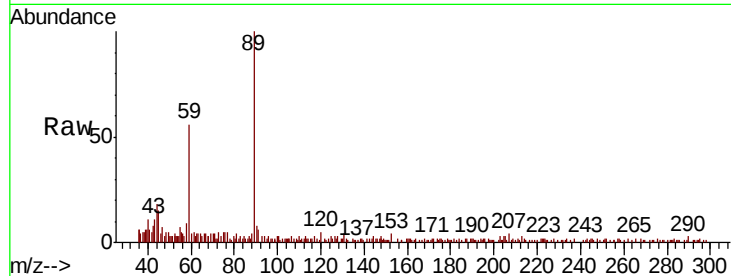


#11

Tert butyl alcohol  
Concen: 5.365 ug/l  
RT: 3.00 min Scan# 347  
Delta R.T. -0.04 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

Instrument :  
MSVOA\_X  
ClientSampleId :  
MH-140N-20191121

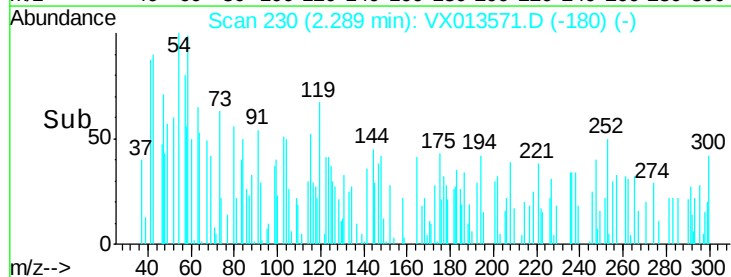
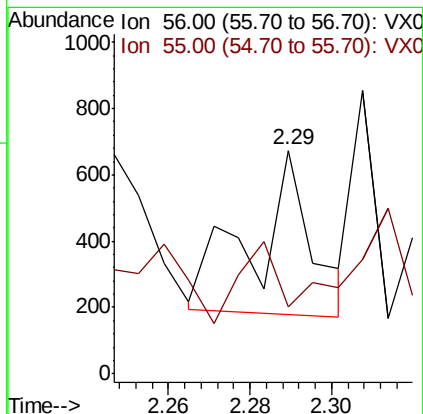
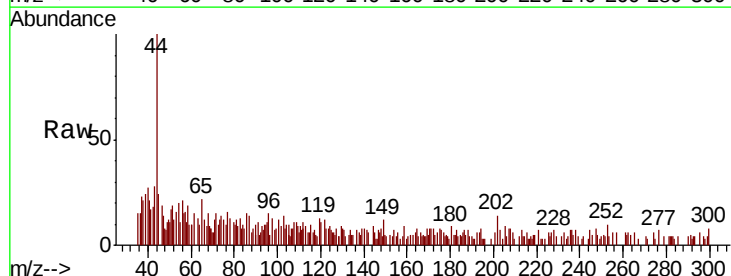
Tot Ion: 59 Resp: 10541  
Ion Ratio Lower Upper  
59 100  
57 4.1 8.0 12.0#

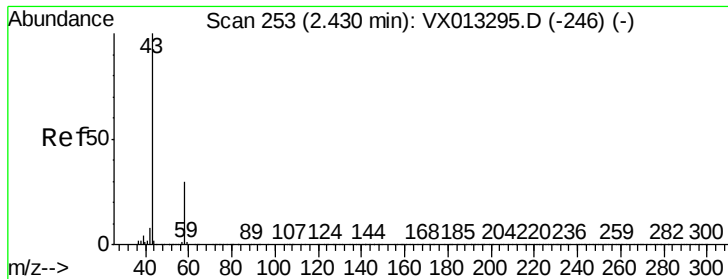


#13

Acrolein  
Concen: 0.463 ug/l  
RT: 2.29 min Scan# 230  
Delta R.T. 0.01 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

Tgt Ion: 56 Resp: 493  
Ion Ratio Lower Upper  
56 100  
55 50.9 57.4 86.0#

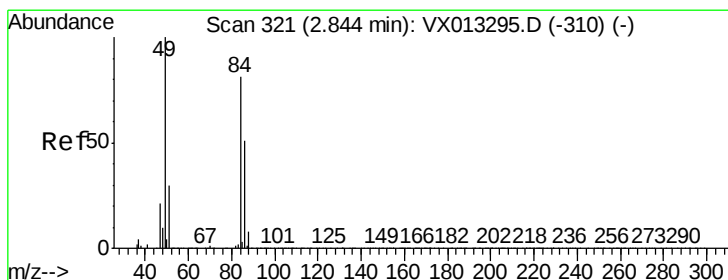
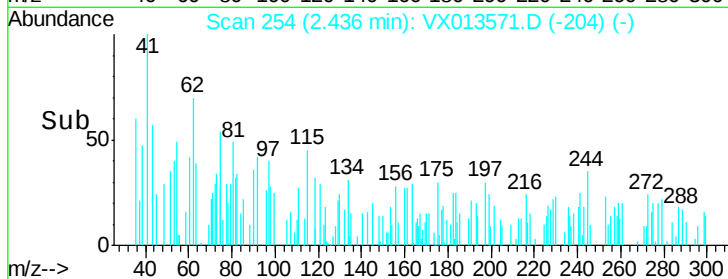
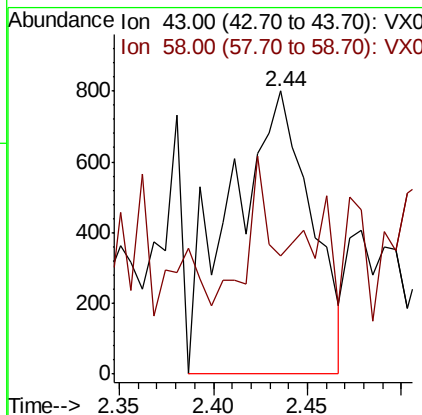
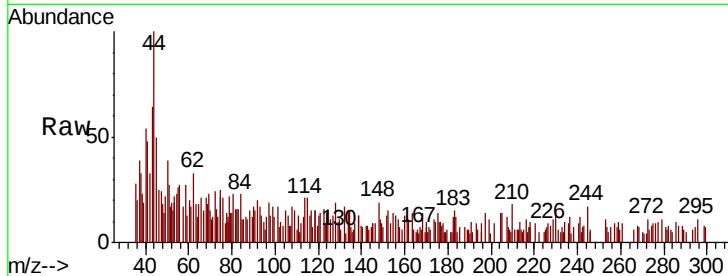




#16  
Acetone  
Concen: 0.638 ug/l  
RT: 2.44 min Scan# 254  
Delta R.T. 0.01 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

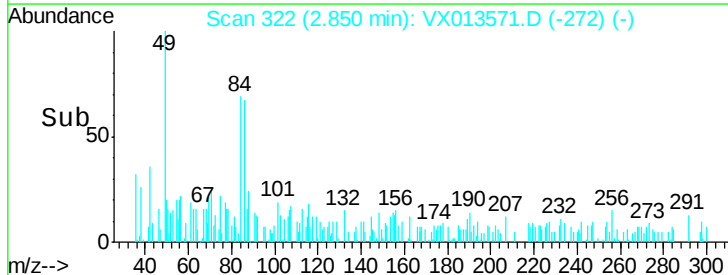
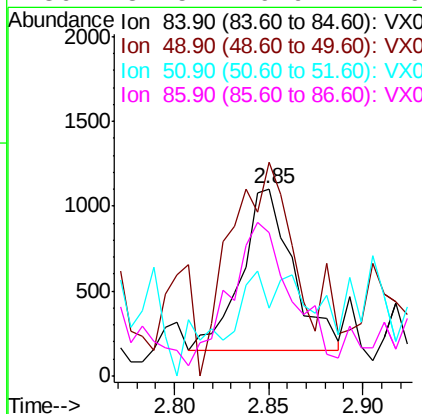
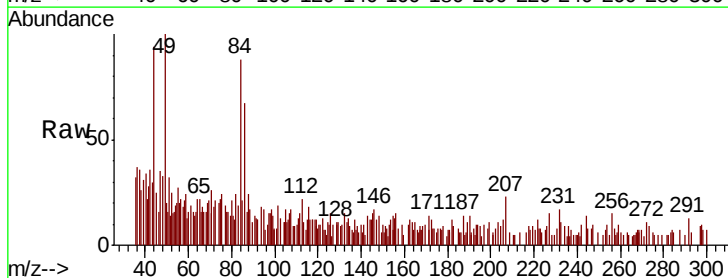
Instrument :  
MSVOA\_X  
ClientSampleId :  
MH-140N-20191121

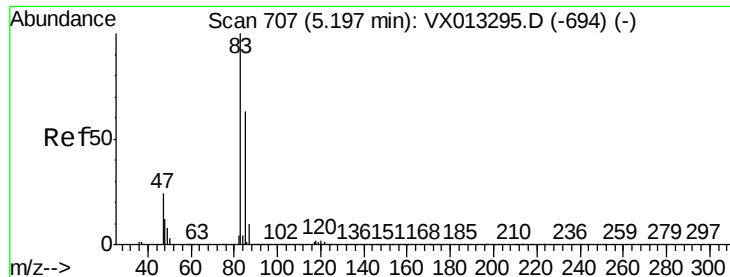
Tot Ion: 43 Resp: 2374  
Ion Ratio Lower Upper  
43 100  
58 17.6 24.3 36.5#



#20  
Methylene Chloride  
Concen: 0.264 ug/l  
RT: 2.85 min Scan# 322  
Delta R.T. 0.01 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

Tgt Ion: 84 Resp: 1811  
Ion Ratio Lower Upper  
84 100  
49 84.9 98.2 147.4#  
51 7.4 29.9 44.9#  
86 82.5 49.9 74.9#

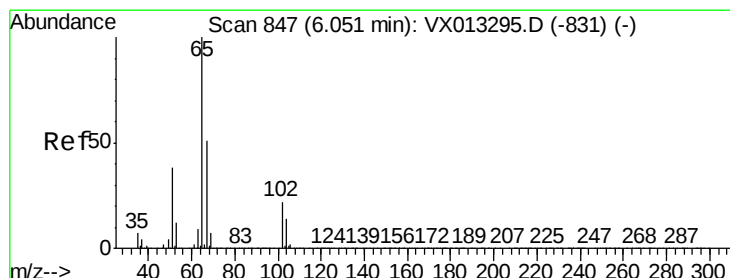
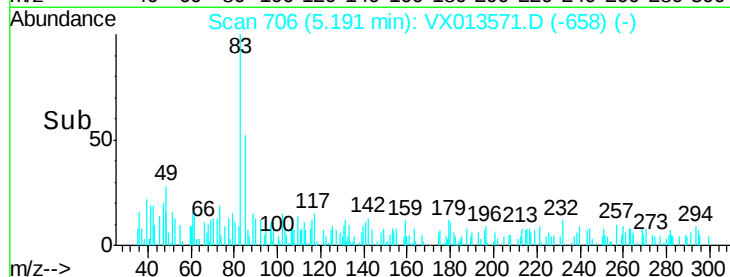
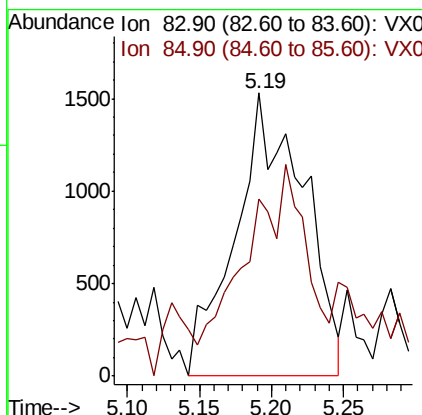
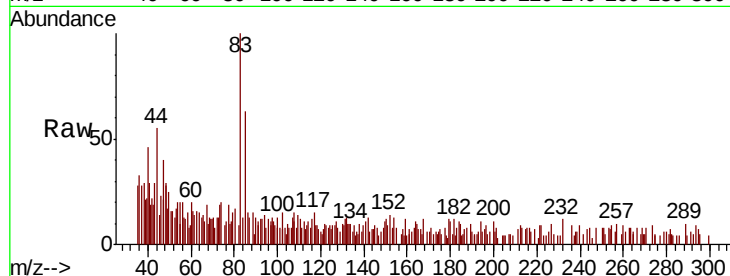




#30  
Chloroform  
Concen: 0.454 ug/l  
RT: 5.19 min Scan# 706  
Delta R.T. -0.01 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

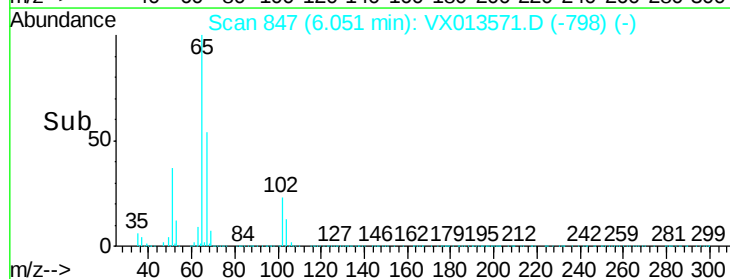
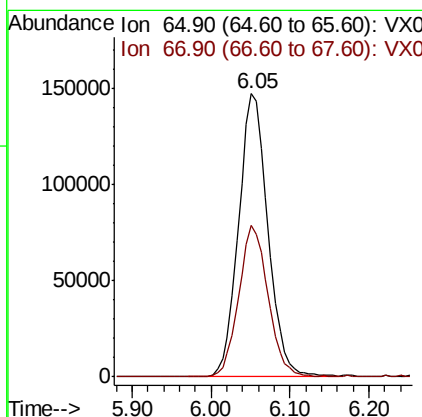
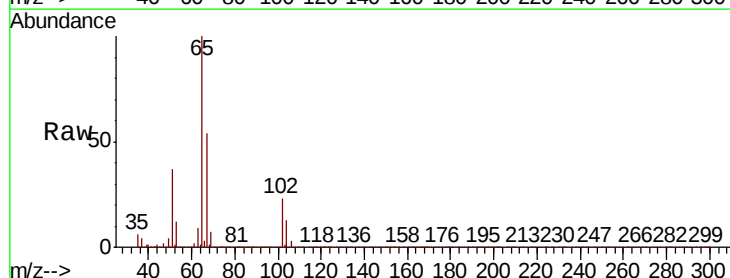
Instrument :  
MSVOA\_X  
ClientSampleId :  
MH-140N-20191121

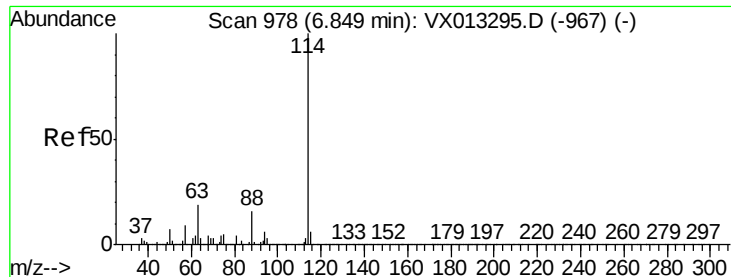
Tot Ion: 83 Resp: 5072  
Ion Ratio Lower Upper  
83 100  
85 46.3 50.2 75.4#



#33  
1,2-Dichloroethane-d4  
Concen: 50.849 ug/l  
RT: 6.05 min Scan# 847  
Delta R.T. 0.00 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

Tgt Ion: 65 Resp: 379058  
Ion Ratio Lower Upper  
65 100  
67 53.4 0.0 104.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Instrument :

MSVOA\_X

ClientSampleId :

MH-140N-20191121

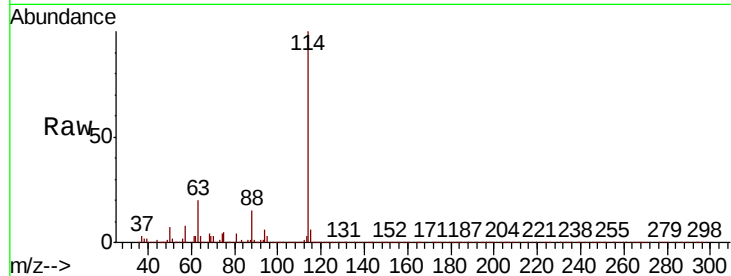
Tot Ion:114 Resp: 1033088

Ion Ratio Lower Upper

114 100

63 20.1 0.0 38.4

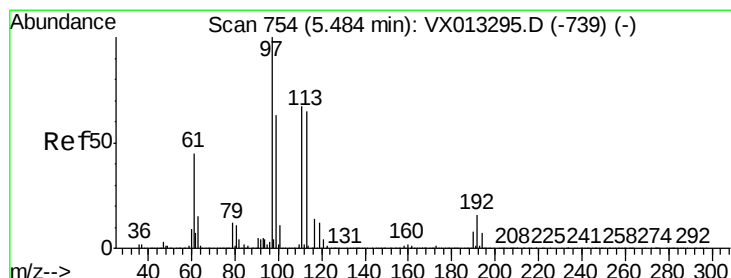
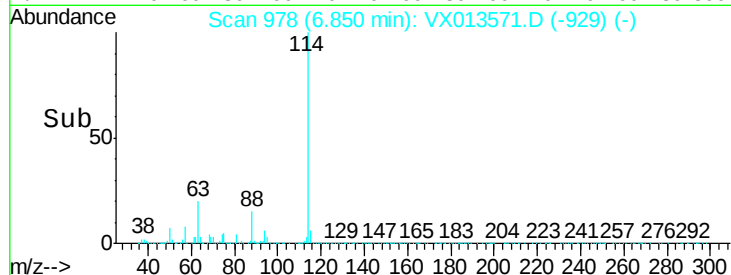
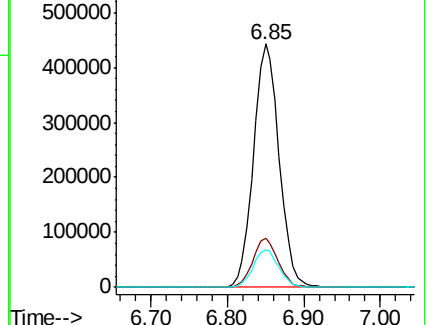
88 15.3 0.0 32.2



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: 48.127 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.01 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

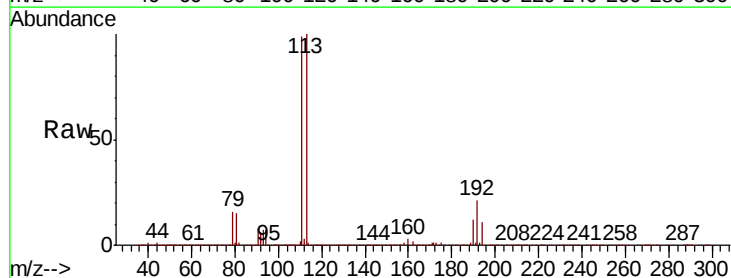
Tgt Ion:113 Resp: 311846

Ion Ratio Lower Upper

113 100

111 102.6 81.9 122.9

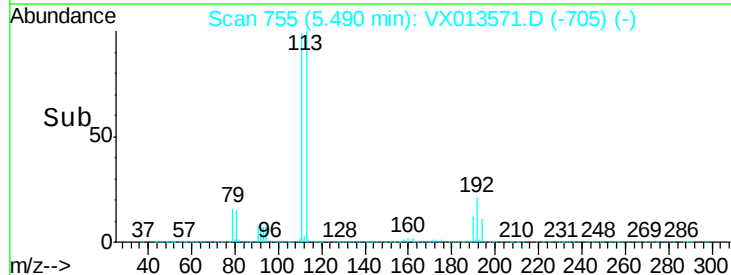
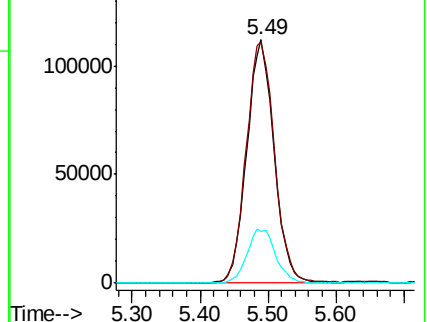
192 23.5 19.1 28.7

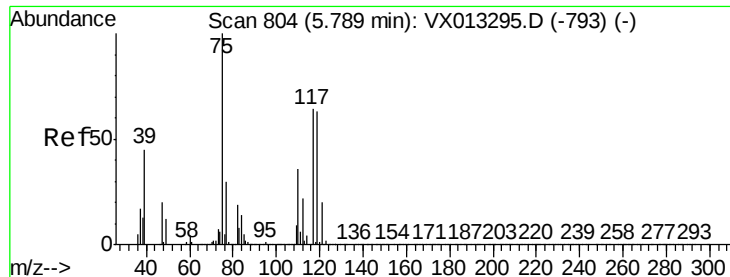


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

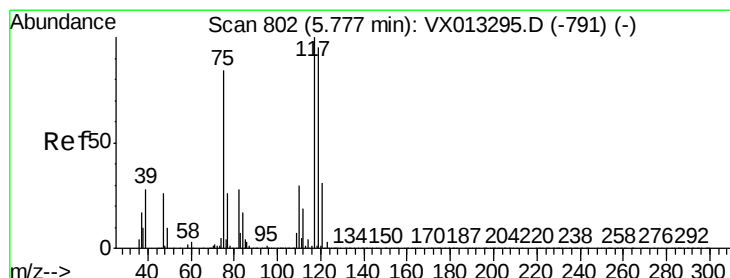
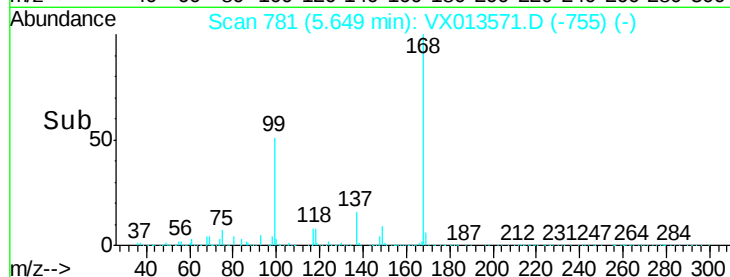
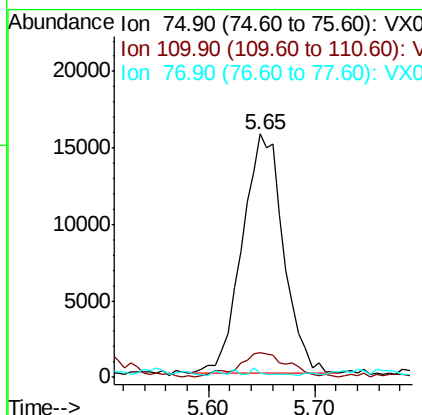
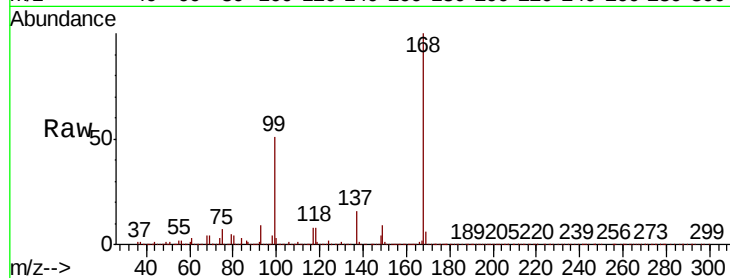




#36  
 1,1-Dichloropropene  
 Concen: 4.784 ug/l  
 RT: 5.65 min Scan# 781  
 Delta R.T. -0.14 min  
 Lab File: VX013571.D  
 Acq: 23 Nov 2019 06:43

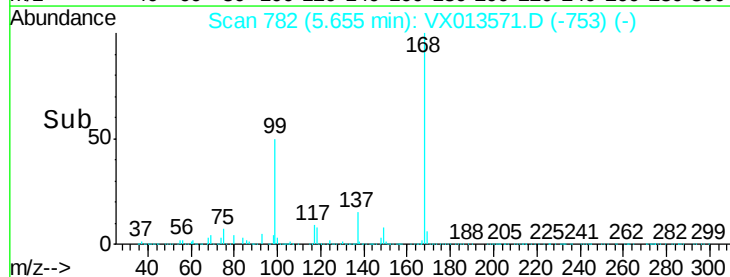
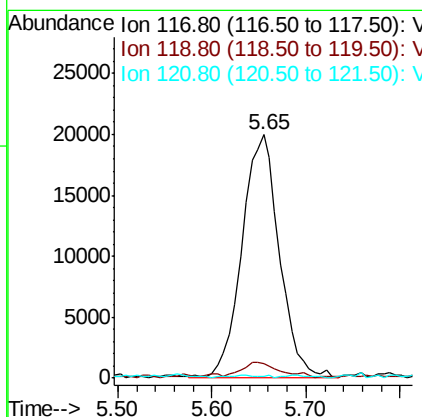
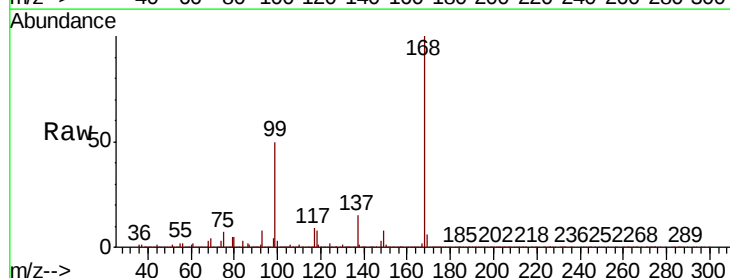
Instrument :  
 MSVOA\_X  
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 MH-140N-20191121

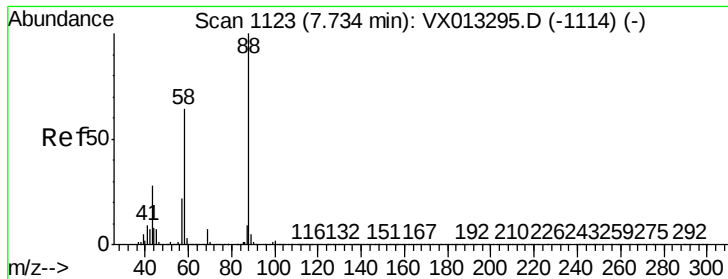
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 12.7  | 18.1  | 54.1# |
| 77      | 0.6   | 25.0  | 37.4# |



#38  
 Carbon Tetrachloride  
 Concen: 6.438 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.12 min  
 Lab File: VX013571.D  
 Acq: 23 Nov 2019 06:43

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.0   | 76.1  | 114.1# |
| 121     | 0.0   | 24.6  | 37.0#  |





#49

1,4-Dioxane

Concen: 1.406 ug/l

RT: 7.73 min Scan# 1122

Delta R.T. -0.01 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Instrument :

MSVOA\_X

ClientSampleId :

MH-140N-20191121

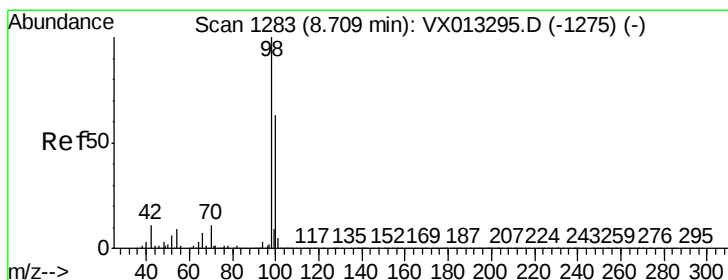
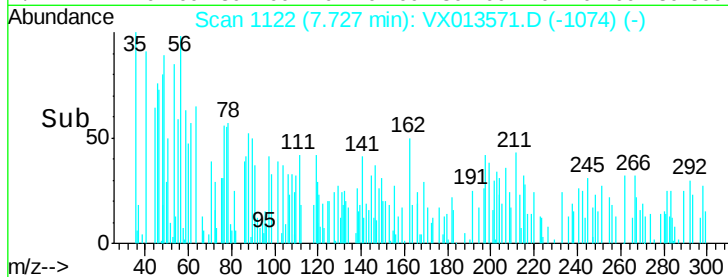
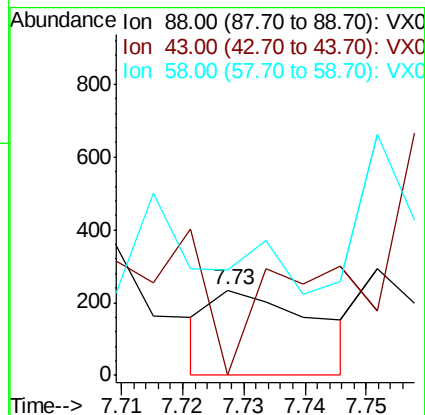
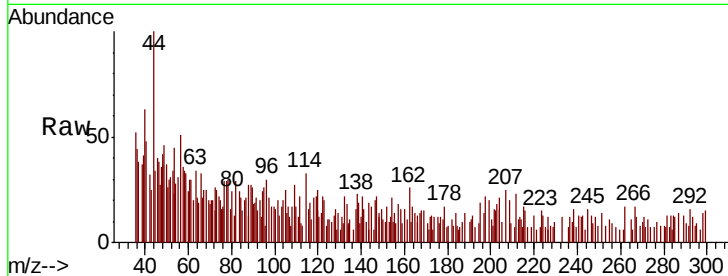
Tot Ion: 88 Resp: 274

Ion Ratio Lower Upper

88 100

43 0.0 26.6 39.8#

58 0.0 55.0 82.6#



#50

Toluene-d8

Concen: 50.975 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX013571.D

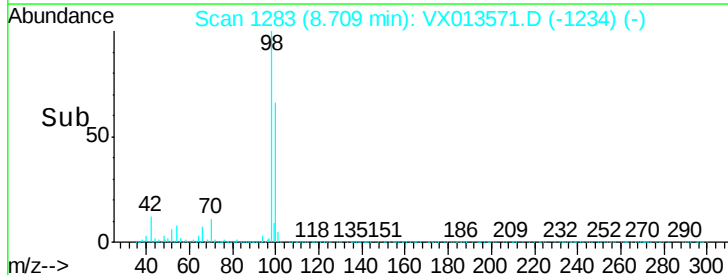
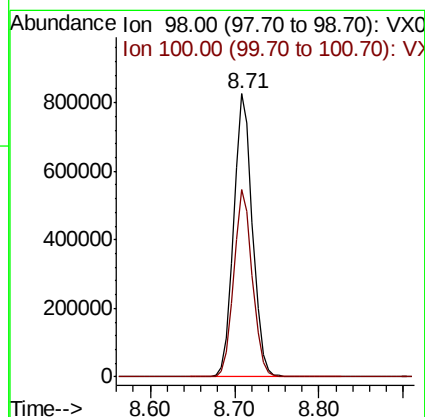
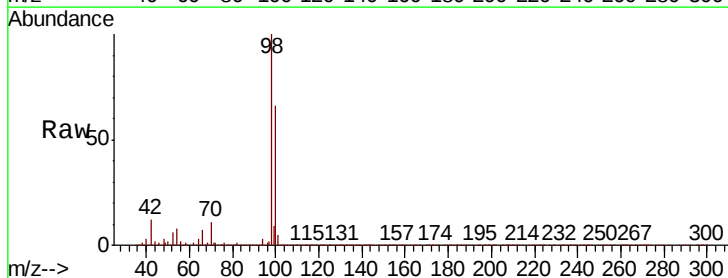
Acq: 23 Nov 2019 06:43

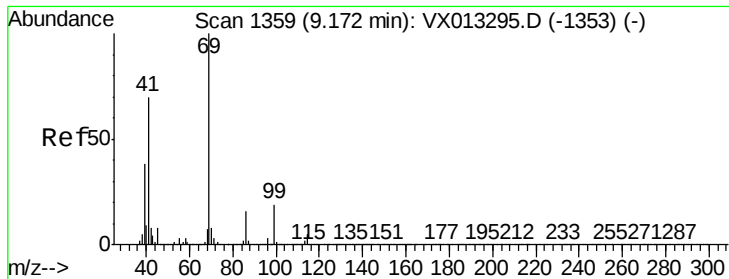
Tgt Ion: 98 Resp: 1245193

Ion Ratio Lower Upper

98 100

100 65.5 52.2 78.2





#56

Ethyl methacrylate

Concen: 1.575 ug/l

RT: 9.18 min Scan# 1361

Delta R.T. 0.01 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Instrument :

MSVOA\_X

ClientSampleId :

MH-140N-20191121

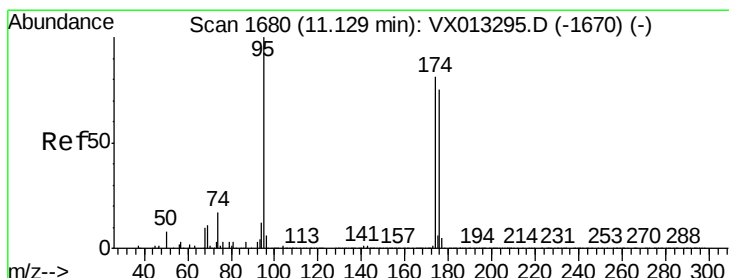
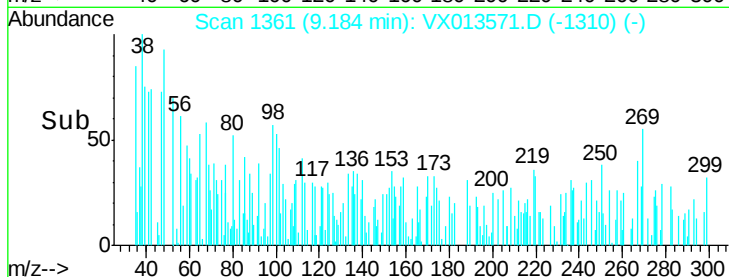
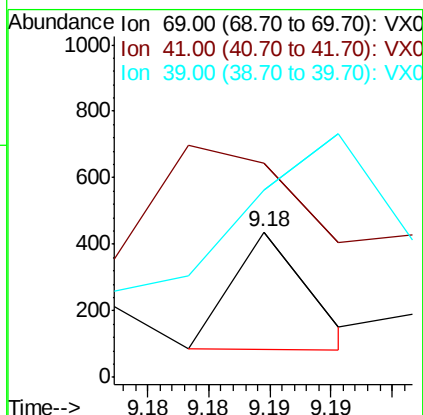
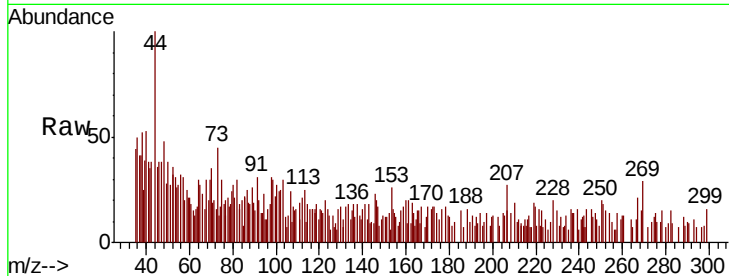
Tot Ion: 69 Resp: 154

Ion Ratio Lower Upper

69 100

41 245.5 56.2 84.2#

39 235.7 31.1 46.7#



#62

4-Bromofluorobenzene

Concen: 47.310 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.01 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

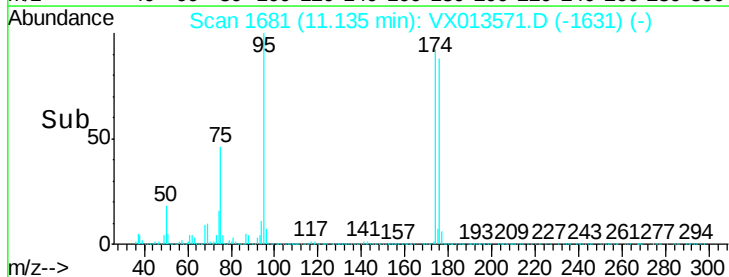
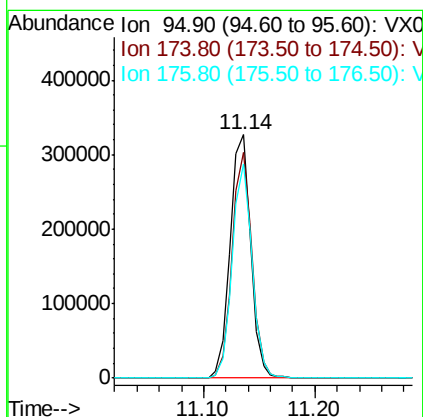
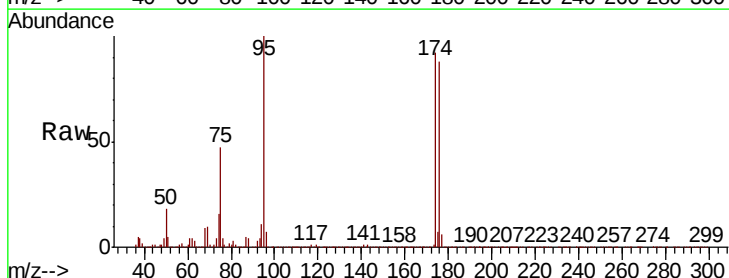
Tgt Ion: 95 Resp: 417086

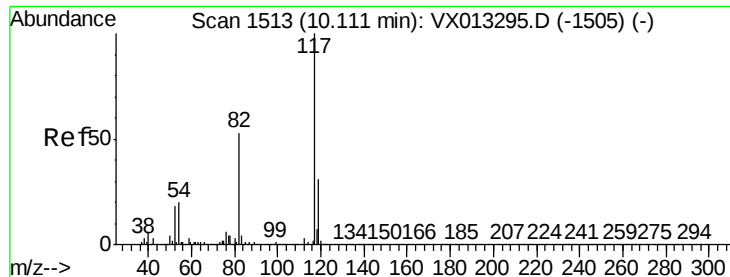
Ion Ratio Lower Upper

95 100

174 89.3 0.0 179.8

176 85.5 0.0 173.0

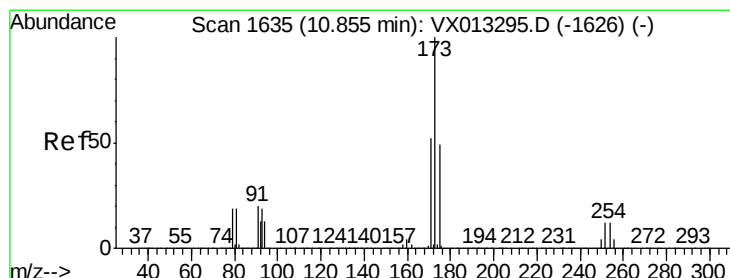
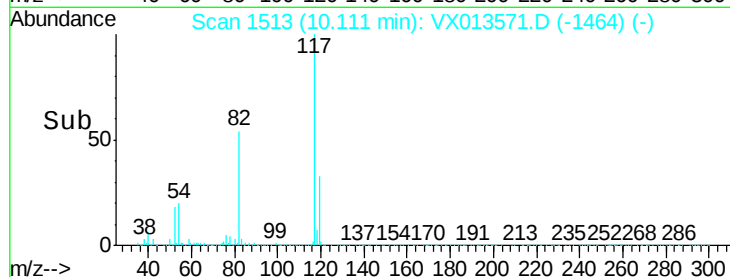
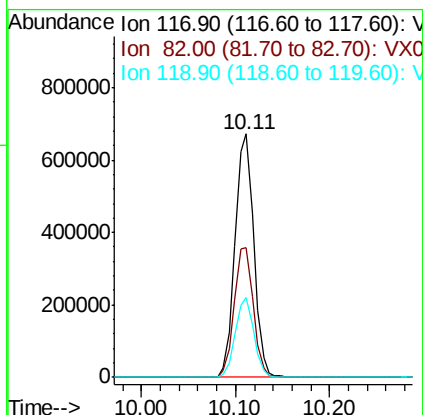
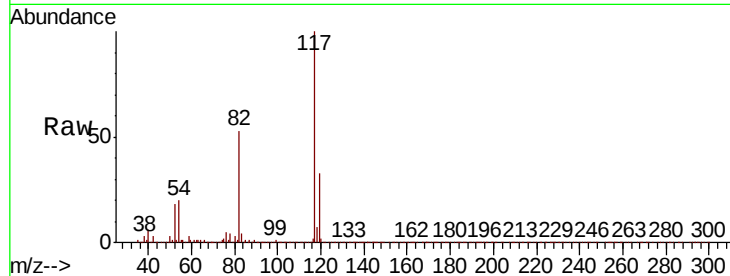




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

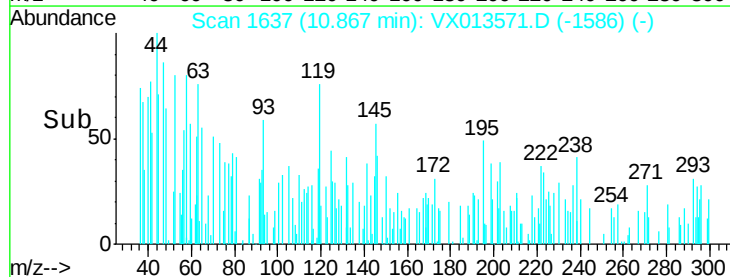
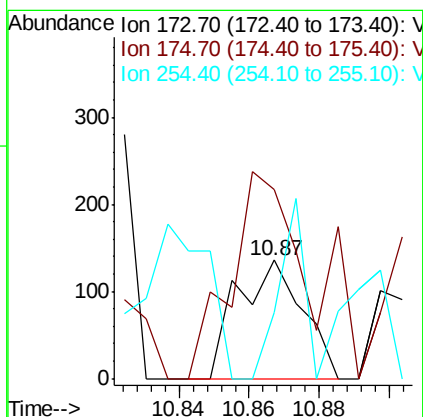
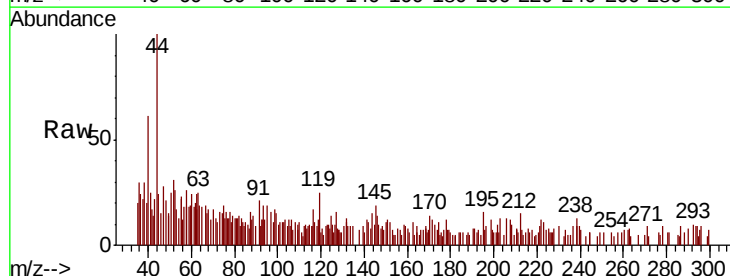
Instrument :  
MSVOA\_X  
ClientSampleId :  
MH-140N-20191121

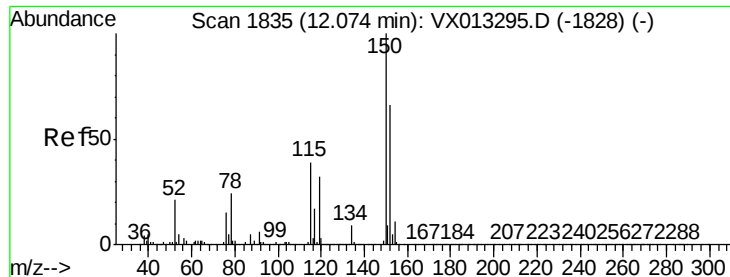
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.5  | 42.6  | 64.0  |
| 119     | 32.7  | 24.8  | 37.2  |



#71  
Bromoform  
Concen: 3.228 ug/l  
RT: 10.87 min Scan# 1637  
Delta R.T. 0.01 min  
Lab File: VX013571.D  
Acq: 23 Nov 2019 06:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 173     | 100   |       |       |
| 175     | 0.0   | 24.8  | 74.4# |
| 254     | 58.5  | 0.2   | 0.2#  |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Instrument :

MSVOA\_X

ClientSampleId :

MH-140N-20191121

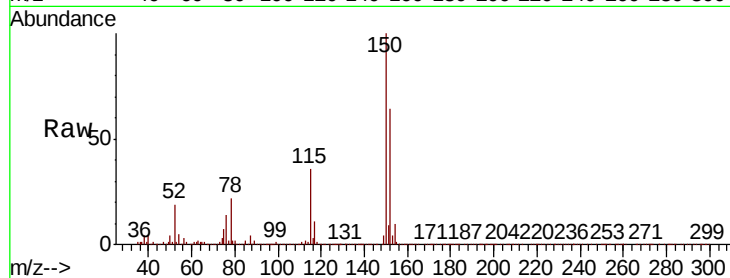
Tot Ion:152 Resp: 429529

Ion Ratio Lower Upper

152 100

115 55.2 39.5 118.3

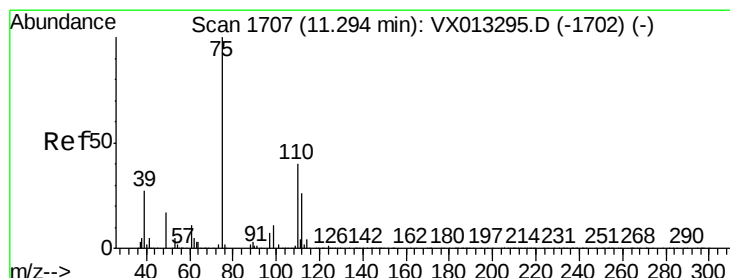
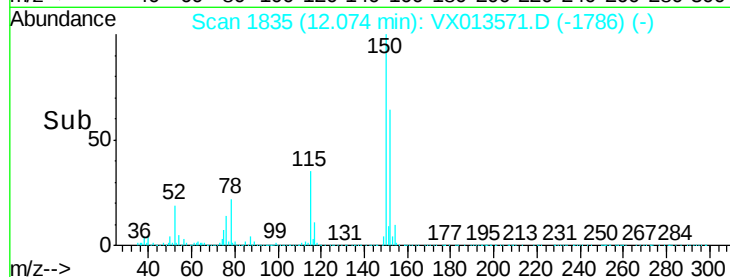
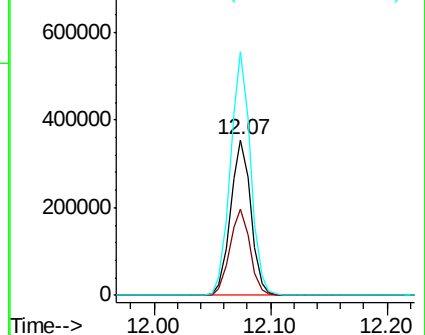
150 154.9 0.0 344.4



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: 22.859 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.16 min

Lab File: VX013571.D

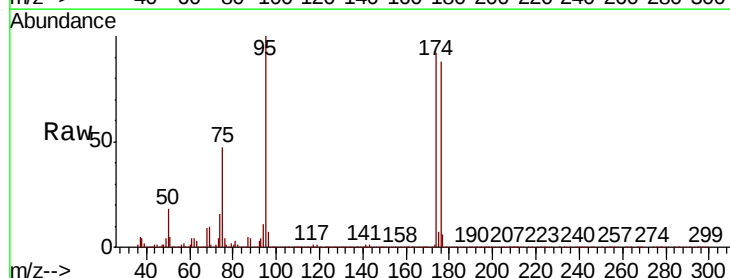
Acq: 23 Nov 2019 06:43

Tgt Ion: 75 Resp: 199428

Ion Ratio Lower Upper

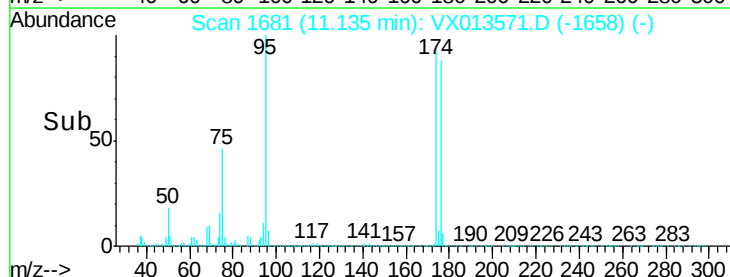
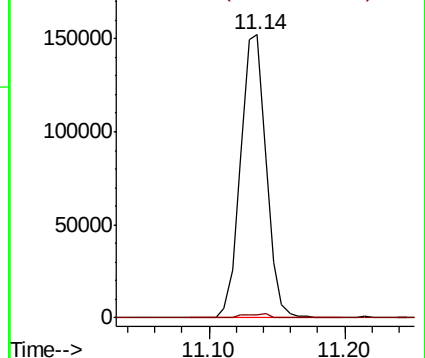
75 100

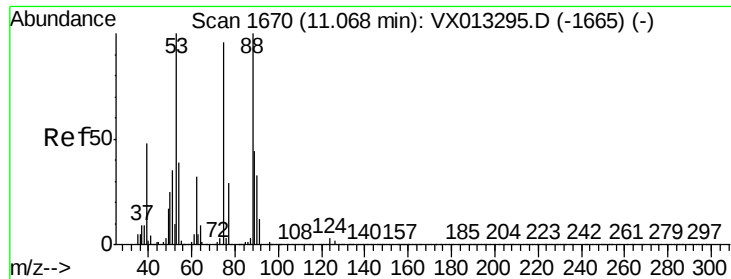
77 1.5 22.3 66.8#



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: 58.838 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.07 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Instrument :

MSVOA\_X

ClientSampleId :

MH-140N-20191121

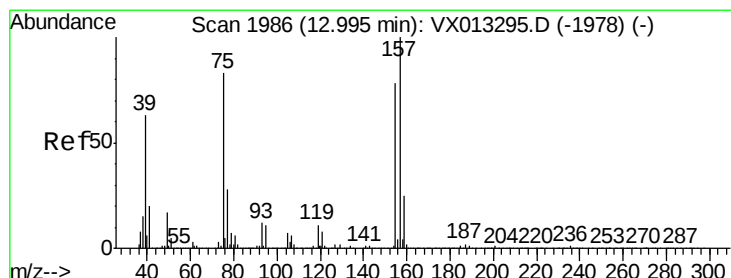
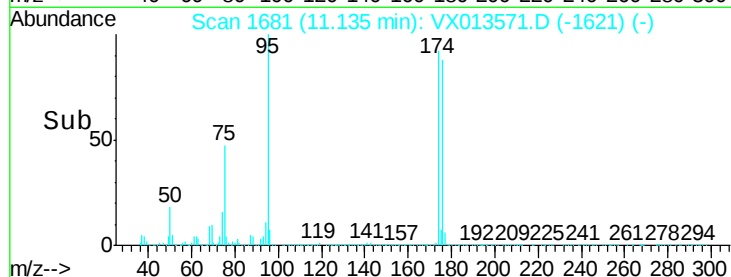
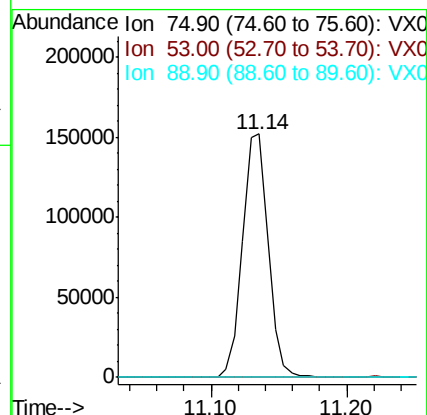
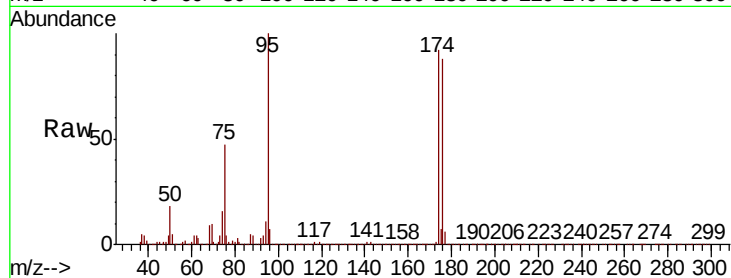
Tot Ion: 75 Resp: 199428

Ion Ratio Lower Upper

75 100

53 0.3 81.0 121.6#

89 0.1 36.0 54.0#



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.240 ug/l

RT: 13.20 min Scan# 2020

Delta R.T. 0.21 min

Lab File: VX013571.D

Acq: 23 Nov 2019 06:43

Tgt Ion: 75 Resp: 607

Ion Ratio Lower Upper

75 100

155 64.3 47.1 141.4

157 72.7 61.3 183.8

