

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX070120\  
 Data File : VX017120.D  
 Acq On : 02 Jul 2020 00:21  
 Operator : JC/SP  
 Sample : L3159-07 100X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 38 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 42BR-20200629

Quant Time: Jul 02 01:43:38 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X062920W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jun 29 17:10:38 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 219508   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 372521   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 384354   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 205975   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.03   | 65  | 144728   | 53.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.96% |      |
| 35) Dibromofluoromethane  | 5.46   | 113 | 124235   | 52.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.44% |      |
| 50) Toluene-d8            | 8.70   | 98  | 454074   | 52.11 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.22% |      |
| 62) 4-Bromofluorobenzene  | 11.12  | 95  | 190224   | 55.84 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.68% |      |

## Target Compounds

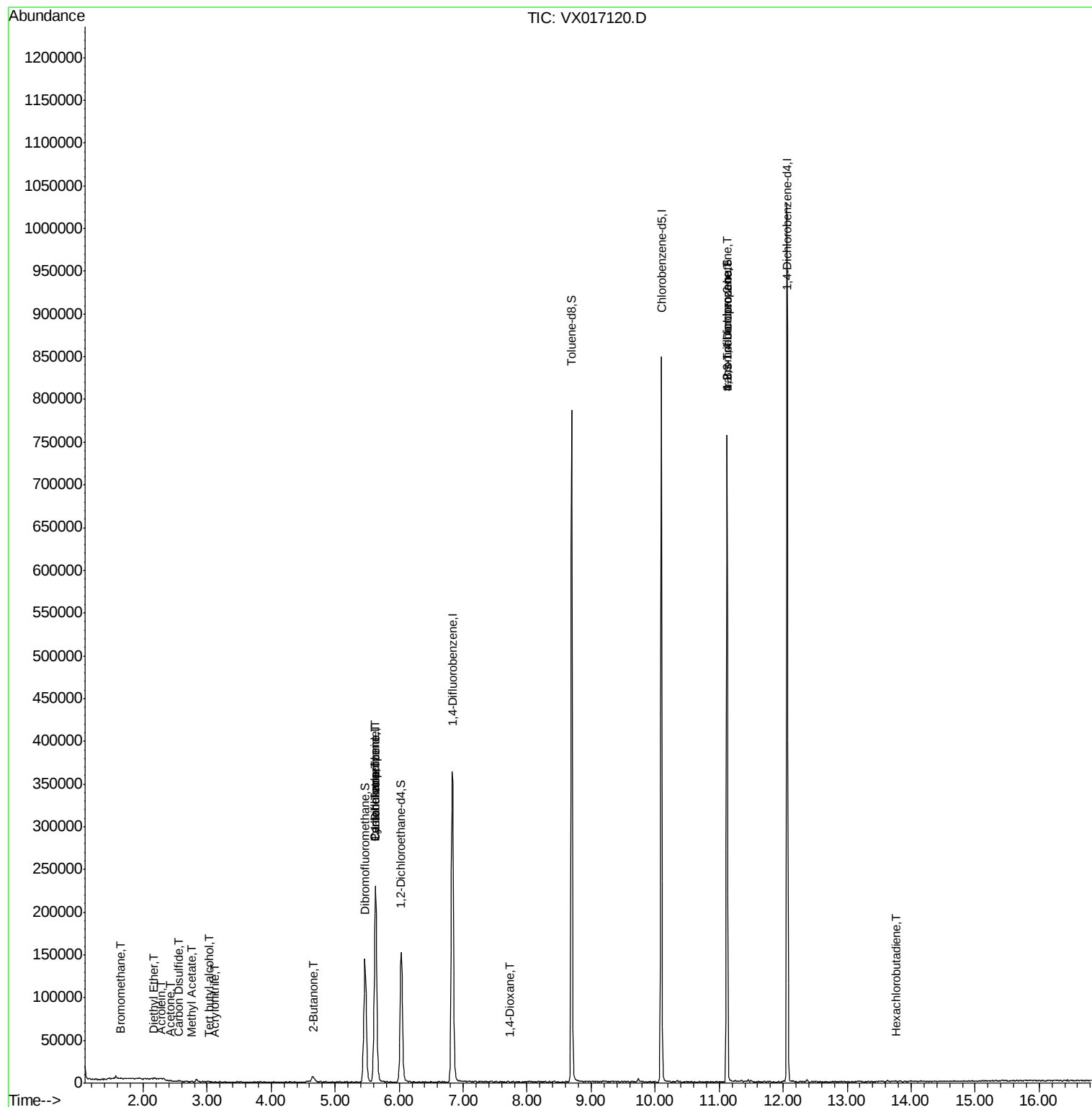
|                                |       |     |       |           | Qvalue |    |
|--------------------------------|-------|-----|-------|-----------|--------|----|
| 5) Bromomethane                | 1.64  | 94  | 355   | 0.282     | ug/l # | 3  |
| 8) Diethyl Ether               | 2.17  | 74  | 329   | 0.641     | ug/l   | 66 |
| 11) Tert butyl alcohol         | 3.02  | 59  | 147   | 0.285     | ug/l # | 87 |
| 13) Acrolein                   | 2.28  | 56  | 189   | 0.612     | ug/l # | 1  |
| 15) Acrylonitrile              | 3.12  | 53  | 319   | 0.257     | ug/l # | 40 |
| 16) Acetone                    | 2.42  | 43  | 1123  | 1.109     | ug/l # | 73 |
| 17) Carbon Disulfide           | 2.55  | 76  | 1350  | 0.245     | ug/l # | 94 |
| 18) Methyl Acetate             | 2.75  | 43  | 656   | 0.248     | ug/l # | 66 |
| 20) Methylene Chloride         | 2.84  | 84  | 1483  | Below Cal | #      | 85 |
| 25) 2-Butanone                 | 4.65  | 43  | 866   | 0.513     | ug/l # | 49 |
| 31) Cyclohexane                | 5.64  | 56  | 4627  | 1.266     | ug/l # | 1  |
| 36) 1,1-Dichloropropene        | 5.63  | 75  | 16343 | 4.642     | ug/l # | 51 |
| 38) Carbon Tetrachloride       | 5.63  | 117 | 21578 | 5.564     | ug/l # | 17 |
| 44) Trichloroethene            | 7.19  | 130 | 390   | Below Cal |        | 84 |
| 49) 1,4-Dioxane                | 7.73  | 88  | 51    | 0.798     | ug/l # | 1  |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75  | 94890 | 23.427    | ug/l # | 37 |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75  | 94890 | 60.669    | ug/l # | 13 |
| 88) 1,4-Dichlorobenzene        | 12.08 | 146 | 848   | Below Cal | #      | 1  |
| 94) Hexachlorobutadiene        | 13.77 | 225 | 144   | 0.931     | ug/l # | 66 |

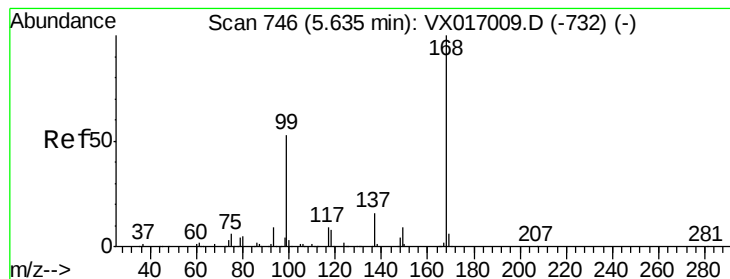
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX070120\  
Data File : VX017120.D  
Acq On : 02 Jul 2020 00:21  
Operator : JC/SP  
Sample : L3159-07 100X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 38 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampled :  
42BR-20200629

Quant Time: Jul 02 01:43:38 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X062920W.M  
Quant Title : SW846 8260  
QLast Update : Mon Jun 29 17:10:38 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 746

Delta R.T. -0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

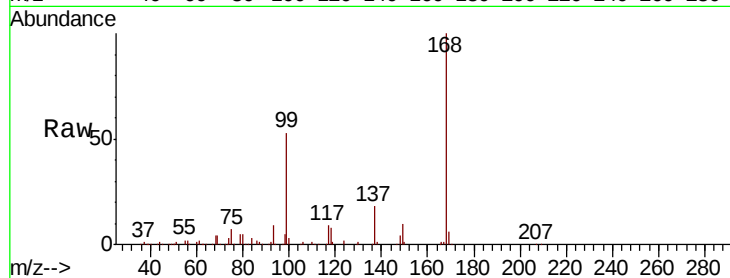
42BR-20200629

Tot Ion:168 Resp: 219508

Ion Ratio Lower Upper

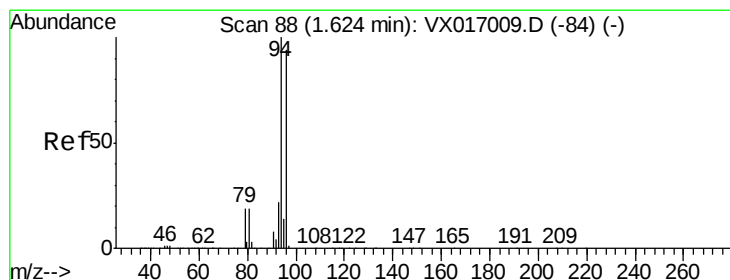
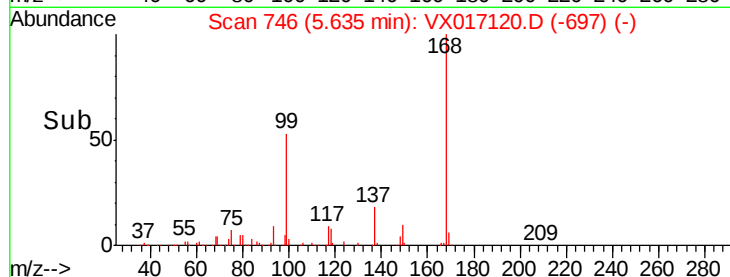
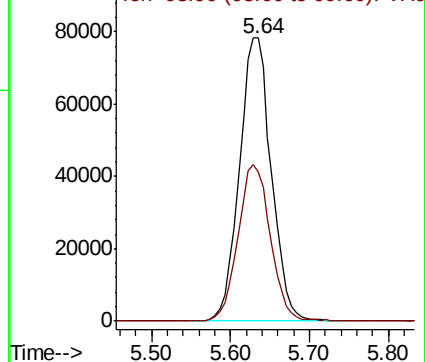
168 100

99 52.8 42.6 64.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: 0.282 ug/l

RT: 1.64 min Scan# 90

Delta R.T. 0.01 min

Lab File: VX017120.D

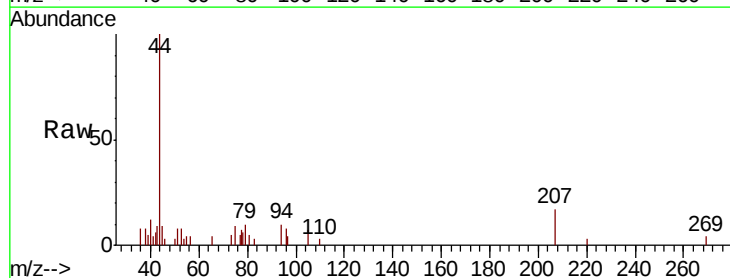
Acq: 02 Jul 2020 00:21

Tgt Ion: 94 Resp: 355

Ion Ratio Lower Upper

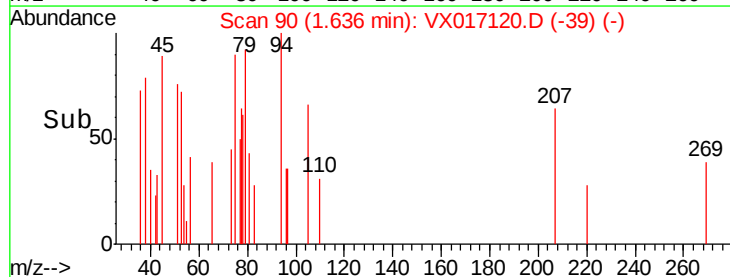
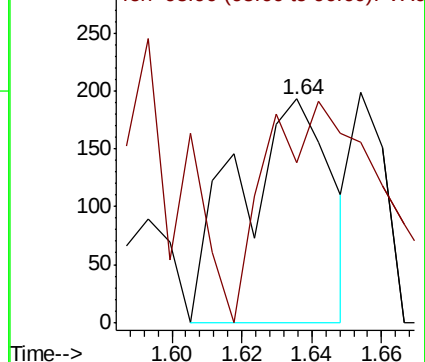
94 100

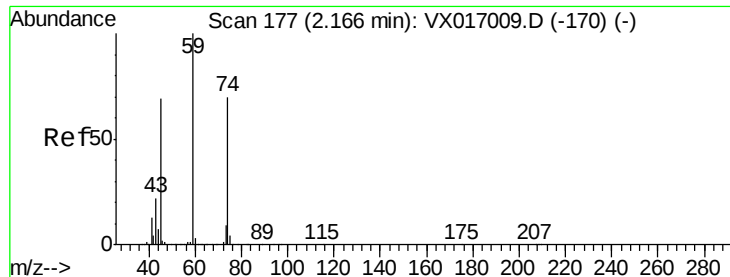
96 0.0 75.0 112.4#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#8

Diethyl Ether

Concen: 0.641 ug/l

RT: 2.17 min Scan# 177

Delta R.T. 0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

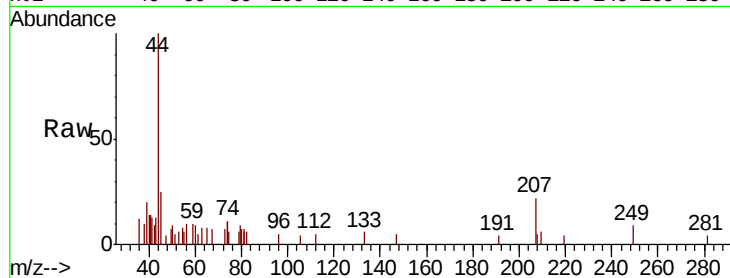
42BR-20200629

Tot Ion: 74 Resp: 329

Ion Ratio Lower Upper

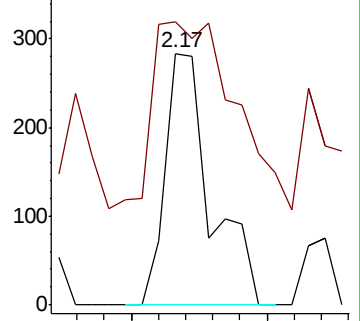
74 100

45 133.1 49.8 149.3

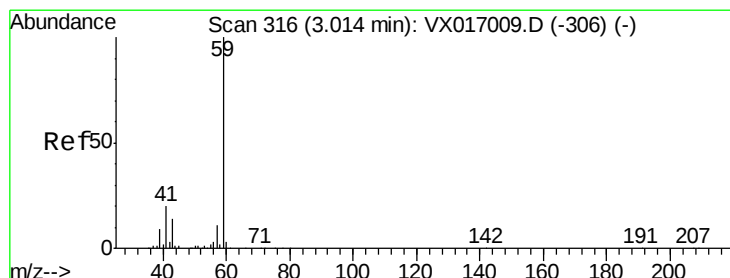
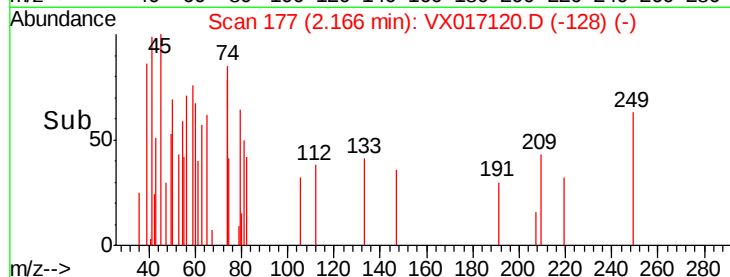


Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



Time-->



#11

Tert butyl alcohol

Concen: 0.285 ug/l

RT: 3.02 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX017120.D

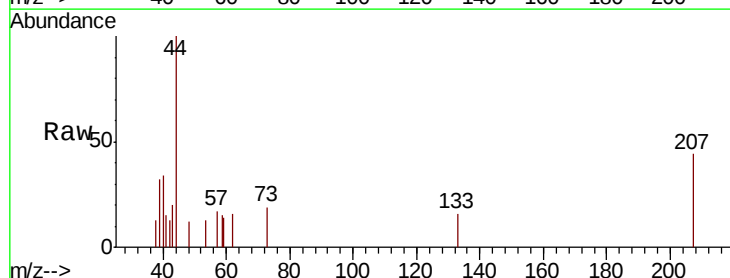
Acq: 02 Jul 2020 00:21

Tgt Ion: 59 Resp: 147

Ion Ratio Lower Upper

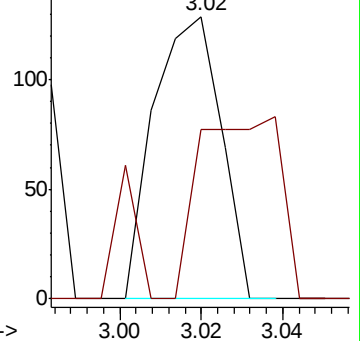
59 100

57 15.0 8.2 12.2#

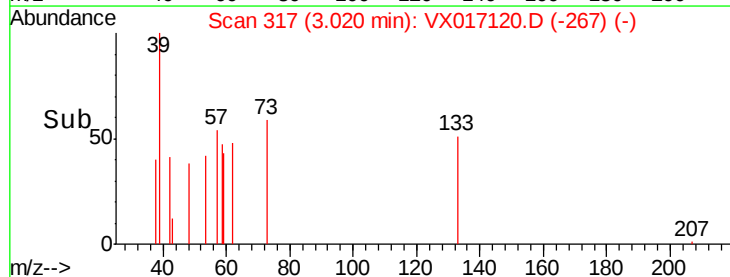


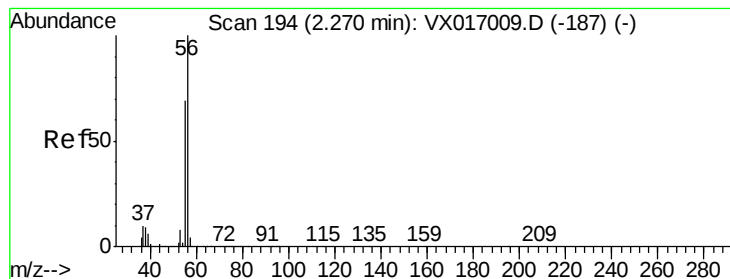
Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0



Time-->





#13

Acrolein

Concen: 0.612 ug/l

RT: 2.28 min Scan# 195

Delta R.T. 0.01 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

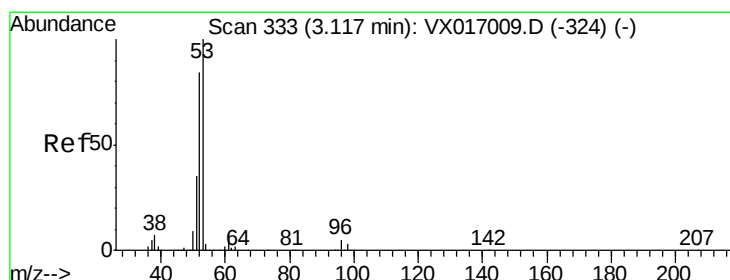
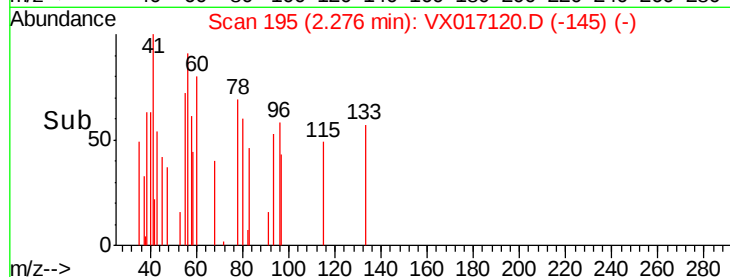
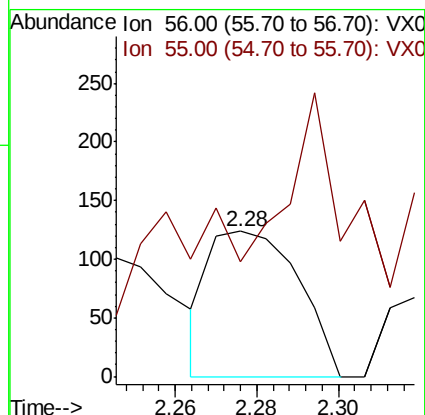
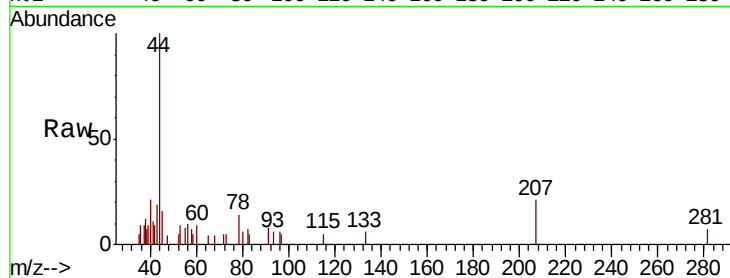
42BR-20200629

Tot Ion: 56 Resp: 189

Ion Ratio Lower Upper

56 100

55 166.7 55.7 83.5#



#15

Acrylonitrile

Concen: 0.257 ug/l

RT: 3.12 min Scan# 333

Delta R.T. -0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

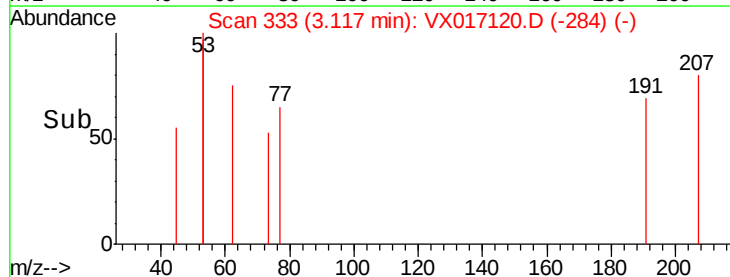
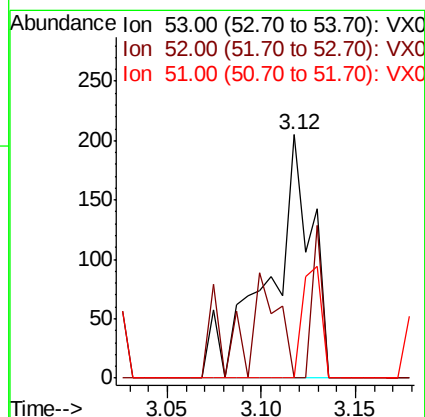
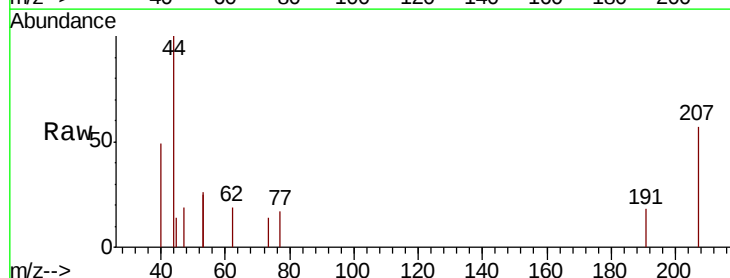
Tgt Ion: 53 Resp: 319

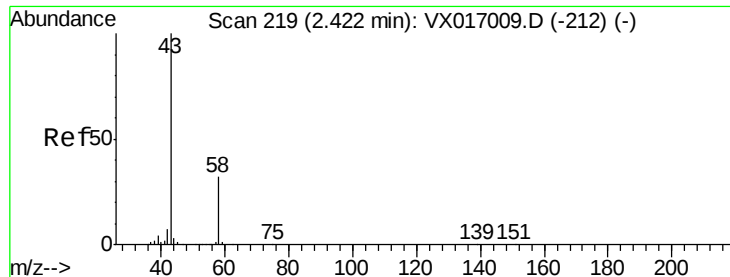
Ion Ratio Lower Upper

53 100

52 14.7 65.6 98.4#

51 20.7 28.3 42.5#





#16

Acetone

Concen: 1.109 ug/l

RT: 2.42 min Scan# 219

Delta R.T. -0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

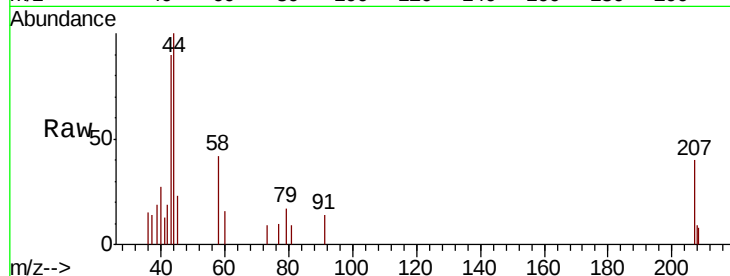
42BR-20200629

Tot Ion: 43 Resp: 1123

Ion Ratio Lower Upper

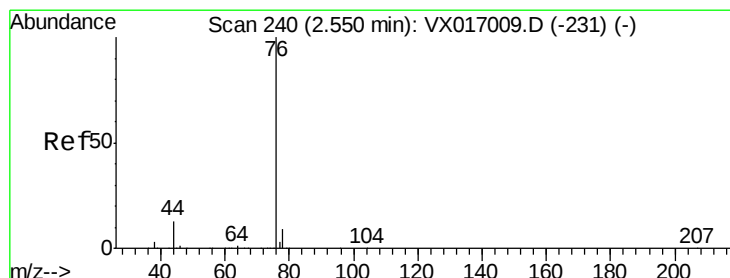
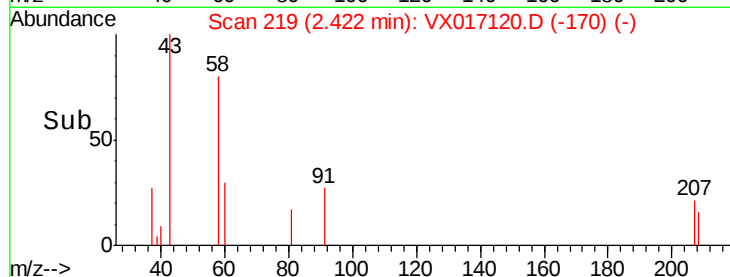
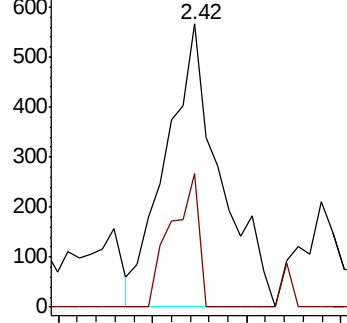
43 100

58 47.3 25.7 38.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#17

Carbon Disulfide

Concen: 0.245 ug/l

RT: 2.55 min Scan# 240

Delta R.T. 0.00 min

Lab File: VX017120.D

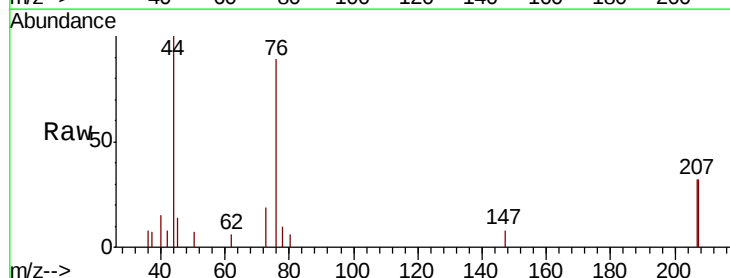
Acq: 02 Jul 2020 00:21

Tgt Ion: 76 Resp: 1350

Ion Ratio Lower Upper

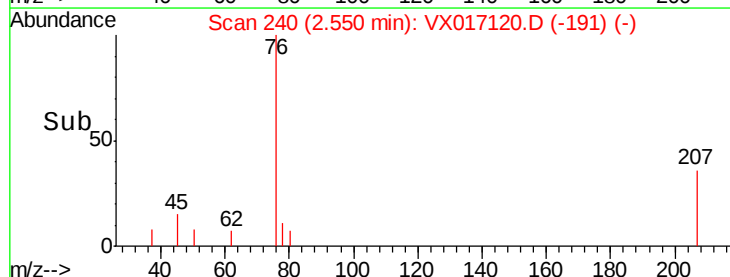
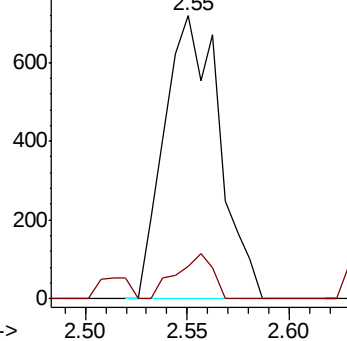
76 100

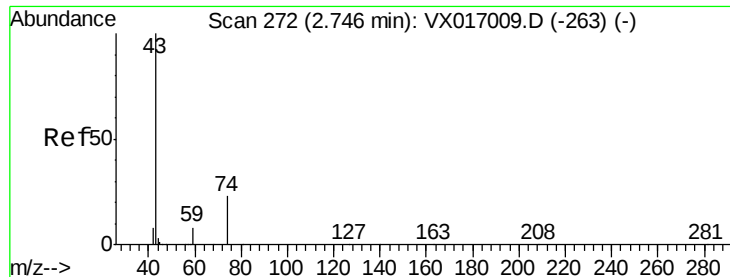
78 11.3 7.2 10.8#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

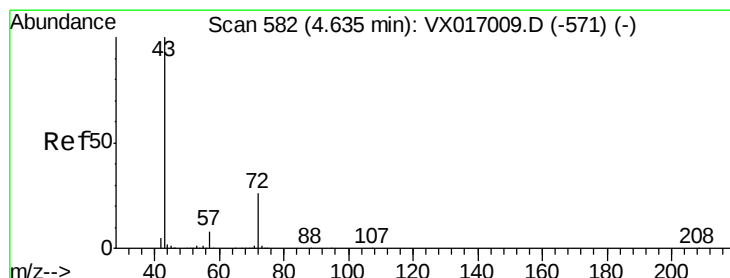
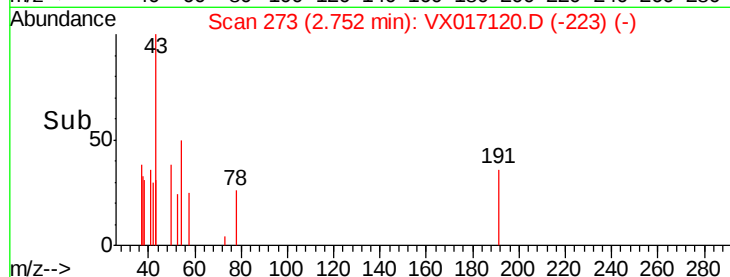
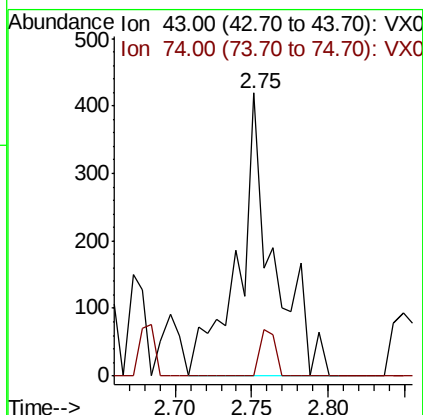
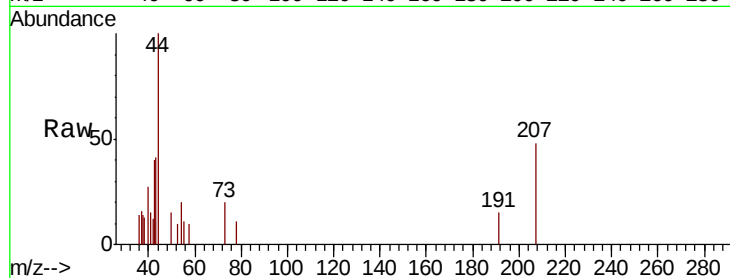




#18  
Methyl Acetate  
Concen: 0.248 ug/l  
RT: 2.75 min Scan# 273  
Delta R.T. 0.01 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

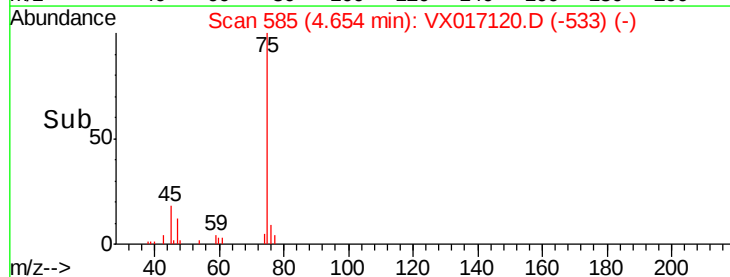
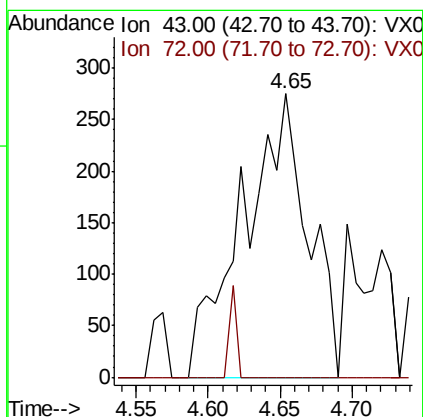
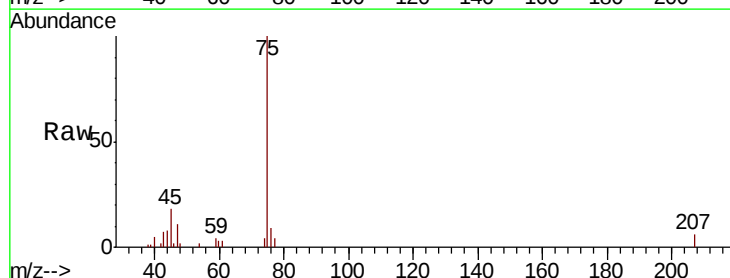
Instrument :  
MSVOA\_X  
ClientSampleId :  
42BR-20200629

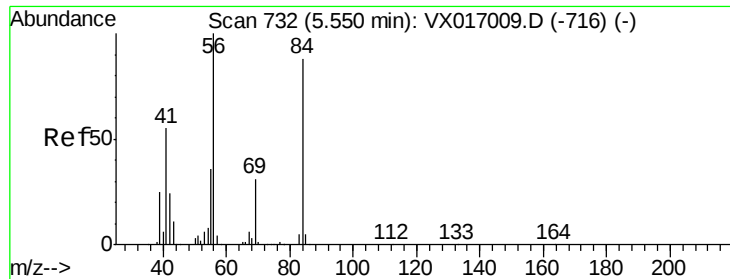
Tot Ion: 43 Resp: 656  
Ion Ratio Lower Upper  
43 100  
74 7.2 19.3 28.9#



#25  
2-Butanone  
Concen: 0.513 ug/l  
RT: 4.65 min Scan# 585  
Delta R.T. 0.02 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Tgt Ion: 43 Resp: 866  
Ion Ratio Lower Upper  
43 100  
72 0.0 20.8 31.2#

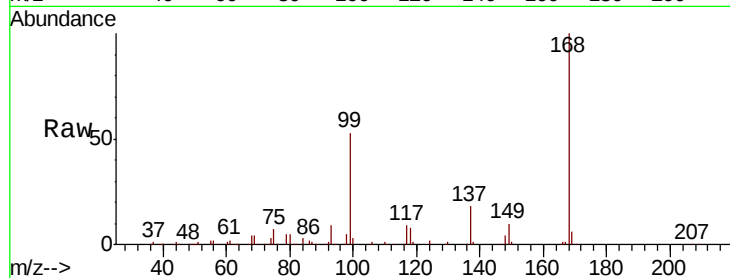




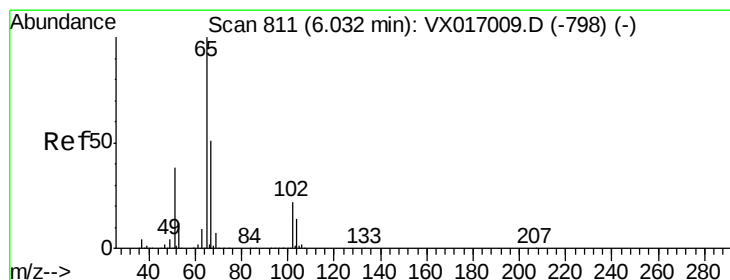
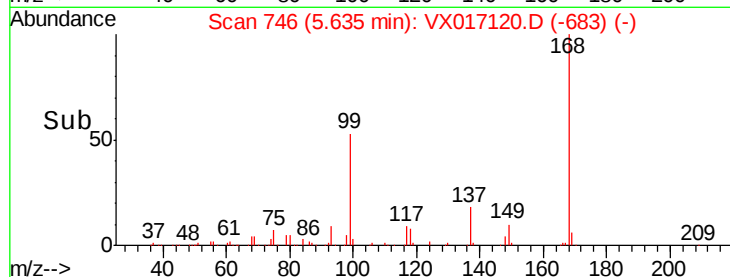
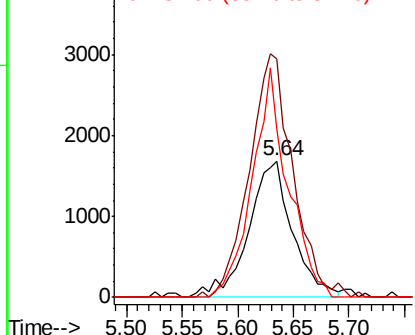
#31  
Cvclohexane  
Concen: 1.266 ug/l  
RT: 5.64 min Scan# 746  
Delta R.T. 0.09 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Instrument :  
MSVOA\_X  
ClientSampleId :  
42BR-20200629

Tot Ion: 56 Resp: 4627  
Ion Ratio Lower Upper  
56 100  
69 174.8 25.0 37.4#  
84 123.8 69.1 103.7#

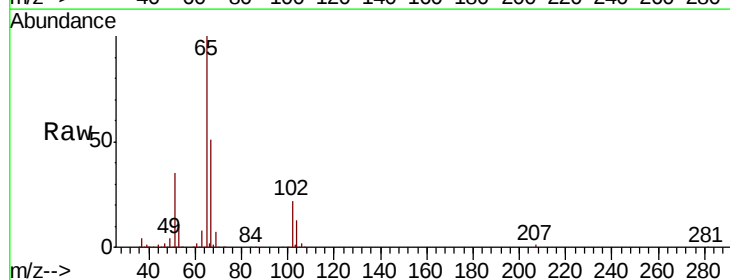


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

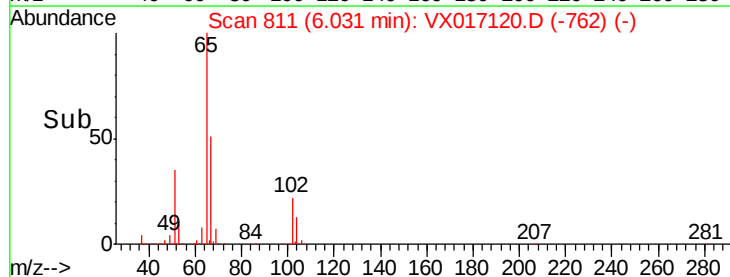
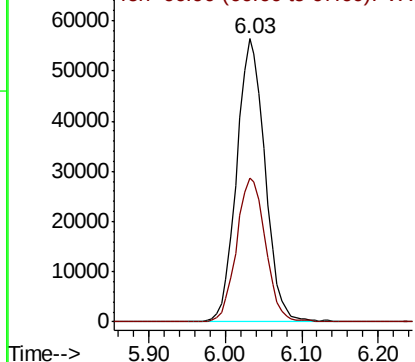


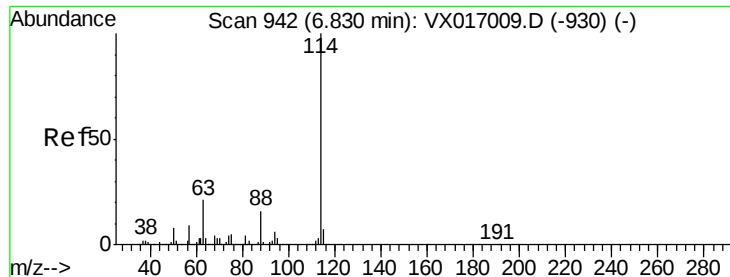
#33  
1,2-Dichloroethane-d4  
Concen: 53.482 ug/l  
RT: 6.03 min Scan# 811  
Delta R.T. -0.00 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Tgt Ion: 65 Resp: 144728  
Ion Ratio Lower Upper  
65 100  
67 52.1 0.0 103.8



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: 6.83 min Scan# 942

Delta R.T. -0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

42BR-20200629

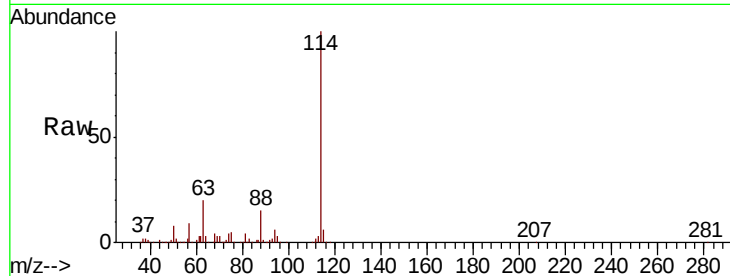
Tot Ion:114 Resp: 372521

Ion Ratio Lower Upper

114 100

63 19.7 0.0 41.4

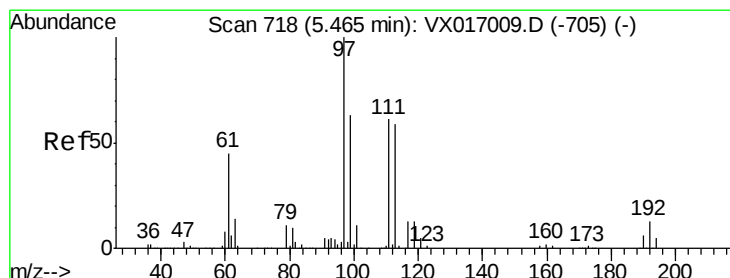
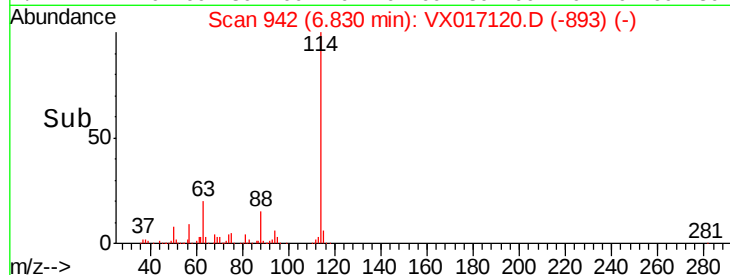
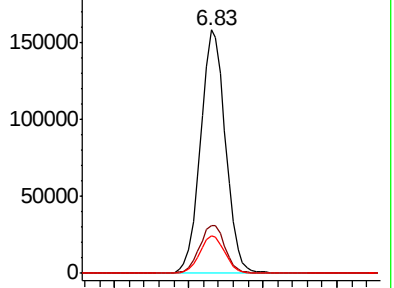
88 15.5 0.0 32.4



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: 52.721 ug/l

RT: 5.46 min Scan# 718

Delta R.T. -0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

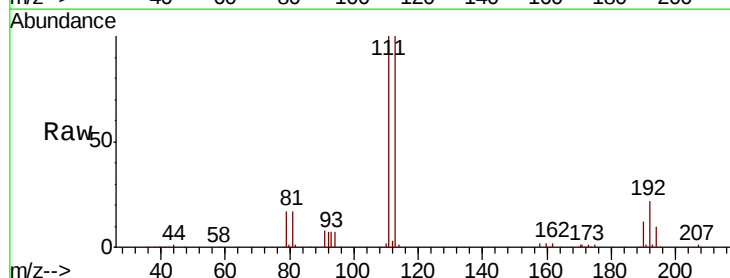
Tgt Ion:113 Resp: 124235

Ion Ratio Lower Upper

113 100

111 101.4 81.9 122.9

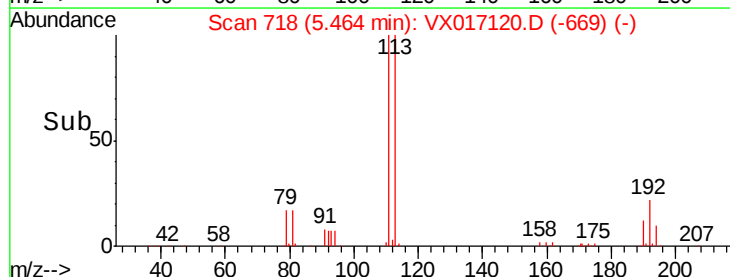
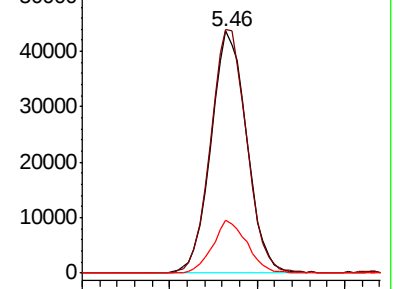
192 21.0 16.7 25.1

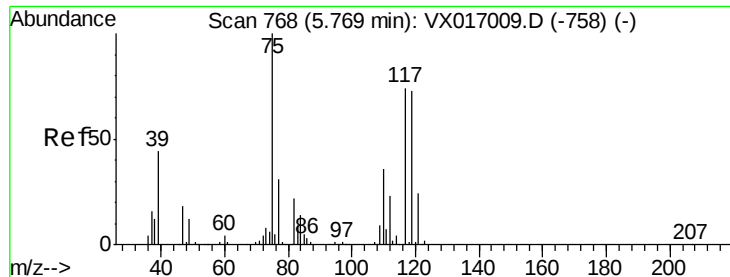


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.642 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.14 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

42BR-20200629

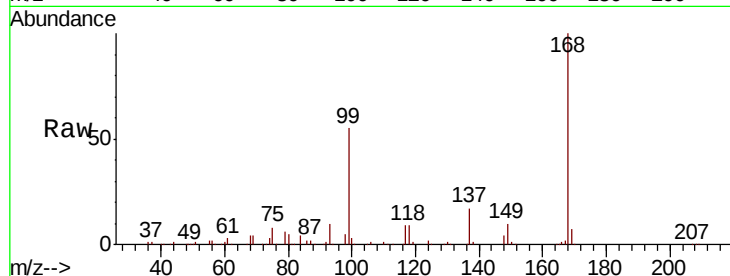
Tot Ion: 75 Resp: 16343

Ion Ratio Lower Upper

75 100

110 10.4 18.1 54.1#

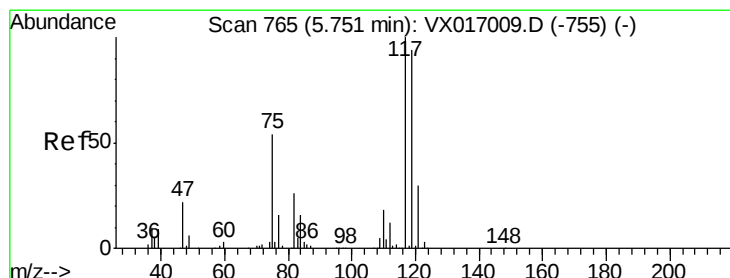
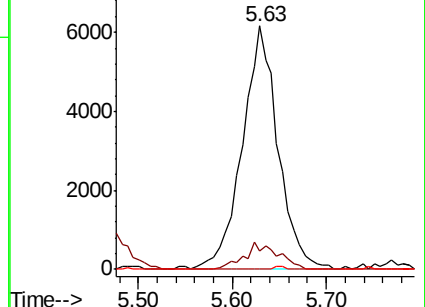
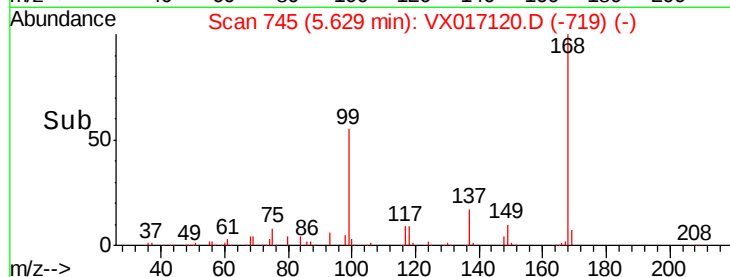
77 0.0 24.6 37.0#



Abundance Ion 74.90 (74.60 to 75.60): VX017120.D (-719) (-)

Ion 109.90 (109.60 to 110.60): VX017120.D (-719) (-)

Ion 76.90 (76.60 to 77.60): VX017120.D (-719) (-)



#38

Carbon Tetrachloride

Concen: 5.564 ug/l

RT: 5.63 min Scan# 745

Delta R.T. -0.12 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

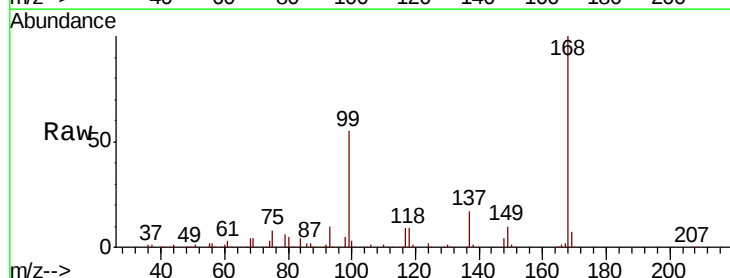
Tgt Ion: 117 Resp: 21578

Ion Ratio Lower Upper

117 100

119 4.9 75.4 113.0#

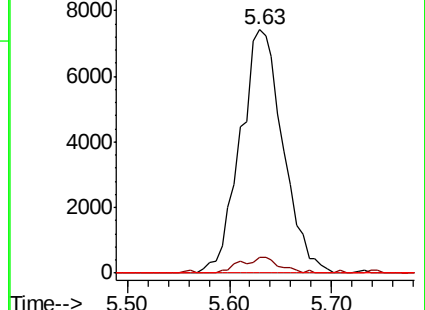
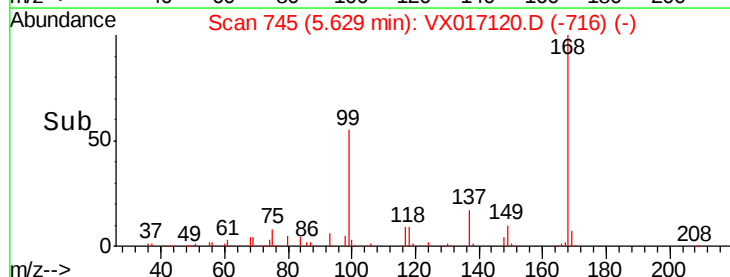
121 0.0 23.8 35.6#

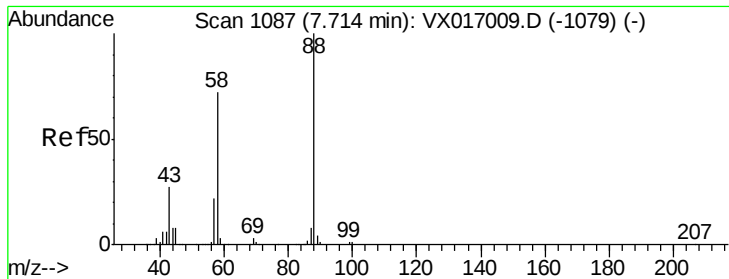


Abundance Ion 116.80 (116.50 to 117.50): VX017120.D (-716) (-)

Ion 118.80 (118.50 to 119.50): VX017120.D (-716) (-)

Ion 120.80 (120.50 to 121.50): VX017120.D (-716) (-)

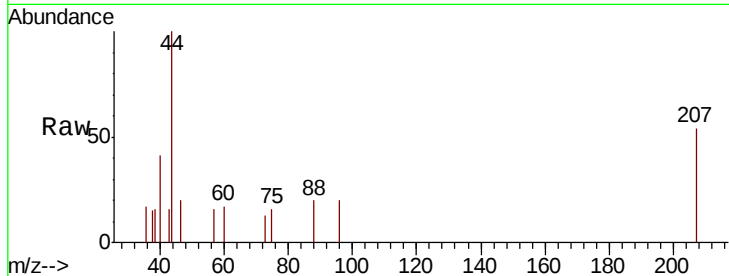




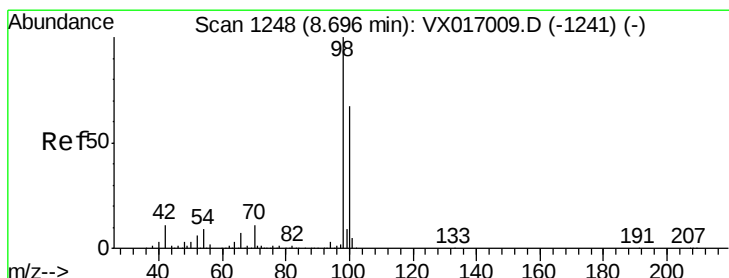
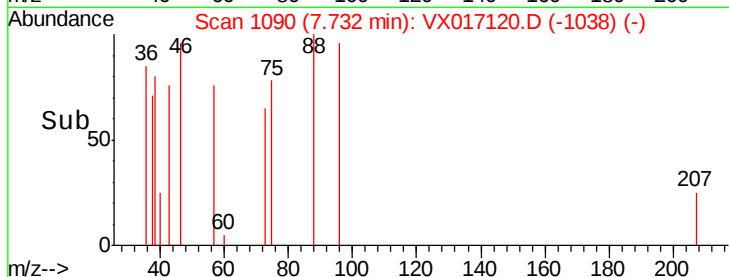
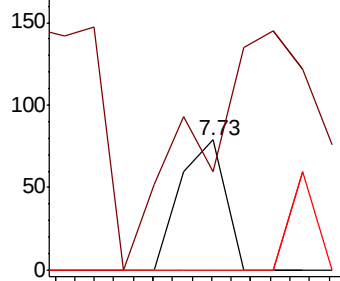
#49  
1,4-Dioxane  
Concen: 0.798 ug/l  
RT: 7.73 min Scan# 1090  
Delta R.T. 0.02 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Instrument :  
MSVOA\_X  
ClientSampleId :  
42BR-20200629

Tot Ion: 88 Resp: 51  
Ion Ratio Lower Upper  
88 100  
43 374.5 25.8 38.8#  
58 43.1 54.8 82.2#

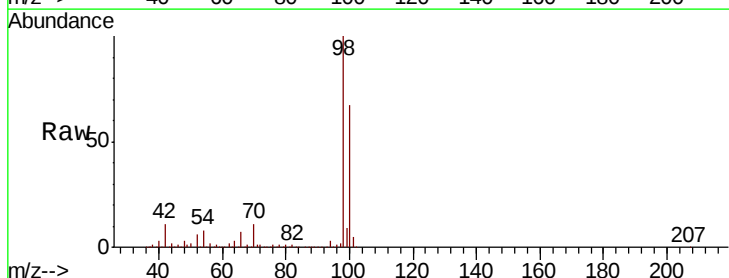


Abundance Ion 88.00 (87.70 to 88.70): VX0  
Ion 43.00 (42.70 to 43.70): VX0  
Ion 58.00 (57.70 to 58.70): VX0

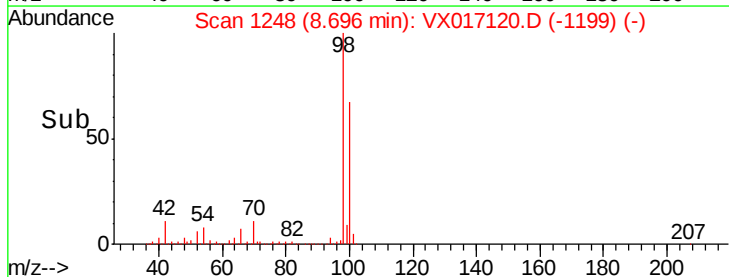
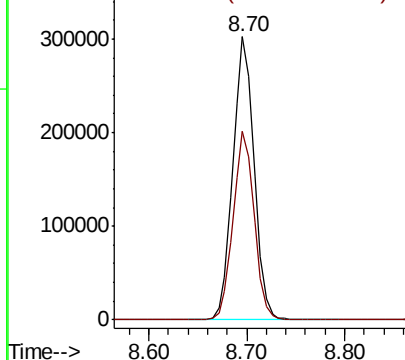


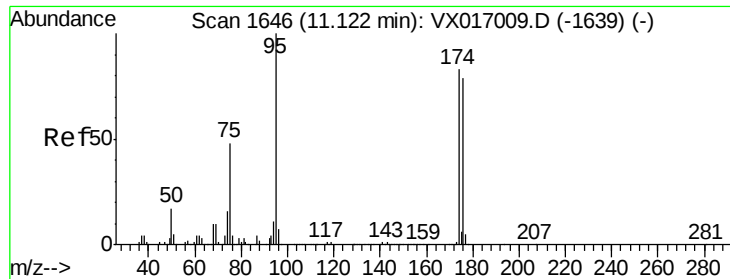
#50  
Toluene-d8  
Concen: 52.110 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Tgt Ion: 98 Resp: 454074  
Ion Ratio Lower Upper  
98 100  
100 66.4 53.8 80.6



Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): V

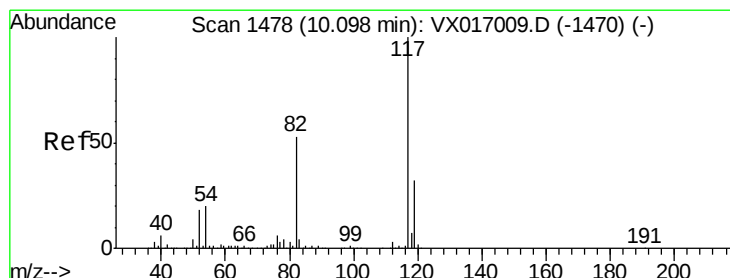
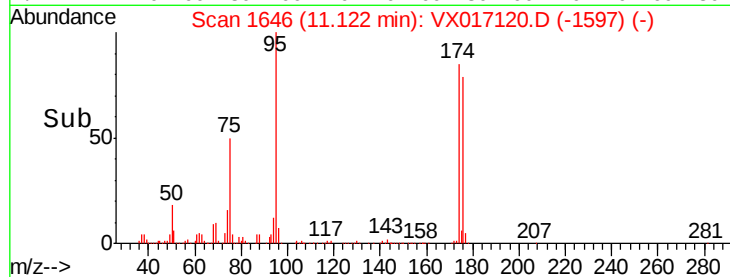
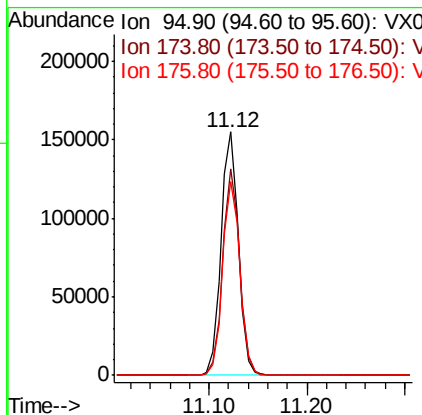
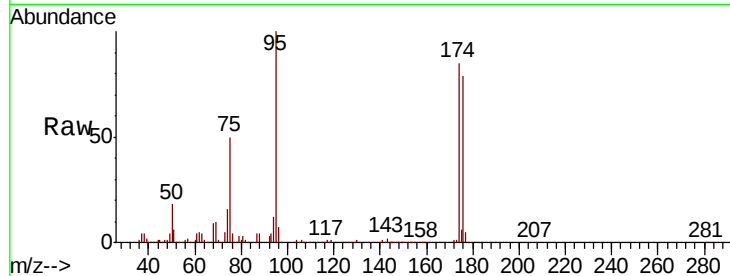




#62  
 4-Bromofluorobenzene  
 Concen: 55.845 ug/l  
 RT: 11.12 min Scan# 1646  
 Delta R.T. -0.00 min  
 Lab File: VX017120.D  
 Acq: 02 Jul 2020 00:21

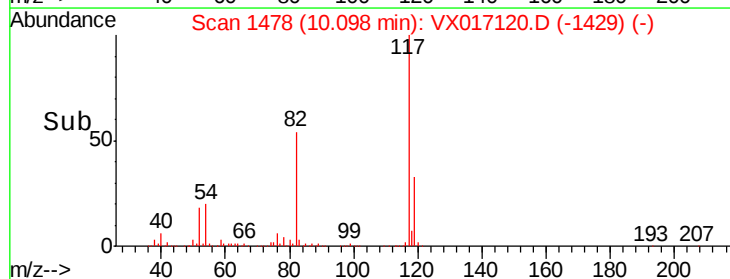
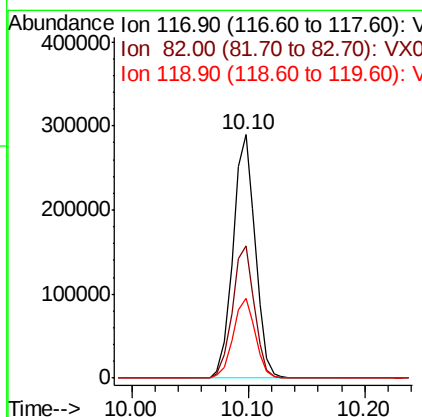
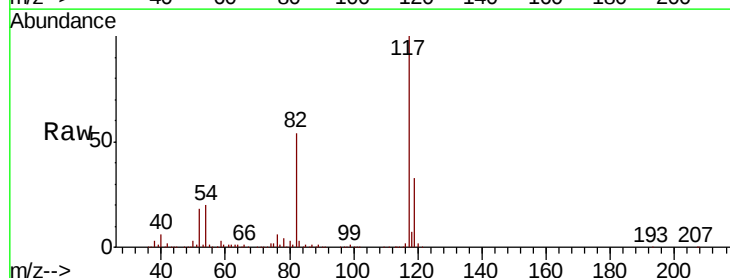
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 42BR-20200629

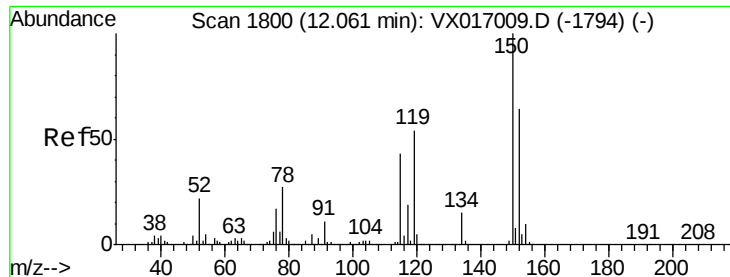
Tot Ion: 95 Resp: 190224  
 Ion Ratio Lower Upper  
 95 100  
 174 83.1 0.0 164.0  
 176 79.5 0.0 157.6



#63  
 Chlorobenzene-d5  
 Concen: 50.000 ug/l  
 RT: 10.10 min Scan# 1478  
 Delta R.T. -0.00 min  
 Lab File: VX017120.D  
 Acq: 02 Jul 2020 00:21

Tgt Ion: 117 Resp: 384354  
 Ion Ratio Lower Upper  
 117 100  
 82 54.1 42.6 63.8  
 119 32.8 25.4 38.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.06 min Scan# 1800

Delta R.T. -0.00 min

Lab File: VX017120.D

Acq: 02 Jul 2020 00:21

Instrument :

MSVOA\_X

ClientSampleId :

42BR-20200629

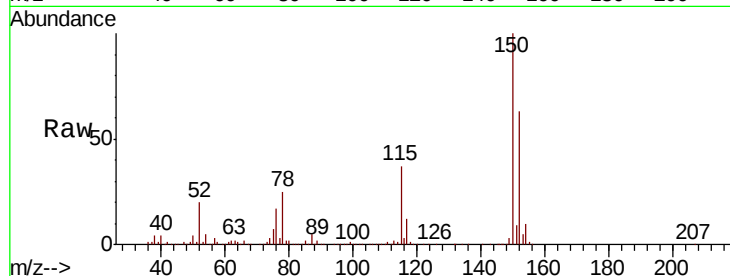
Tot Ion:152 Resp: 205975

Ion Ratio Lower Upper

152 100

115 58.5 40.9 122.7

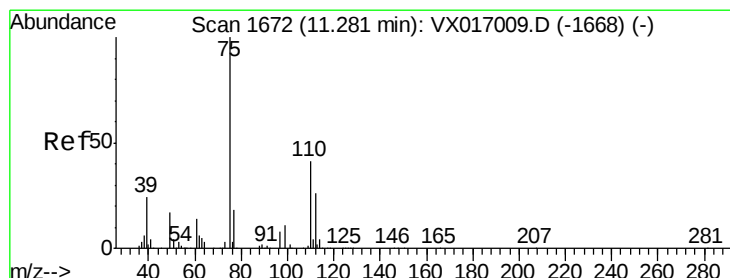
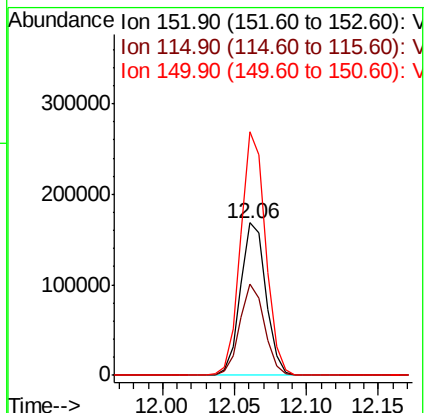
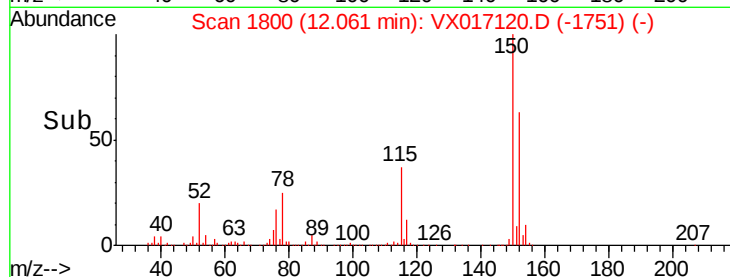
150 156.5 0.0 351.6



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: 23.427 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX017120.D

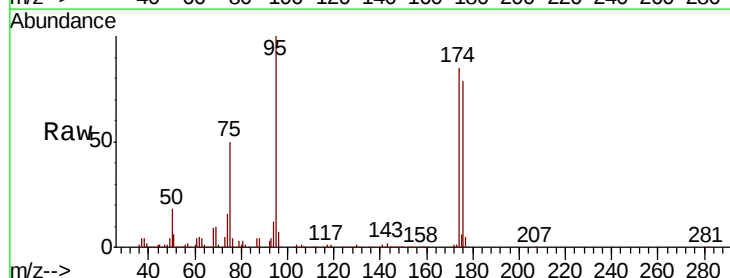
Acq: 02 Jul 2020 00:21

Tgt Ion: 75 Resp: 94890

Ion Ratio Lower Upper

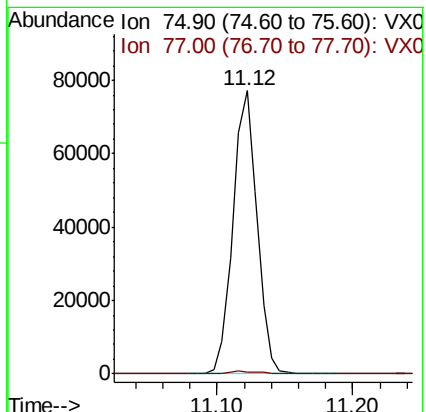
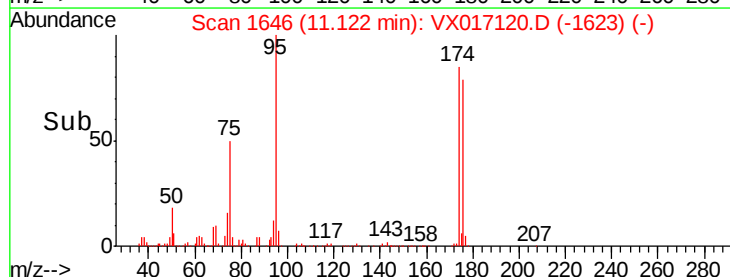
75 100

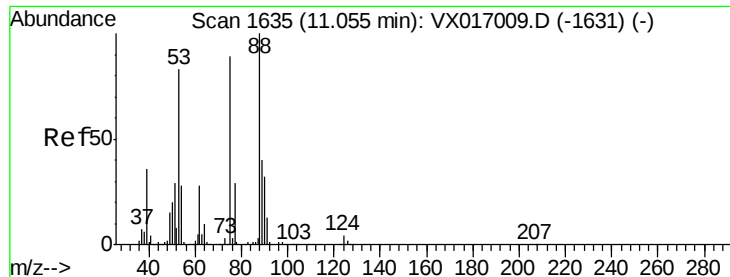
77 1.1 20.2 60.6#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

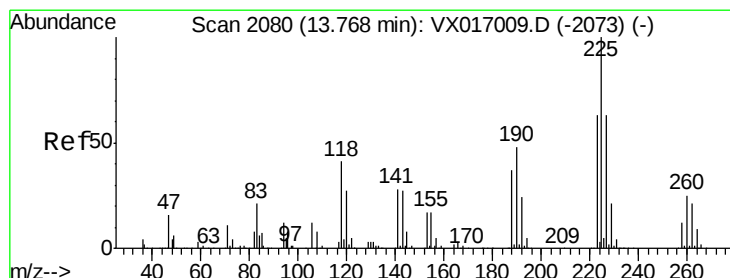
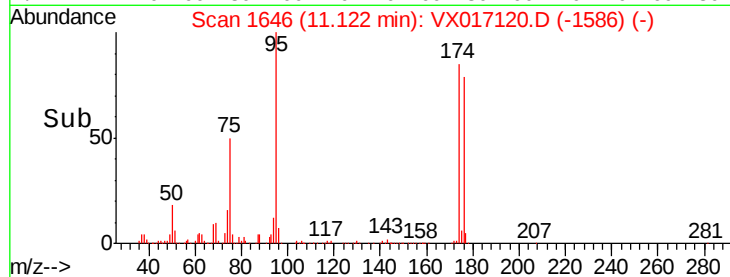
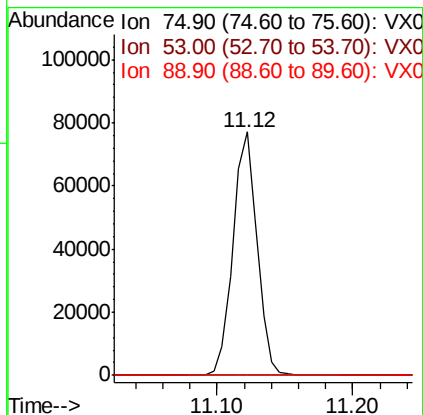
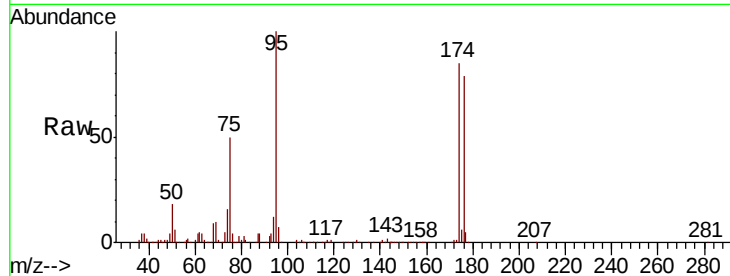




#81  
trans-1,4-Dichloro-2-butene  
Concen: 60.669 ug/l  
RT: 11.12 min Scan# 1646  
Delta R.T. 0.07 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Instrument :  
MSVOA\_X  
ClientSampleId :  
42BR-20200629

Tot Ion: 75 Resp: 94890  
Ion Ratio Lower Upper  
75 100  
53 0.4 72.4 108.6#  
89 0.0 37.0 55.4#



#94  
Hexachlorobutadiene  
Concen: 0.931 ug/l  
RT: 13.77 min Scan# 2080  
Delta R.T. 0.00 min  
Lab File: VX017120.D  
Acq: 02 Jul 2020 00:21

Tgt Ion: 225 Resp: 144  
Ion Ratio Lower Upper  
225 100  
223 118.1 32.5 97.5#  
227 65.3 33.1 99.2

