

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX011020\  
 Data File : VX014559.D  
 Acq On : 11 Jan 2020 00:53  
 Operator : JC/SP  
 Sample : L1070-03  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 42 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RBR-200030

Quant Time: Jan 11 05:18:24 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010720W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 07 15:54:41 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 493946   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 765318   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 708412   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 321850   | 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   | 275211   | 49.91 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.82%  |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 229731   | 49.59 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.18%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 922375   | 51.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.60% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 318498   | 48.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.52%  |          |

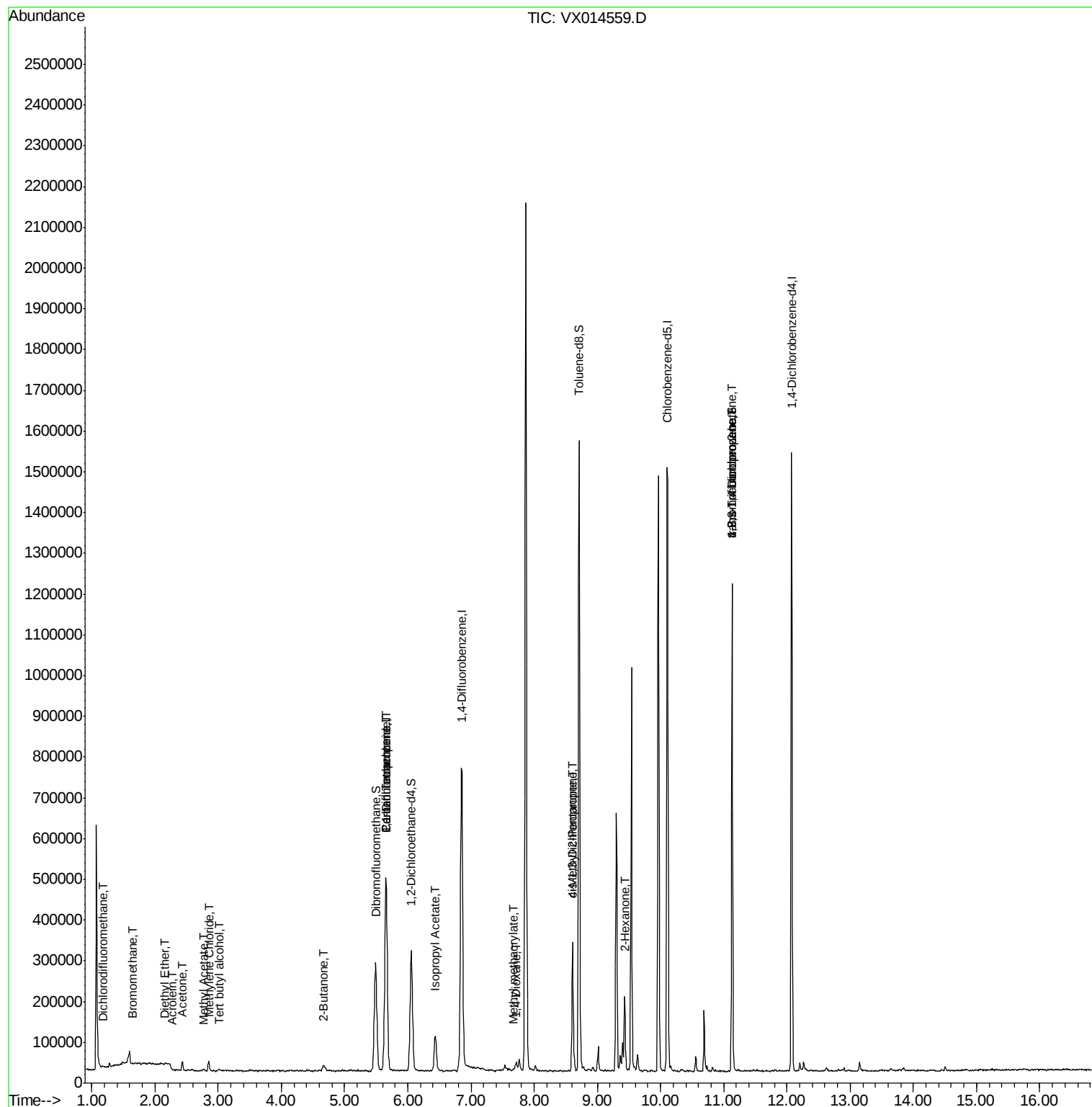
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.18  | 85   | 318      | 0.304     | ug/l # | 1      |
| 5) Bromomethane                | 1.65  | 94   | 1073     | 0.231     | ug/l   | 81     |
| 6) Chloroethane                | 1.73  | 64   | 568      | Below Cal | #      | 63     |
| 8) Diethyl Ether               | 2.16  | 74   | 1119     | 0.308     | ug/l   | 54     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 3923     | 3.407     | ug/l # | 87     |
| 13) Acrolein                   | 2.26  | 56   | 1144     | 1.240     | ug/l # | 15     |
| 16) Acetone                    | 2.44  | 43   | 24050    | 4.597     | ug/l   | 98     |
| 18) Methyl Acetate             | 2.76  | 43   | 6475     | 0.817     | ug/l   | 96     |
| 20) Methylene Chloride         | 2.85  | 84   | 11107    | 2.002     | ug/l   | 96     |
| 25) 2-Butanone                 | 4.67  | 43   | 9791     | 2.377     | ug/l   | 97     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 33971    | 4.720     | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 42048    | 6.349     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 6.43  | 43   | 122051   | 9.665     | ug/l   | 99     |
| 48) Methyl methacrylate        | 7.67  | 41   | 8953     | 1.480     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.72  | 88   | 146      | 1.139     | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.61  | 43   | 115188   | 14.968    | ug/l # | 50     |
| 54) cis-1,3-Dichloropropene    | 8.61  | 75   | 53528    | 6.154     | ug/l # | 60     |
| 59) 2-Hexanone                 | 9.43  | 43   | 139217   | 22.863    | ug/l # | 23     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 156418   | 23.489    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 156418   | 62.101    | ug/l # | 12     |
| 88) 1,4-Dichlorobenzene        | 12.23 | 146  | 327      | Below Cal |        | 82     |
| 93) 1,2,4-Trichlorobenzene     | 13.66 | 180  | 750      | Below Cal |        | 78     |
| 96) 1,2,3-Trichlorobenzene     | 14.01 | 180  | 468      | Below Cal | #      | 76     |

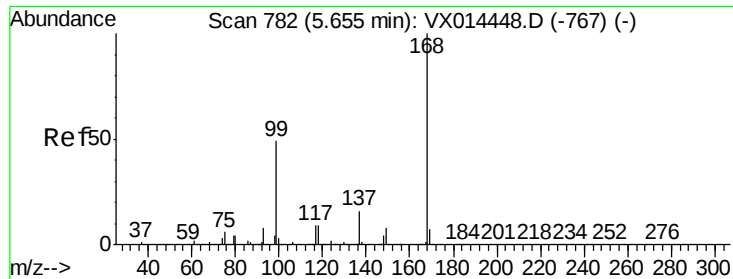
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX011020\  
Data File : VX014559.D  
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Sample : L1070-03  
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RBR-200030

Quant Time: Jan 11 05:18:24 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X010720W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 07 15:54:41 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: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampleId :

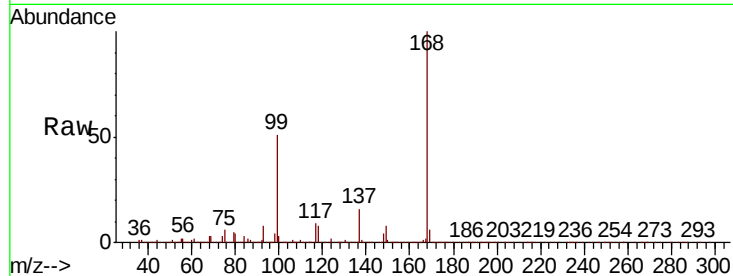
RBR-200030

Tot Ion:168 Resp: 493946

Ion Ratio Lower Upper

168 100

99 50.7 39.2 58.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

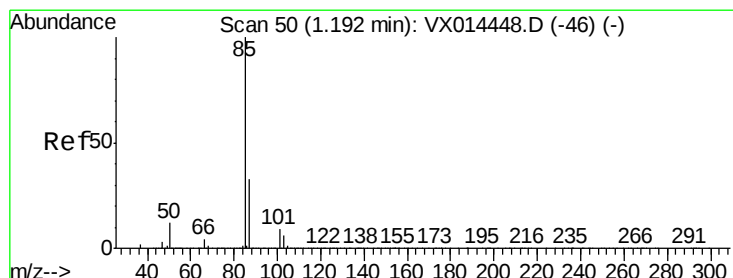
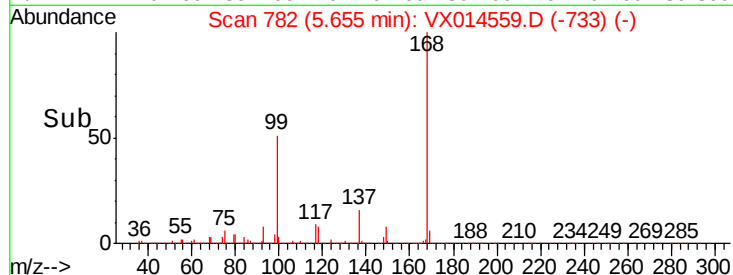
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.304 ug/l

RT: 1.18 min Scan# 48

Delta R.T. -0.01 min

Lab File: VX014559.D

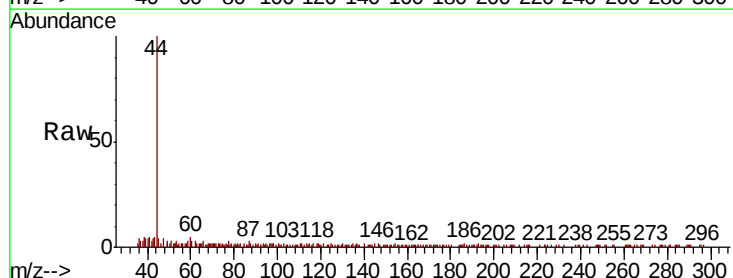
Acq: 11 Jan 2020 00:53

Tgt Ion: 85 Resp: 318

Ion Ratio Lower Upper

85 100

87 140.6 16.5 49.5#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

500

400

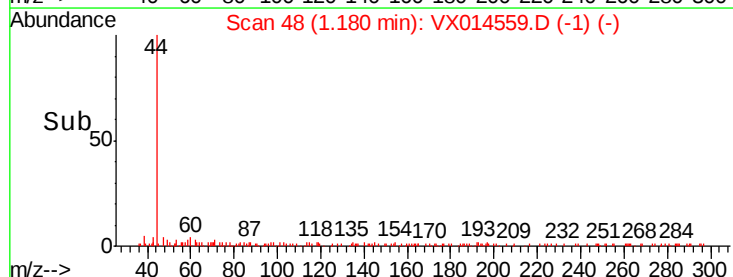
300

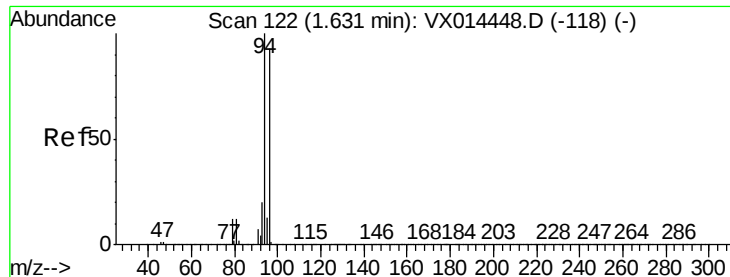
200

100

0

Time-->





#5

Bromomethane

Concen: 0.231 ug/l

RT: 1.65 min Scan# 125

Delta R.T. 0.02 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampleId :

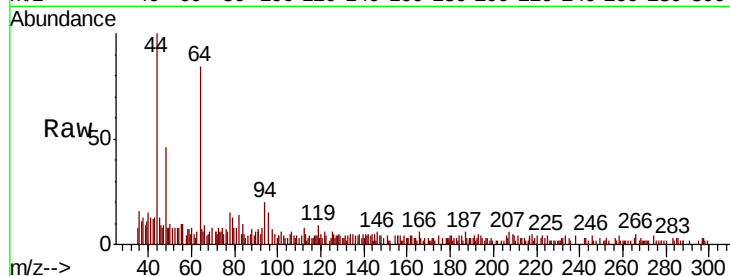
RBR-200030

Tot Ion: 94 Resp: 1073

Ion Ratio Lower Upper

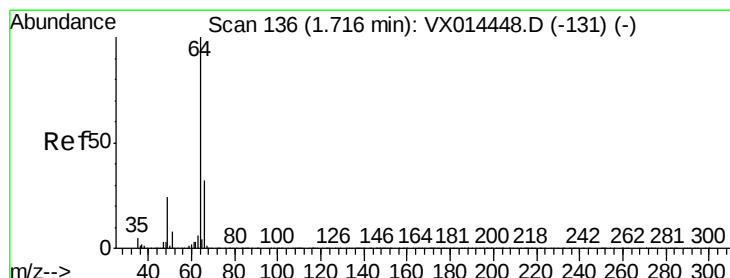
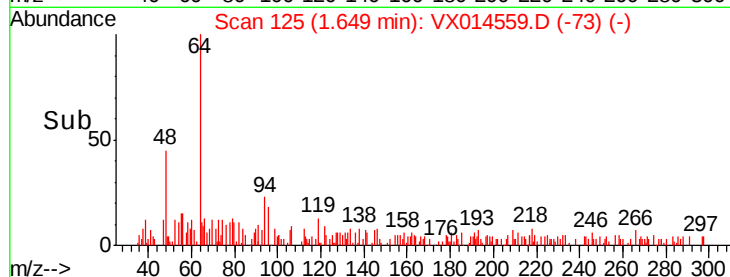
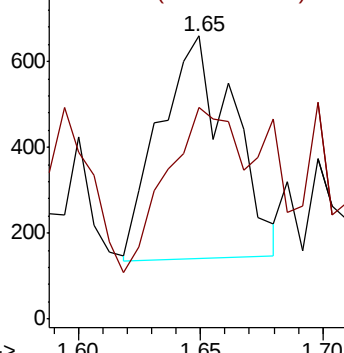
94 100

96 74.8 74.2 111.2



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: Below Cal

RT: 1.73 min Scan# 139

Delta R.T. 0.02 min

Lab File: VX014559.D

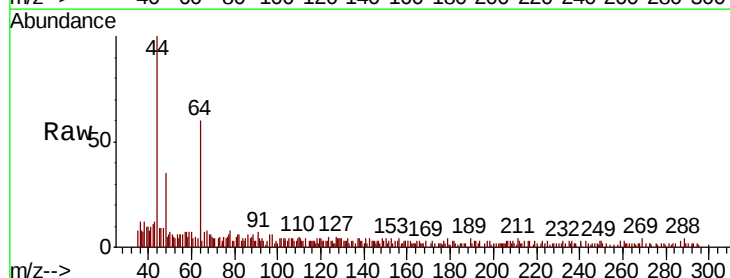
Acq: 11 Jan 2020 00:53

Tgt Ion: 64 Resp: 568

Ion Ratio Lower Upper

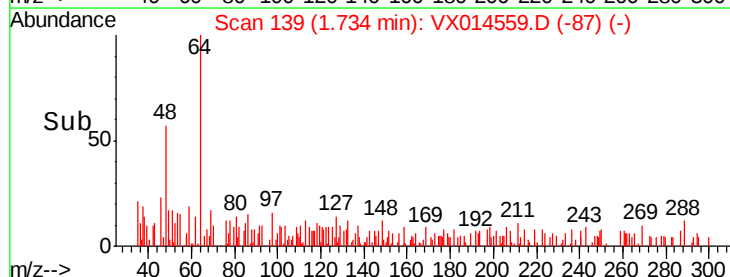
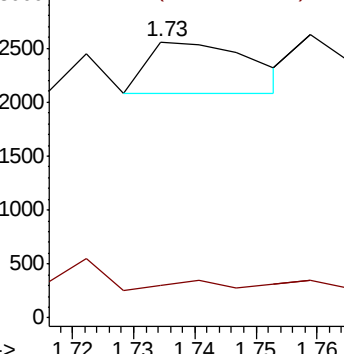
64 100

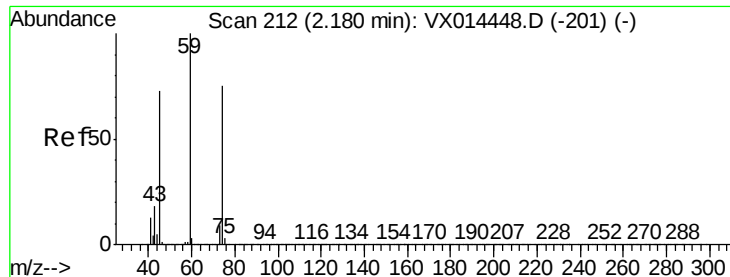
66 11.0 25.3 37.9#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0





#8

Diethyl Ether

Concen: 0.308 ug/l

RT: 2.16 min Scan# 208

Delta R.T. -0.02 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampled :

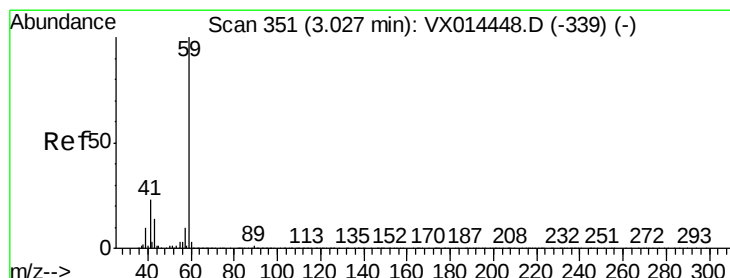
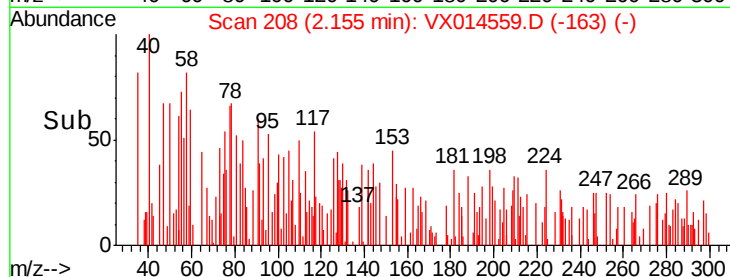
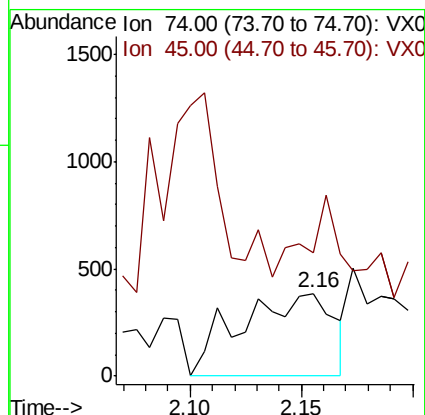
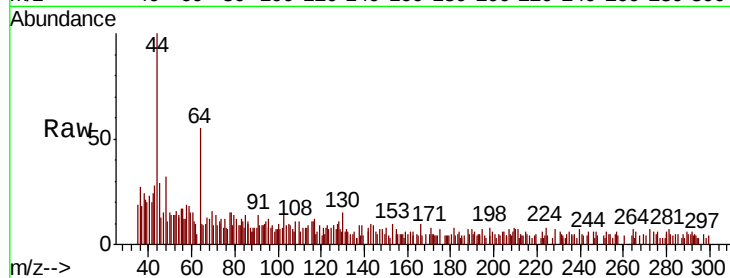
RBR-200030

Tot Ion: 74 Resp: 1119

Ion Ratio Lower Upper

74 100

45 52.5 48.7 146.1



#11

Tert butyl alcohol

Concen: 3.407 ug/l

RT: 3.01 min Scan# 349

Delta R.T. -0.01 min

Lab File: VX014559.D

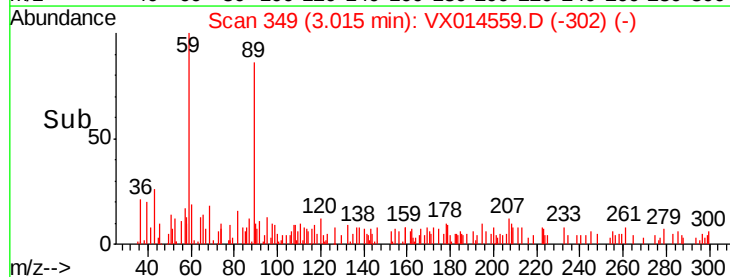
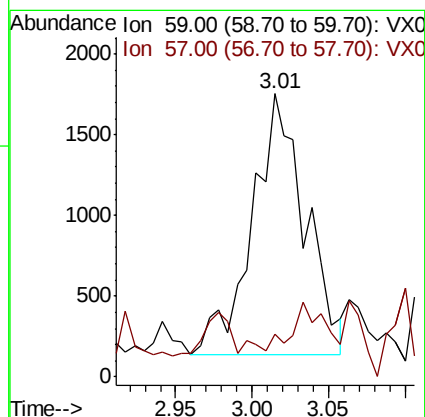
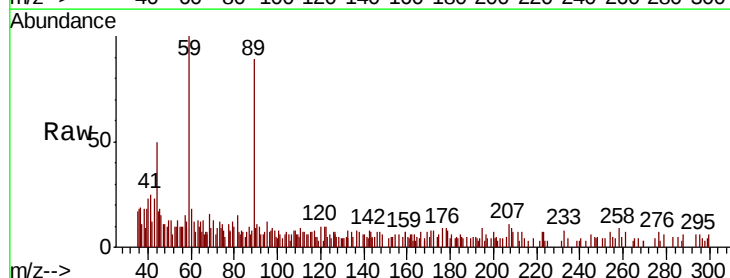
Acq: 11 Jan 2020 00:53

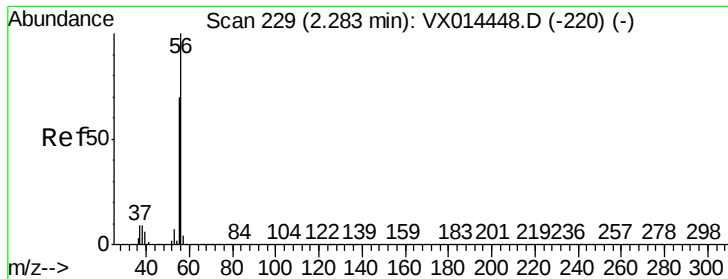
Tgt Ion: 59 Resp: 3923

Ion Ratio Lower Upper

59 100

57 15.4 8.5 12.7#

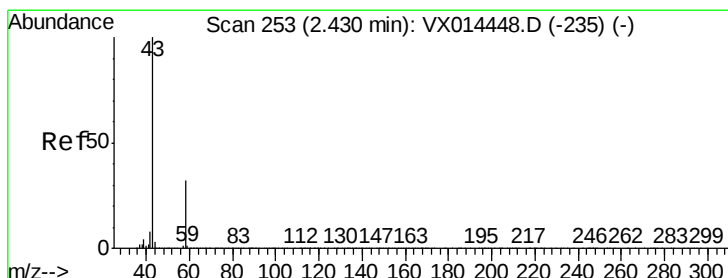
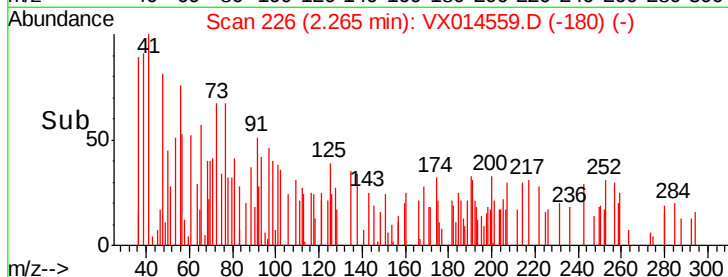
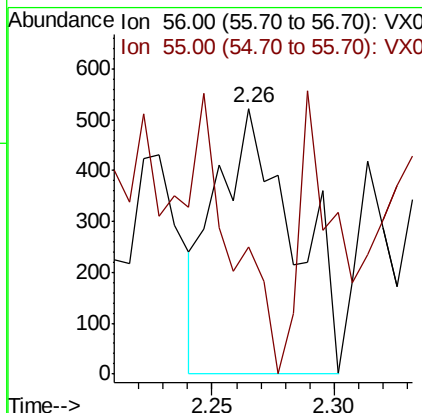
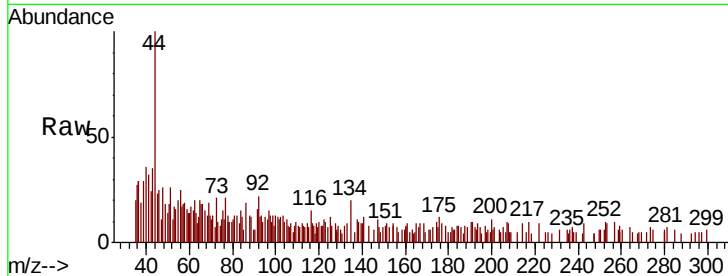




#13  
Acrolein  
Concen: 1.240 ug/l  
RT: 2.26 min Scan# 226  
Delta R.T. -0.02 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

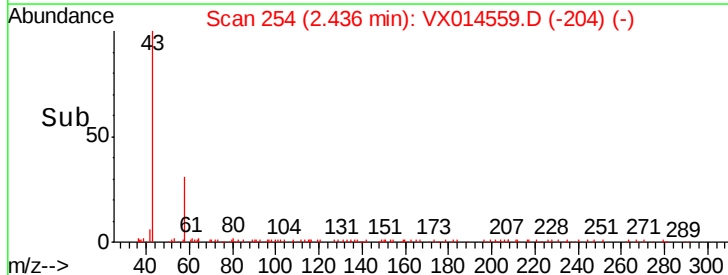
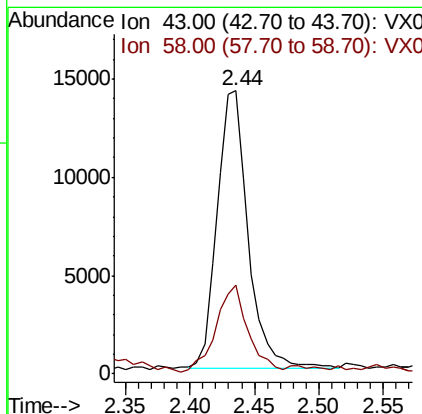
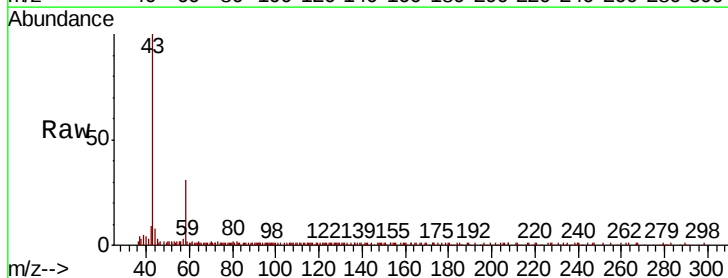
Instrument :  
MSVOA\_X  
ClientSampled :  
RBR-200030

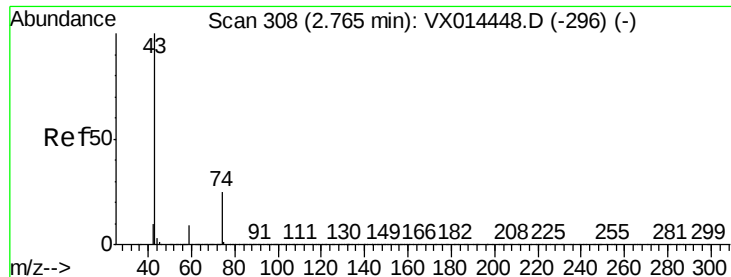
Tot Ion: 56 Resp: 1144  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.0 82.6#



#16  
Acetone  
Concen: 4.597 ug/l  
RT: 2.44 min Scan# 254  
Delta R.T. 0.01 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

Tgt Ion: 43 Resp: 24050  
Ion Ratio Lower Upper  
43 100  
58 30.6 25.4 38.0

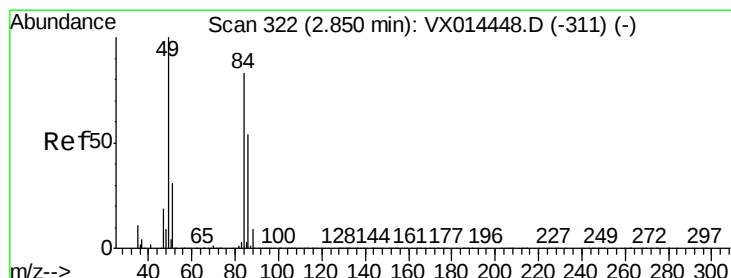
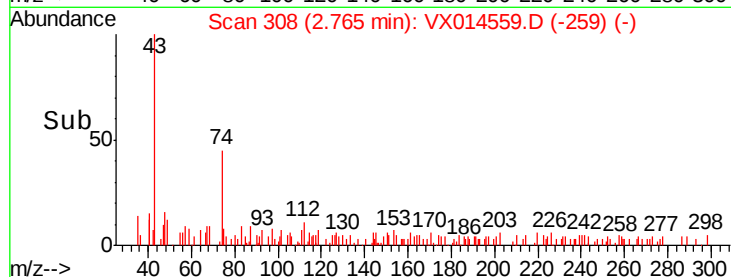
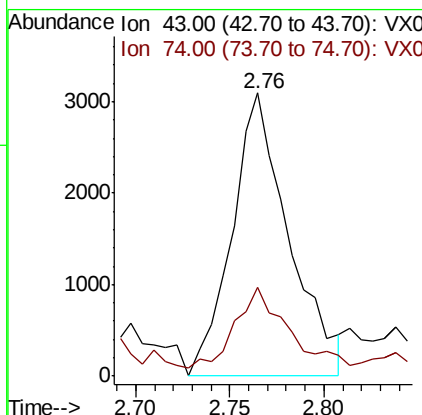
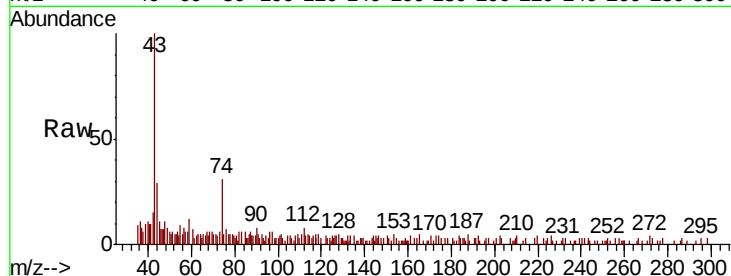




#18  
Methvl Acetate  
Concen: 0.817 ug/l  
RT: 2.76 min Scan# 308  
Delta R.T. -0.00 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

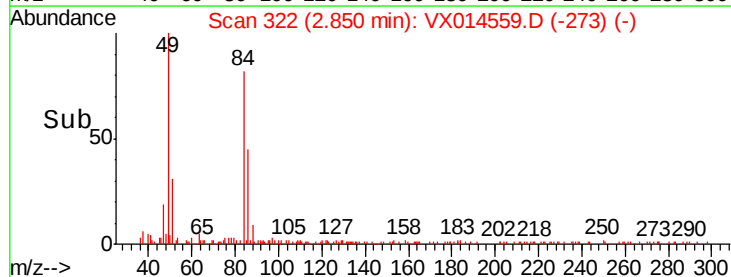
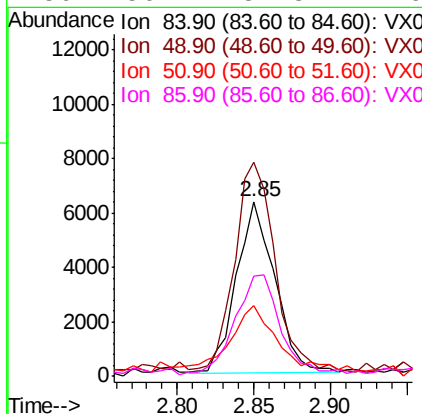
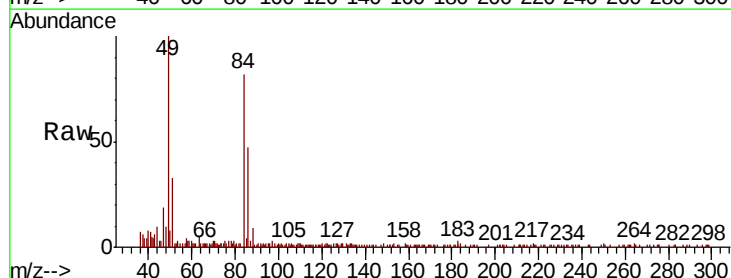
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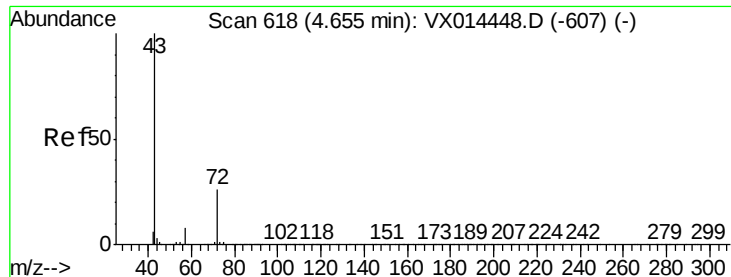
Tot Ion: 43 Resp: 6475  
Ion Ratio Lower Upper  
43 100  
74 26.1 19.4 29.2



#20  
Methylene Chloride  
Concen: 2.002 ug/l  
RT: 2.85 min Scan# 322  
Delta R.T. -0.00 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

Tgt Ion: 84 Resp: 11107  
Ion Ratio Lower Upper  
84 100  
49 121.3 95.8 143.8  
51 37.4 30.2 45.4  
86 56.1 51.8 77.6

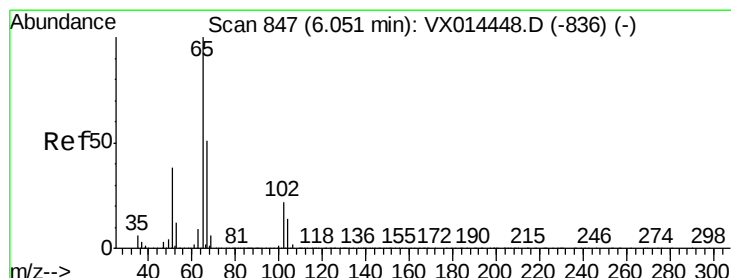
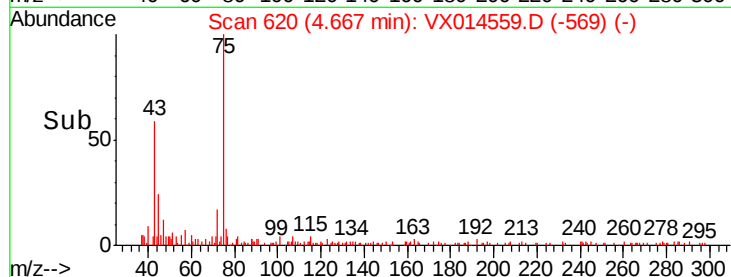
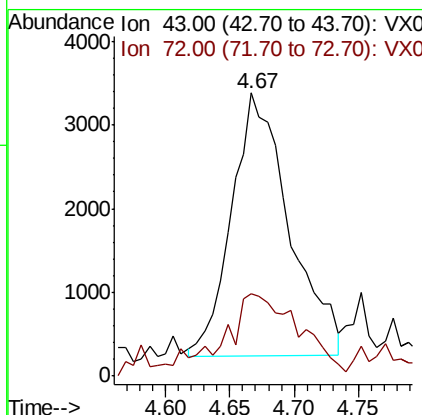
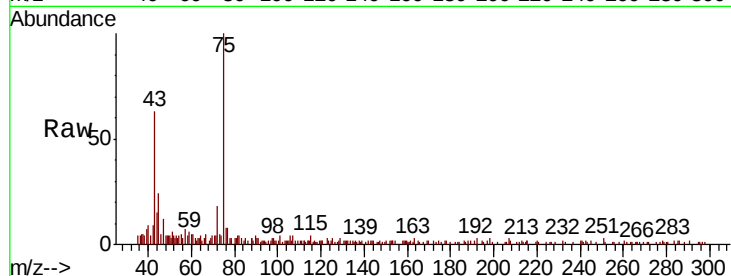




#25  
2-Butanone  
Concen: 2.377 ug/l  
RT: 4.67 min Scan# 620  
Delta R.T. 0.01 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

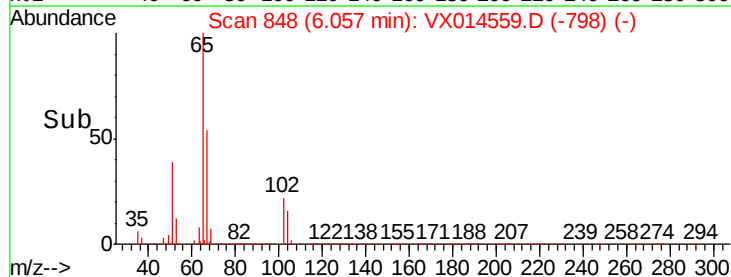
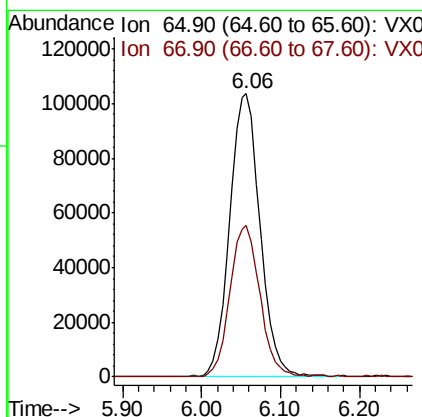
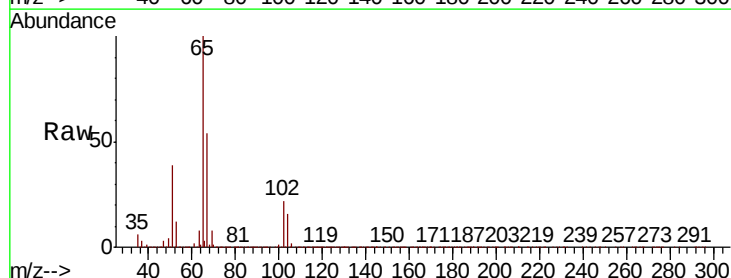
Instrument :  
MSVOA\_X  
ClientSampleId :  
RBR-200030

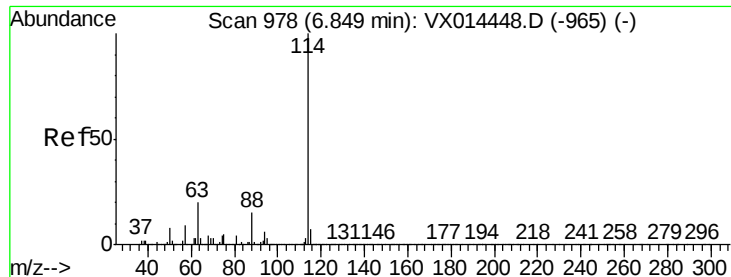
Tot Ion: 43 Resp: 9791  
Ion Ratio Lower Upper  
43 100  
72 27.5 20.6 31.0



#33  
1,2-Dichloroethane-d4  
Concen: 49.910 ug/l  
RT: 6.06 min Scan# 848  
Delta R.T. 0.01 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

Tgt Ion: 65 Resp: 275211  
Ion Ratio Lower Upper  
65 100  
67 52.7 0.0 106.2





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampleId :

RBR-200030

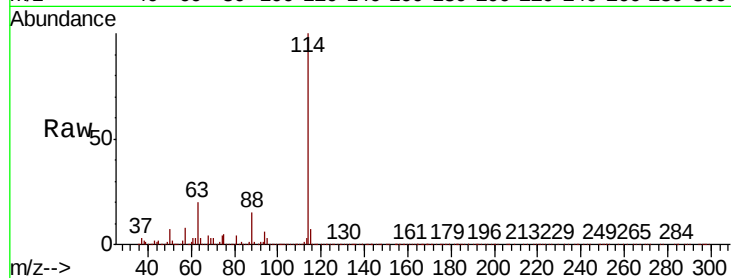
Tot Ion:114 Resp: 765318

Ion Ratio Lower Upper

114 100

63 19.9 0.0 39.6

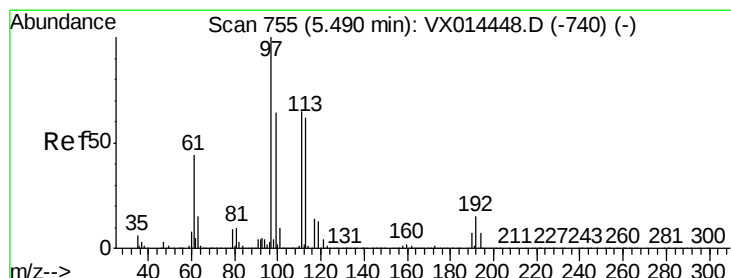
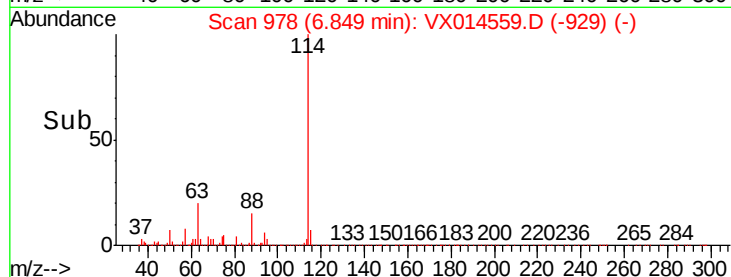
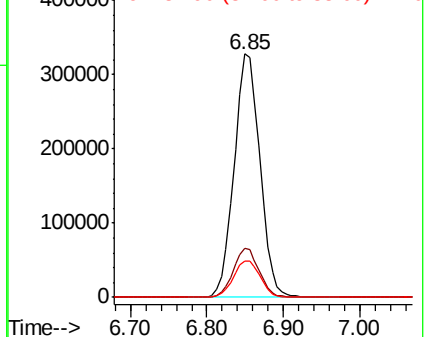
88 15.0 0.0 30.8



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: 49.588 ug/l

RT: 5.49 min Scan# 755

Delta R.T. -0.00 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

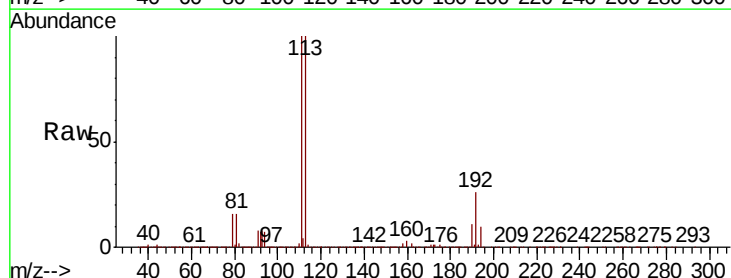
Tgt Ion:113 Resp: 229731

Ion Ratio Lower Upper

113 100

111 102.5 81.5 122.3

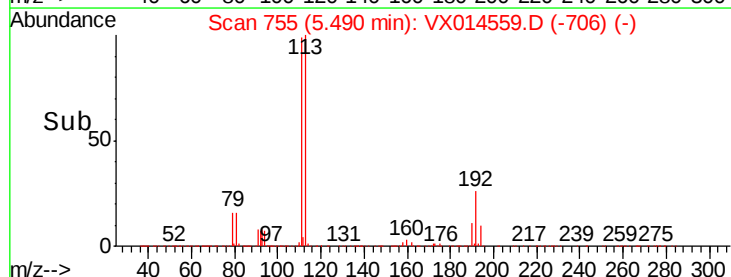
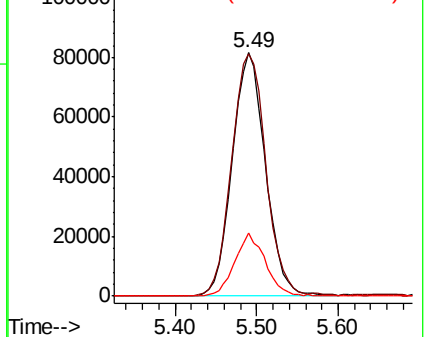
192 24.1 19.2 28.8

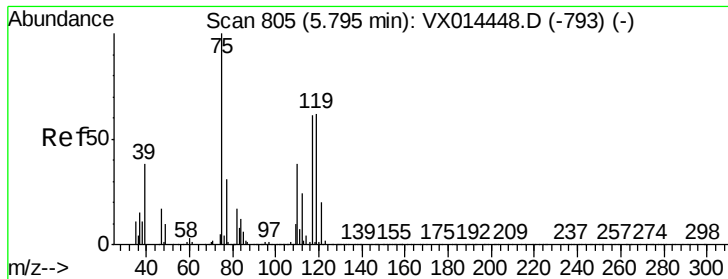


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.720 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.15 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampleId :

RBR-200030

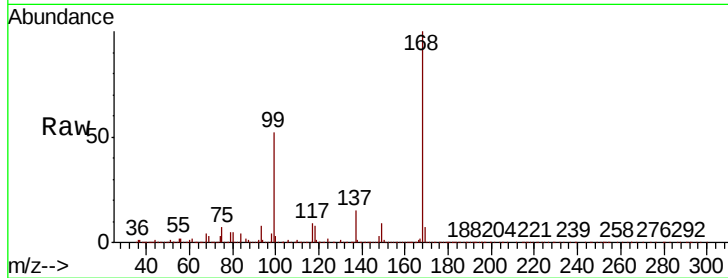
Tot Ion: 75 Resp: 33971

Ion Ratio Lower Upper

75 100

110 10.6 18.6 55.8#

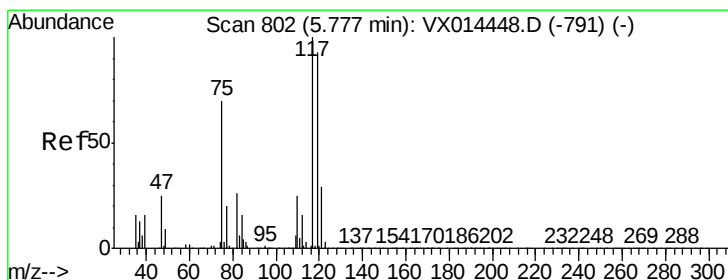
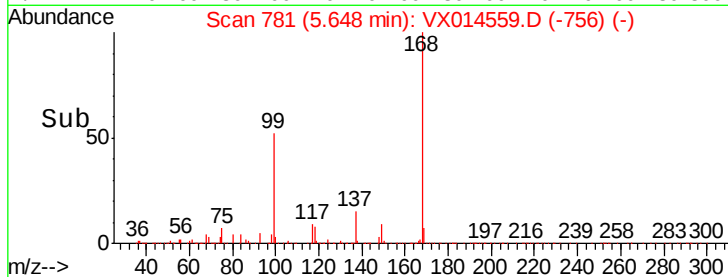
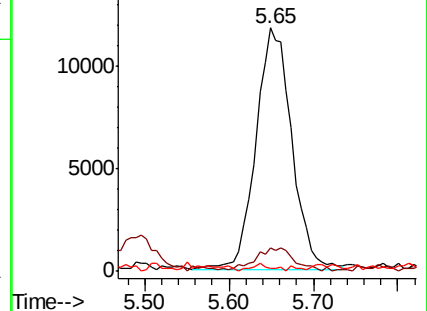
77 1.8 24.5 36.7#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0



#38

Carbon Tetrachloride

Concen: 6.349 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

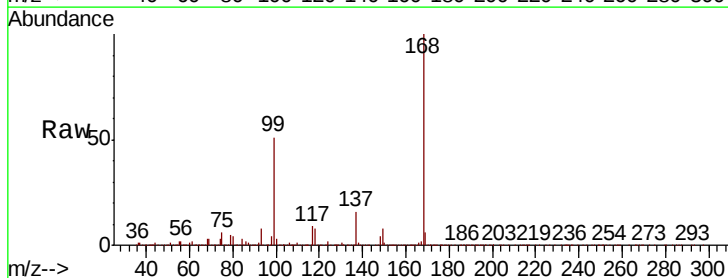
Tgt Ion: 117 Resp: 42048

Ion Ratio Lower Upper

117 100

119 3.7 73.8 110.8#

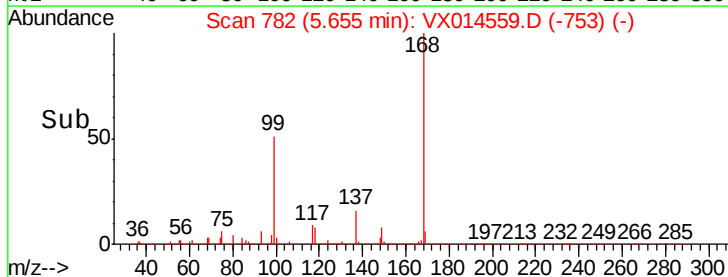
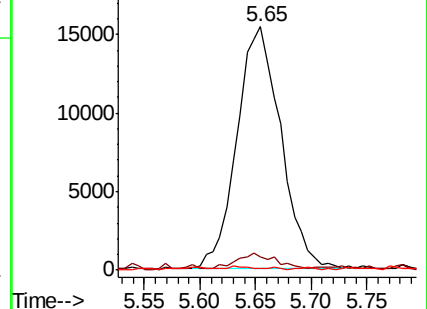
121 0.1 23.4 35.0#

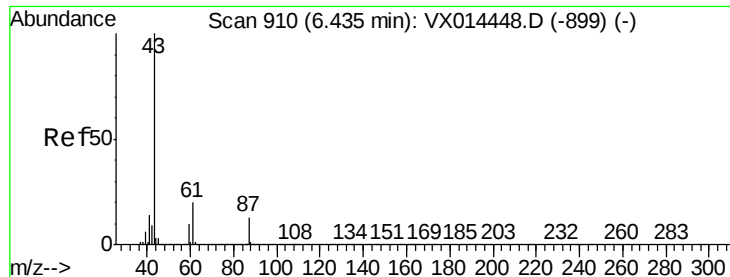


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#43

Isopropyl Acetate

Concen: 9.665 ug/l

RT: 6.43 min Scan# 910

Delta R.T. -0.00 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampleId :

RBR-200030

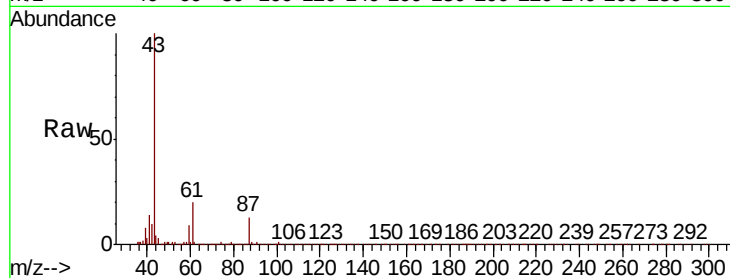
Tot Ion: 43 Resp: 122051

Ion Ratio Lower Upper

43 100

61 19.8 16.6 24.8

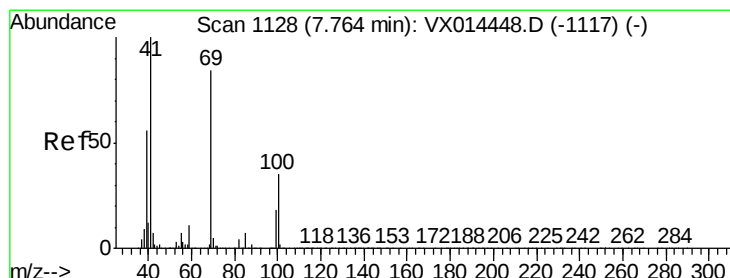
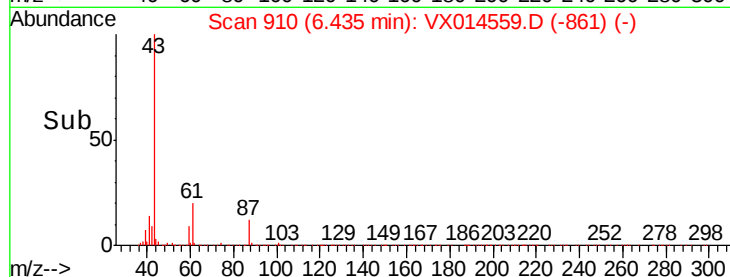
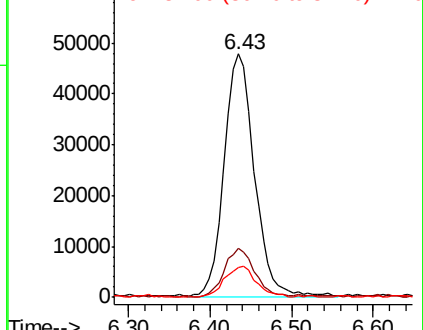
87 13.2 10.8 16.2



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#48

Methyl methacrylate

Concen: 1.480 ug/l

RT: 7.67 min Scan# 1113

Delta R.T. -0.09 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

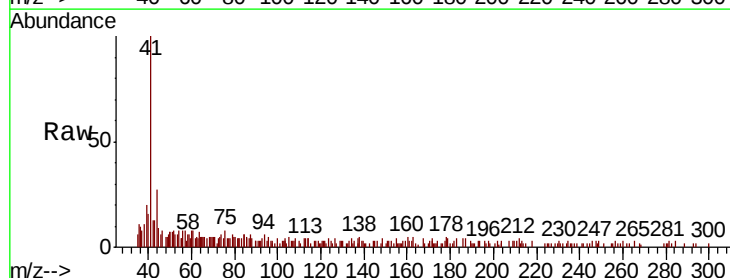
Tgt Ion: 41 Resp: 8953

Ion Ratio Lower Upper

41 100

69 2.7 65.5 98.3#

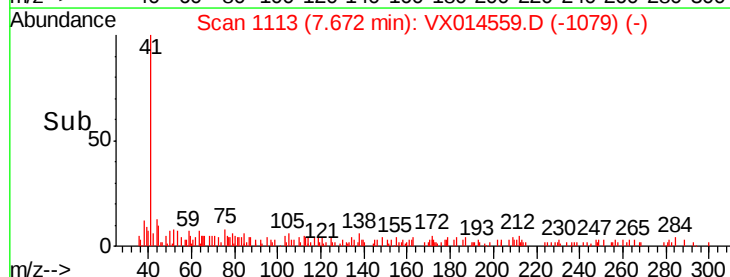
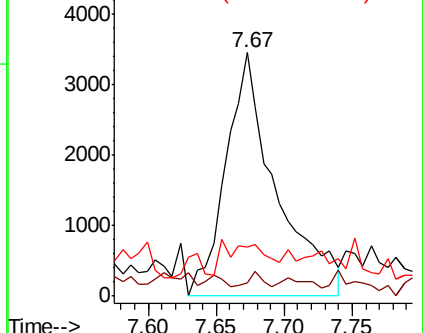
39 0.0 43.9 65.9#

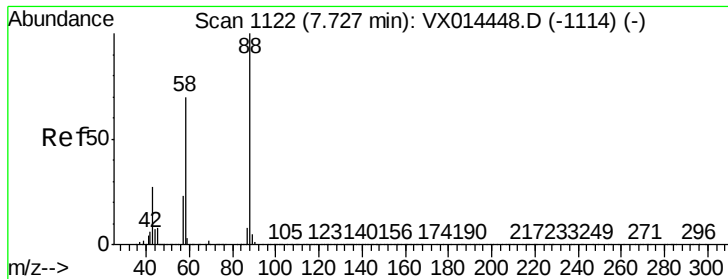


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0





#49

1,4-Dioxane

Concen: 1.139 ug/l

RT: 7.72 min Scan# 1121

Delta R.T. -0.01 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampleId :

RBR-200030

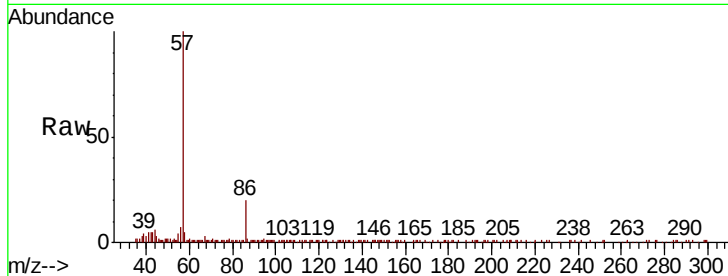
Tot Ion: 88 Resp: 146

Ion Ratio Lower Upper

88 100

43 0.0 27.4 41.0#

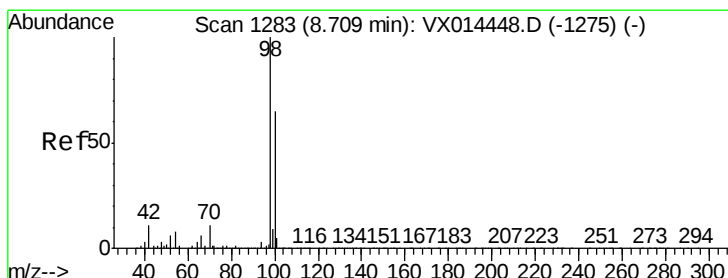
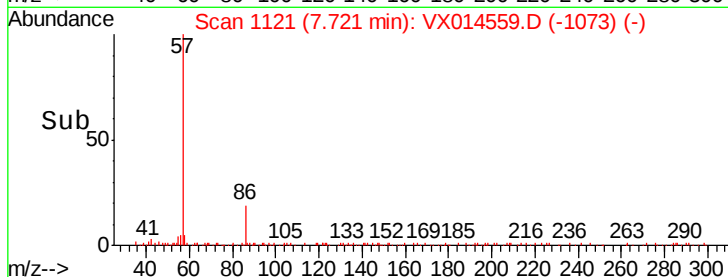
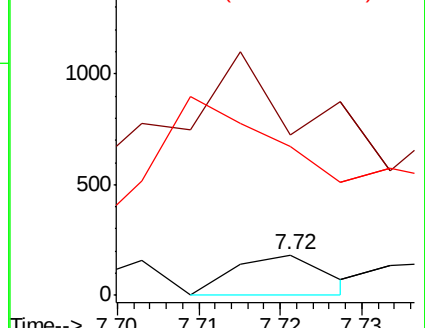
58 758.9 57.1 85.7#



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: 51.305 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX014559.D

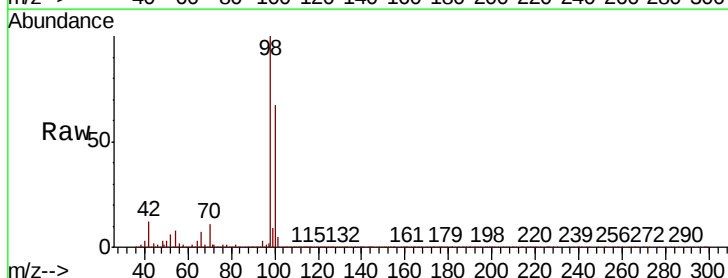
Acq: 11 Jan 2020 00:53

Tgt Ion: 98 Resp: 922375

Ion Ratio Lower Upper

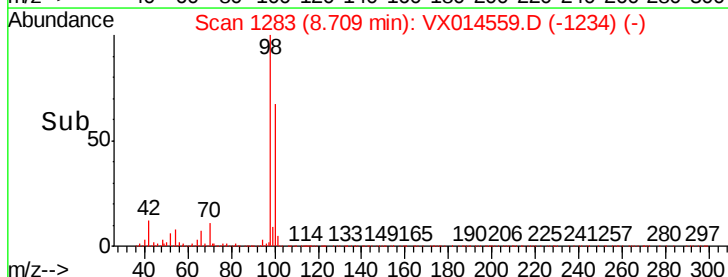
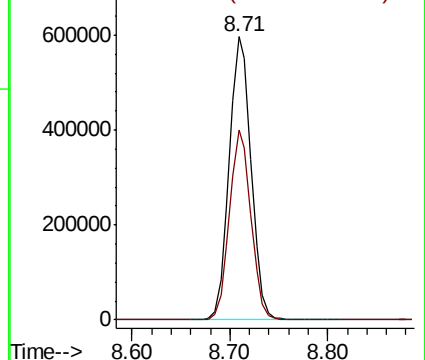
98 100

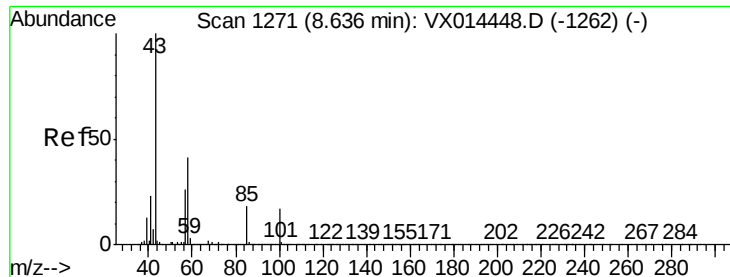
100 65.8 53.2 79.8



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

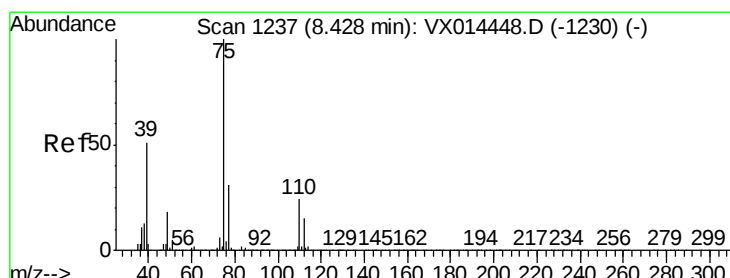
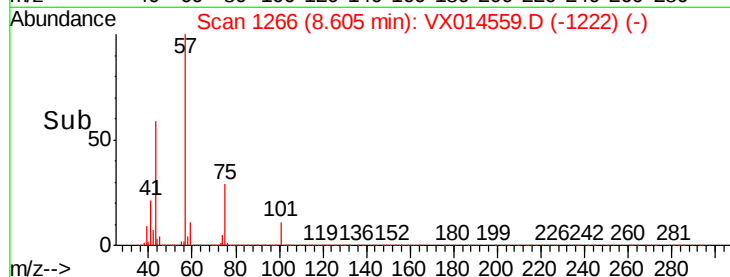
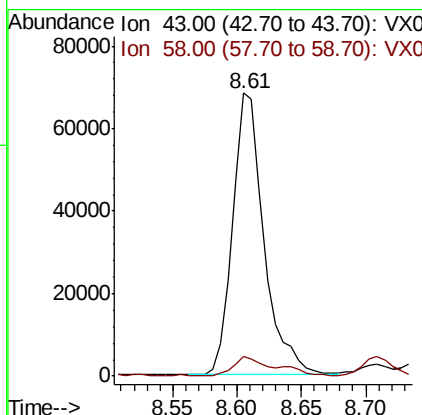
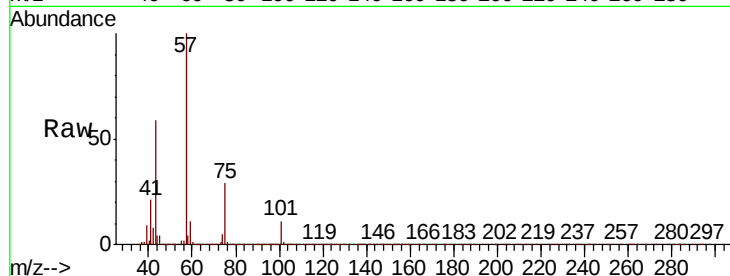




#51  
4-Methyl-2-Pentanone  
Concen: 14.968 ug/l  
RT: 8.61 min Scan# 1266  
Delta R.T. -0.03 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

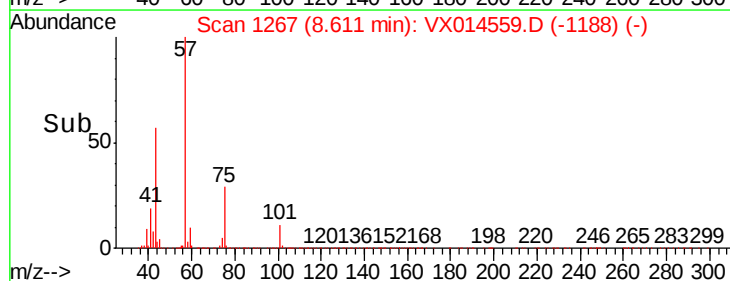
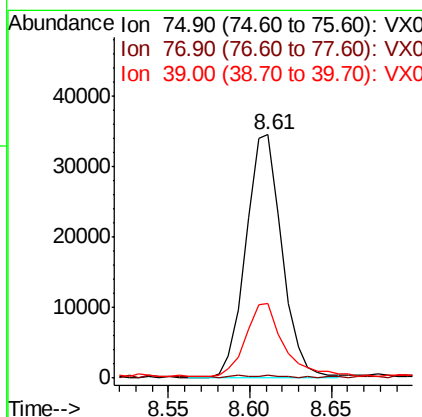
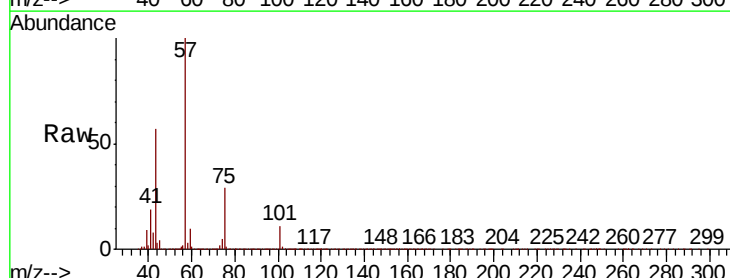
Instrument :  
MSVOA\_X  
ClientSampleId :  
RBR-200030

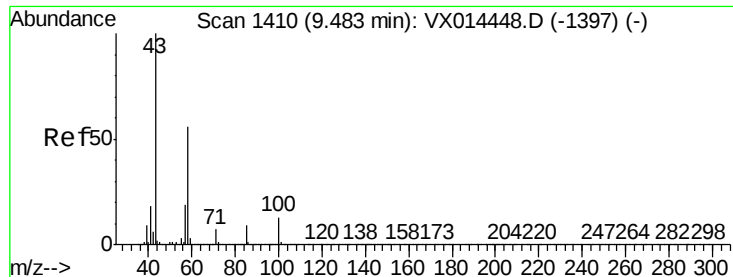
Tot Ion: 43 Resp: 115188  
Ion Ratio Lower Upper  
43 100  
58 9.5 32.4 48.6#



#54  
cis-1,3-Dichloropropene  
Concen: 6.154 ug/l  
RT: 8.61 min Scan# 1267  
Delta R.T. 0.18 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

Tgt Ion: 75 Resp: 53528  
Ion Ratio Lower Upper  
75 100  
77 0.7 25.0 37.4#  
39 30.1 40.7 61.1#

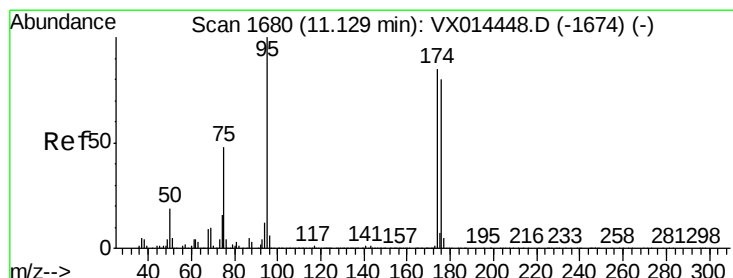
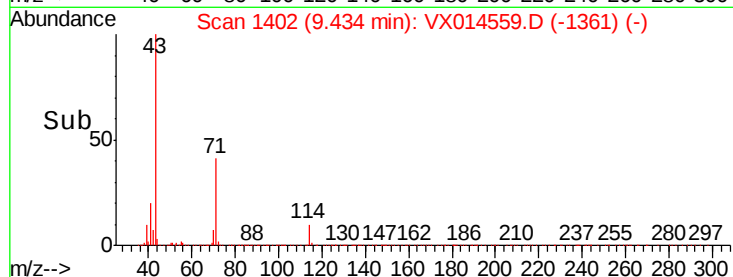
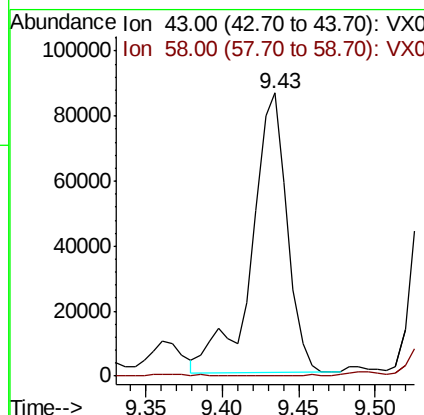
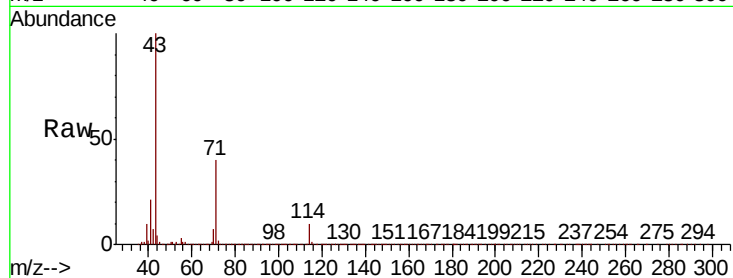




#59  
2-Hexanone  
Concen: 22.863 ug/l  
RT: 9.43 min Scan# 1402  
Delta R.T. -0.05 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

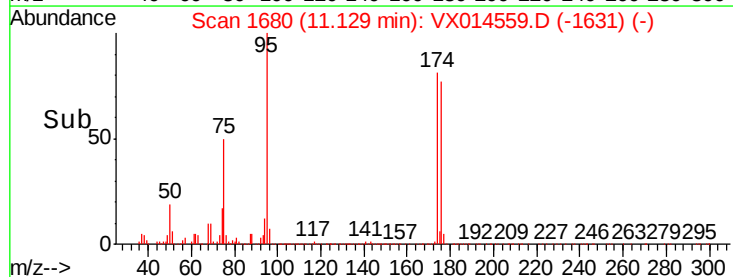
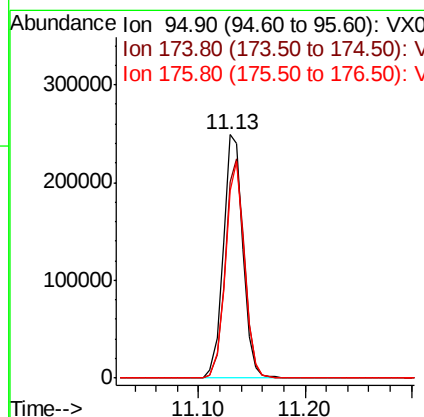
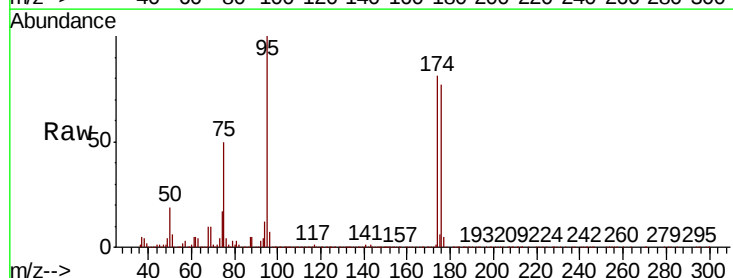
Instrument :  
MSVOA\_X  
ClientSampleId :  
RBR-200030

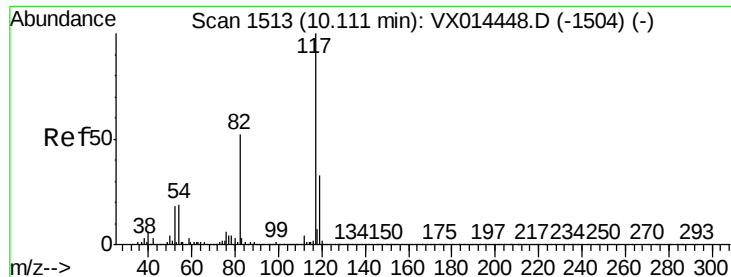
Tot Ion: 43 Resp: 139217  
Ion Ratio Lower Upper  
43 100  
58 0.0 27.9 83.7#



#62  
4-Bromofluorobenzene  
Concen: 48.257 ug/l  
RT: 11.13 min Scan# 1680  
Delta R.T. -0.00 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

Tgt Ion: 95 Resp: 318498  
Ion Ratio Lower Upper  
95 100  
174 88.7 0.0 180.8  
176 86.3 0.0 172.8

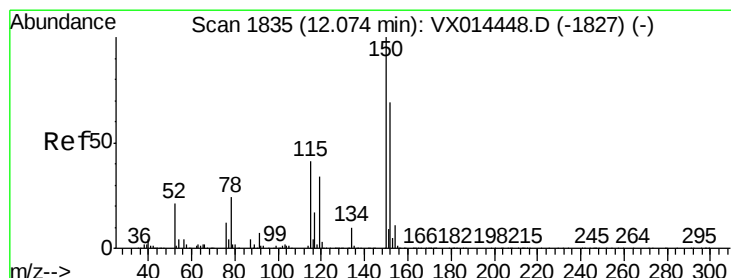
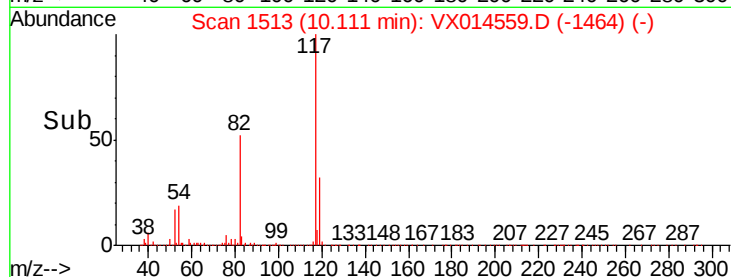
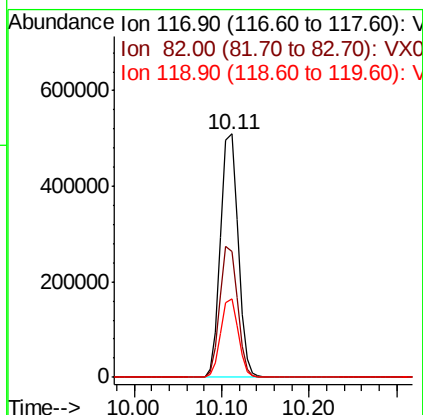
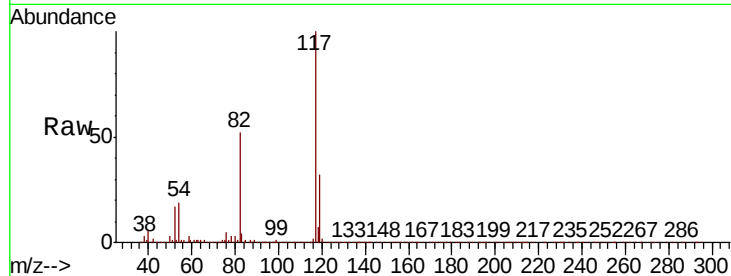




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. -0.00 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

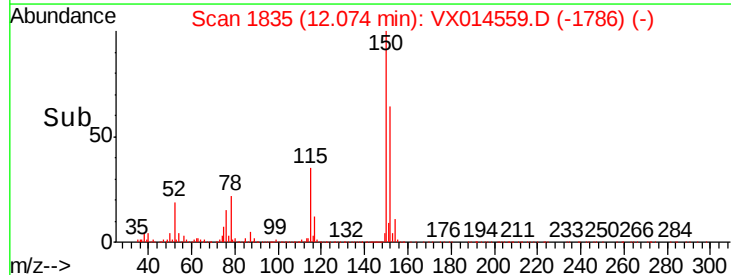
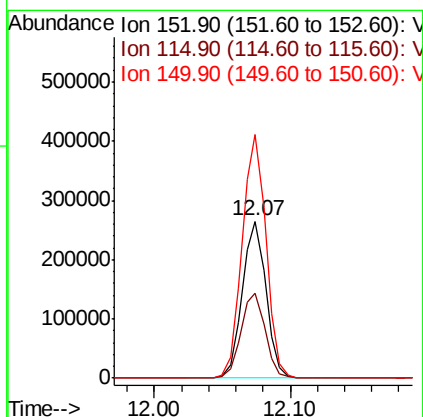
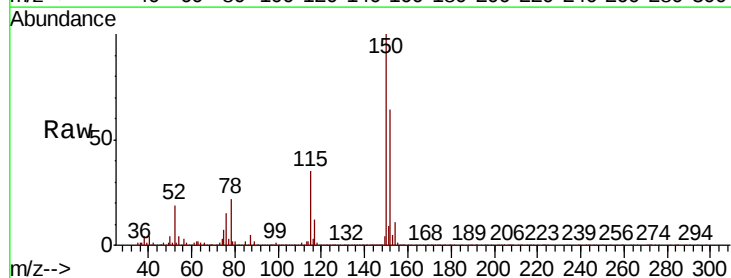
Instrument :  
MSVOA\_X  
ClientSampleId :  
RBR-200030

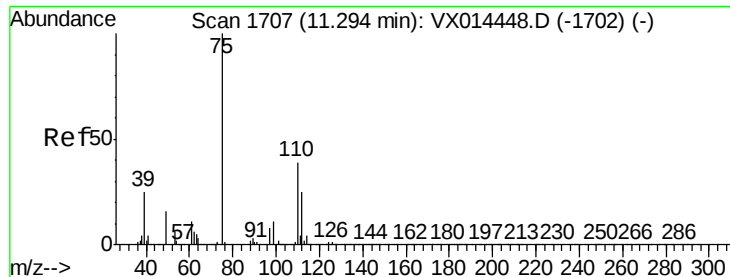
Tot Ion:117 Resp: 708412  
Ion Ratio Lower Upper  
117 100  
82 51.7 41.8 62.6  
119 32.2 26.2 39.4



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. -0.00 min  
Lab File: VX014559.D  
Acq: 11 Jan 2020 00:53

Tgt Ion:152 Resp: 321850  
Ion Ratio Lower Upper  
152 100  
115 54.8 39.5 118.3  
150 155.6 0.0 350.2





#76

1,2,3-Trichloropropane

Concen: 23.489 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

Instrument :

MSVOA\_X

ClientSampled :

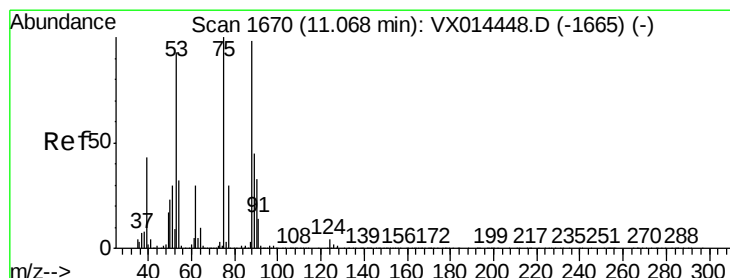
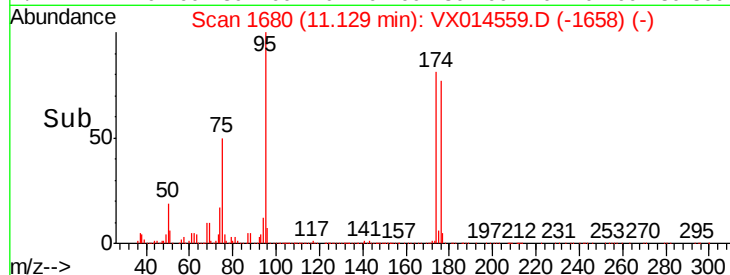
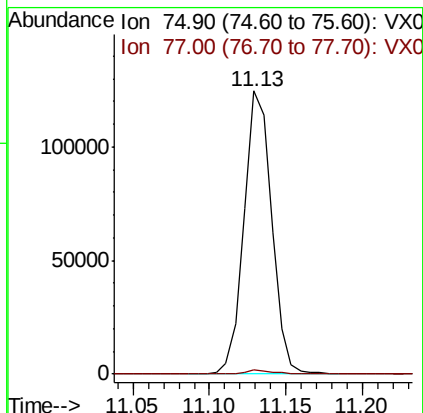
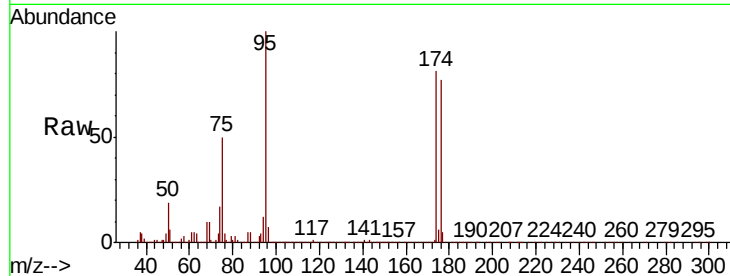
RBR-200030

Tot Ion: 75 Resp: 156418

Ion Ratio Lower Upper

75 100

77 1.5 21.9 65.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 62.101 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX014559.D

Acq: 11 Jan 2020 00:53

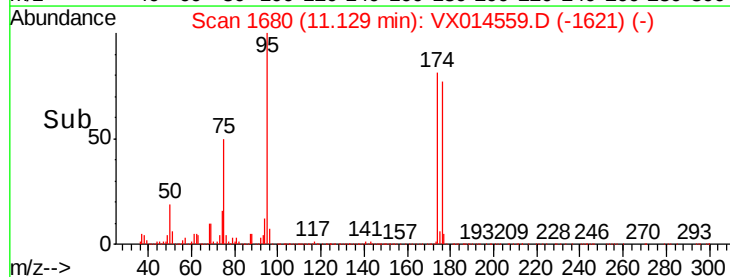
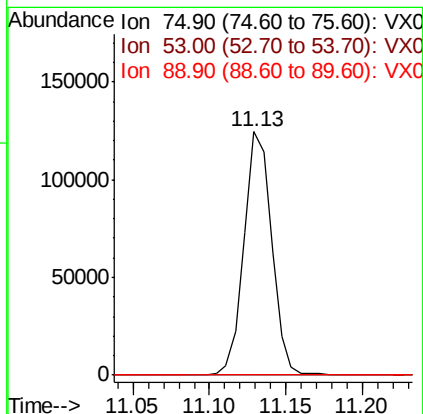
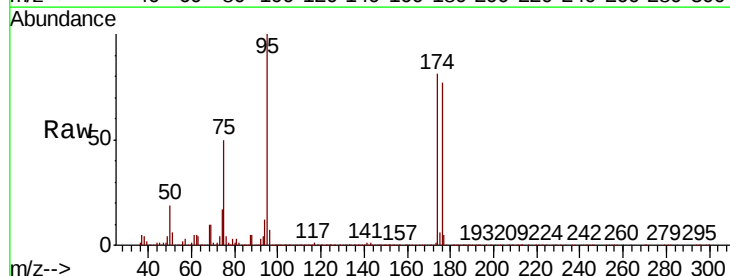
Tgt Ion: 75 Resp: 156418

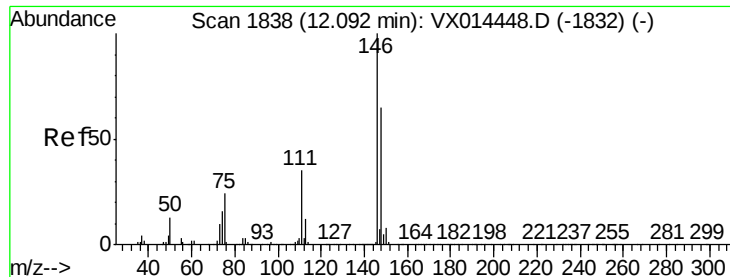
Ion Ratio Lower Upper

75 100

53 0.2 74.8 112.2#

89 0.1 36.3 54.5#

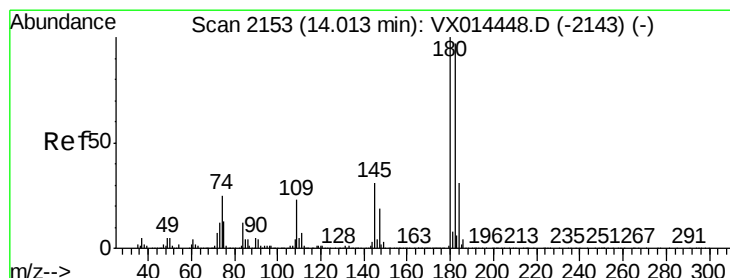
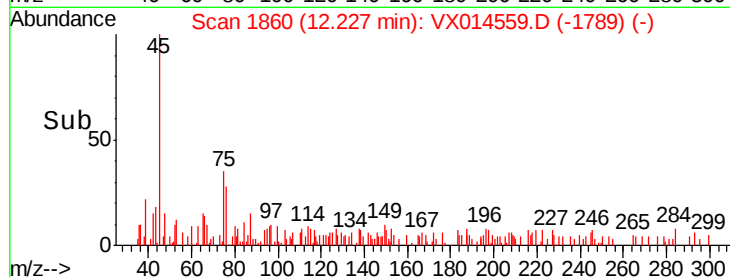
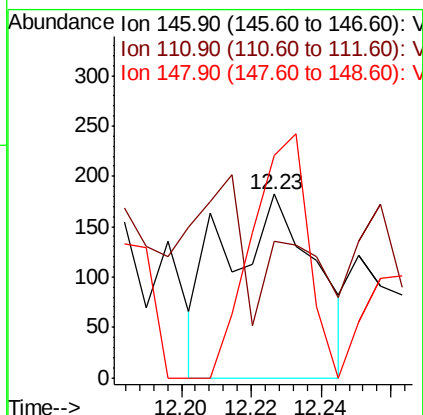
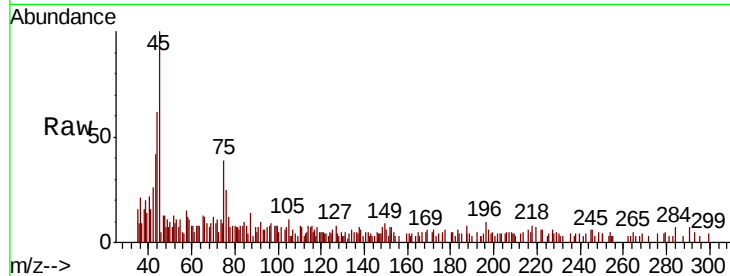




#88  
 1,4-Dichlorobenzene  
 Concen: Below Cal  
 RT: 12.23 min Scan# 1860  
 Delta R.T. 0.13 min  
 Lab File: VX014559.D  
 Acq: 11 Jan 2020 00:53

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RBR-200030

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.3  | 18.1  | 54.1  |
| 148     | 82.9  | 32.1  | 96.3  |



#96  
 1,2,3-Trichlorobenzene  
 Concen: Below Cal  
 RT: 14.01 min Scan# 2153  
 Delta R.T. 0.00 min  
 Lab File: VX014559.D  
 Acq: 11 Jan 2020 00:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 84.8  | 47.9  | 143.6 |
| 145     | 65.0  | 14.8  | 44.3  |

