

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX112719\  
 Data File : VX013651.D  
 Acq On : 27 Nov 2019 14:37  
 Operator : JC/SP  
 Sample : K5962-10DL 10X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 48BR-20191120DL

Quant Time: Nov 28 00:29:26 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 26 15:53:00 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 660453   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 1047285  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 936717   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 415099   | 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   | 381284   | 49.73 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.46% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 315687   | 48.76 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.52% |          |
| 50) Toluene-d8              | 8.71  | 98   | 1247573  | 49.46 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.92% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 418615   | 46.02 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.04% |          |

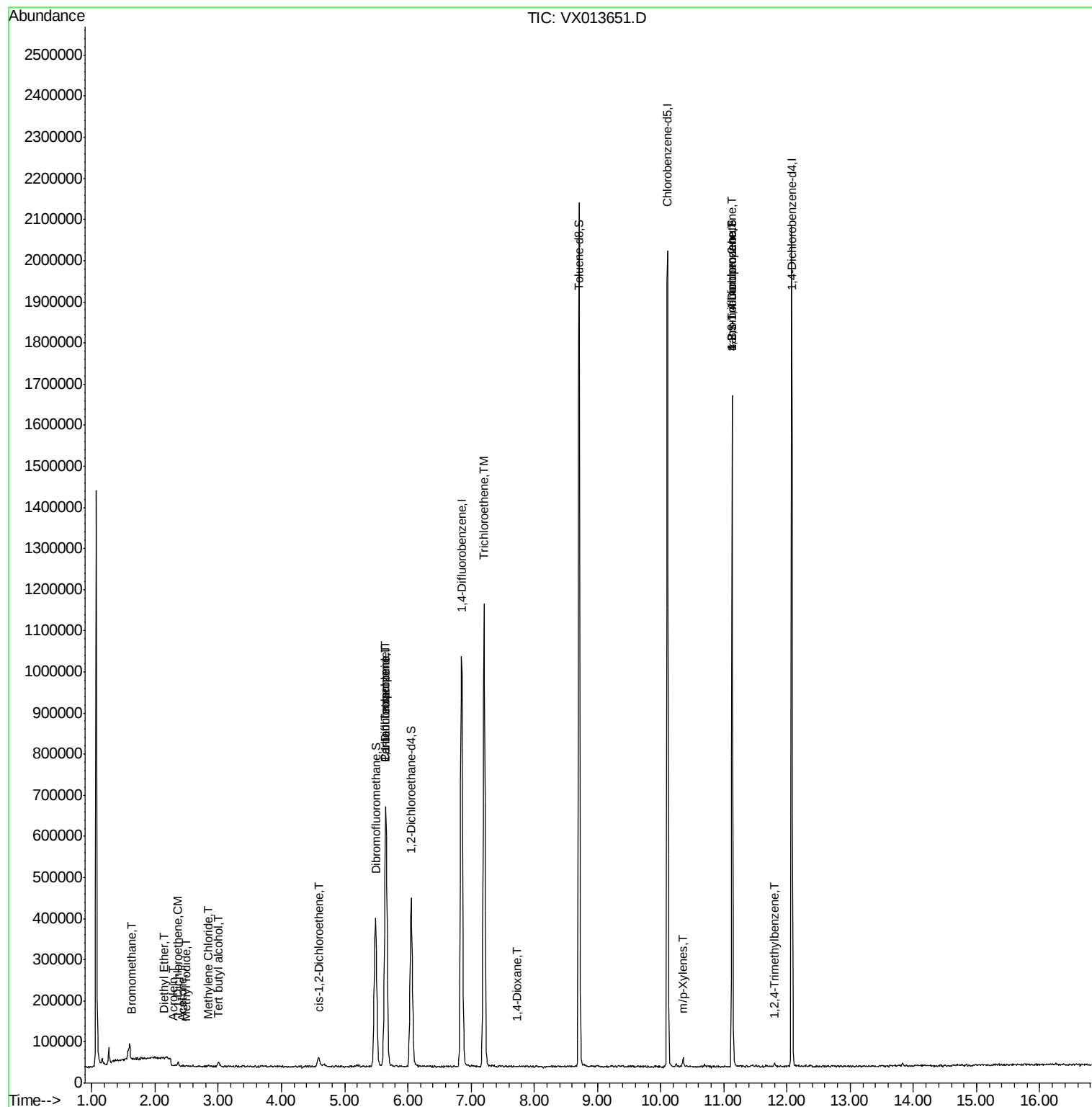
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 5) Bromomethane                | 1.64  | 94   | 1440     | 0.231  | ug/l # | 52     |
| 8) Diethyl Ether               | 2.14  | 74   | 1104     | 0.237  | ug/l   | 91     |
| 10) Methyl Iodide              | 2.50  | 142  | 1610     | 0.211  | ug/l # | 80     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 7687     | 4.062  | ug/l # | 83     |
| 12) 1,1-Dichloroethene         | 2.37  | 96   | 3500     | 0.557  | ug/l   | 94     |
| 13) Acrolein                   | 2.28  | 56   | 672      | 6.522  | ug/l # | 15     |
| 16) Acetone                    | 2.43  | 43   | 3163     | 0.836  | ug/l # | 75     |
| 20) Methylene Chloride         | 2.84  | 84   | 1840     | 0.253  | ug/l # | 64     |
| 27) cis-1,2-Dichloroethene     | 4.58  | 96   | 15000    | 1.908  | ug/l   | 88     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 42854    | 4.508  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 57850    | 6.599  | ug/l # | 15     |
| 44) Trichloroethene            | 7.21  | 130  | 451907   | 56.869 | ug/l   | 96     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 362      | 1.896  | ug/l # | 73     |
| 68) m/p-Xylenes                | 10.35 | 106  | 6626     | 0.518  | ug/l   | 82     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 204989   | 21.956 | ug/l # | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 204989   | 60.068 | ug/l # | 11     |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 5568     | 0.230  | ug/l   | 97     |

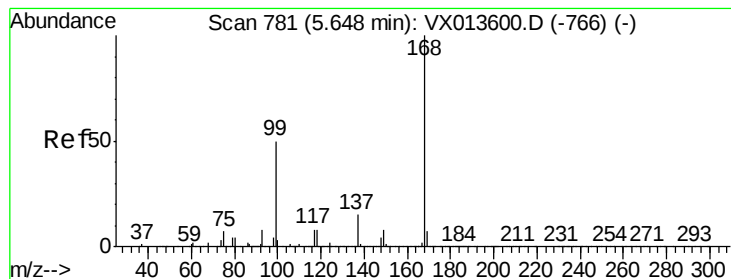
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX112719\  
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Instrument :  
MSVOA\_X  
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48BR-20191120DL

Quant Time: Nov 28 00:29:26 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 26 15:53:00 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: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

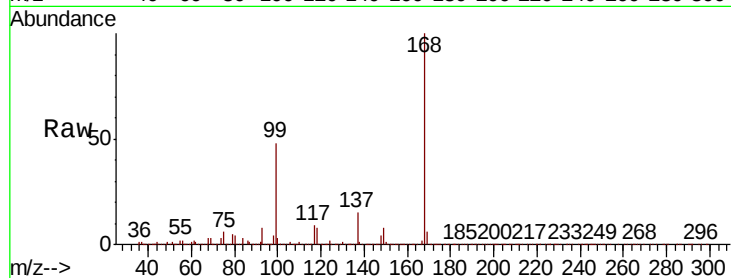
48BR-20191120DL

Tot Ion:168 Resp: 660453

Ion Ratio Lower Upper

168 100

99 48.2 39.8 59.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

250000

200000

150000

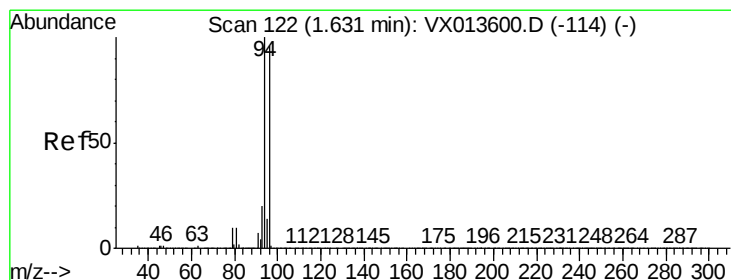
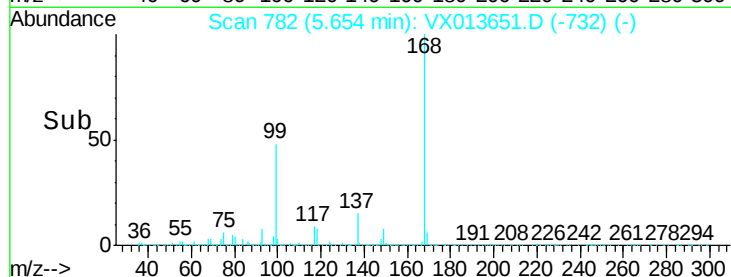
100000

50000

0

Time-->

5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.231 ug/l

RT: 1.64 min Scan# 123

Delta R.T. 0.01 min

Lab File: VX013651.D

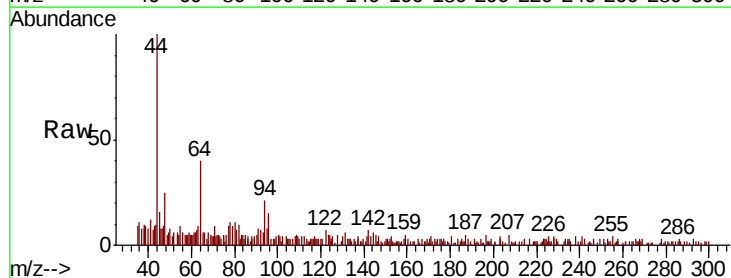
Acq: 27 Nov 2019 14:37

Tgt Ion: 94 Resp: 1440

Ion Ratio Lower Upper

94 100

96 49.6 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

1000

800

600

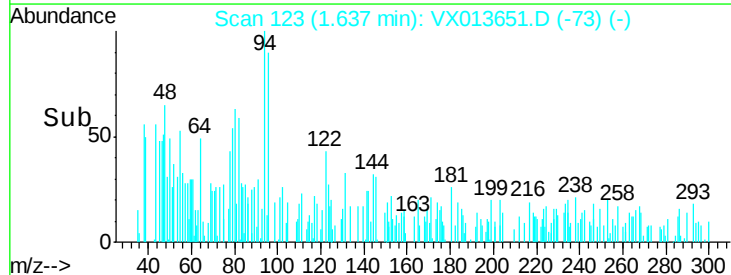
400

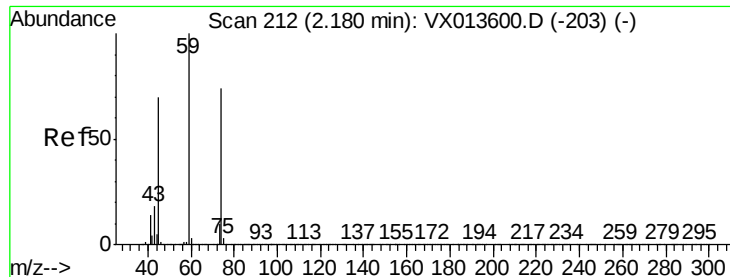
200

0

Time-->

1.60 1.65





#8

Diethyl Ether

Concen: 0.237 ug/l

RT: 2.14 min Scan# 206

Delta R.T. -0.04 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

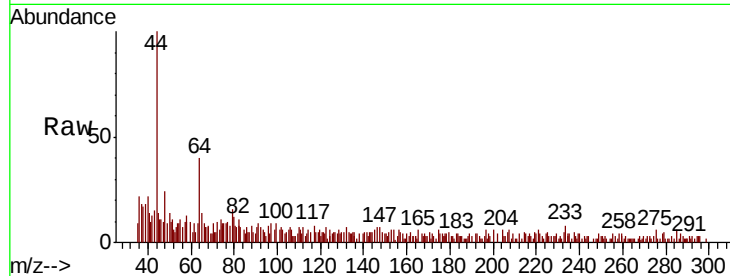
48BR-20191120DL

Tot Ion: 74 Resp: 1104

Ion Ratio Lower Upper

74 100

45 107.1 48.9 146.8



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

2.14

1000

800

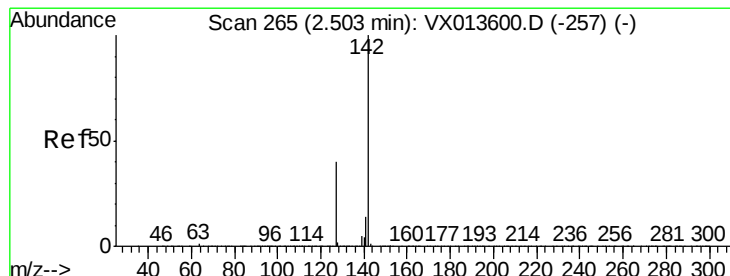
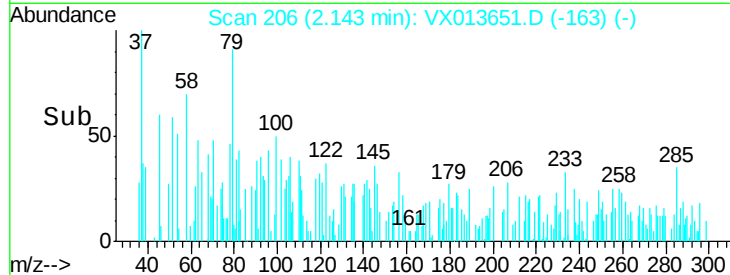
600

400

200

0

Time-->



#10

Methyl Iodide

Concen: 0.211 ug/l

RT: 2.50 min Scan# 264

Delta R.T. -0.01 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

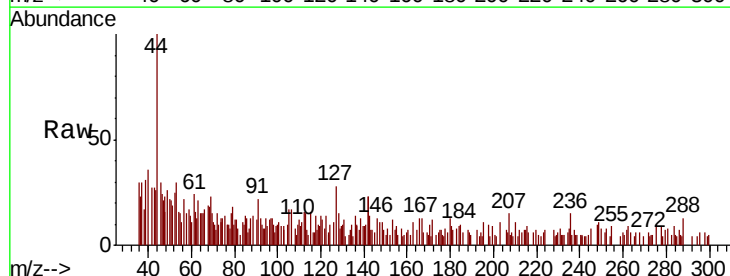
Tgt Ion: 142 Resp: 1610

Ion Ratio Lower Upper

142 100

127 37.4 31.0 46.4

141 42.4 11.6 17.4#



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

1200

1000

800

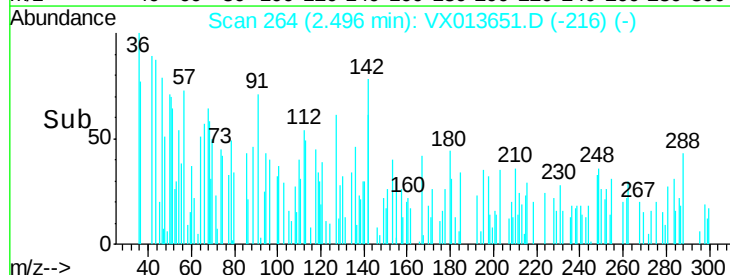
600

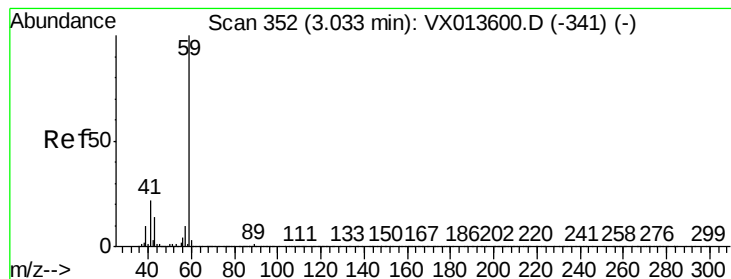
400

200

0

Time-->



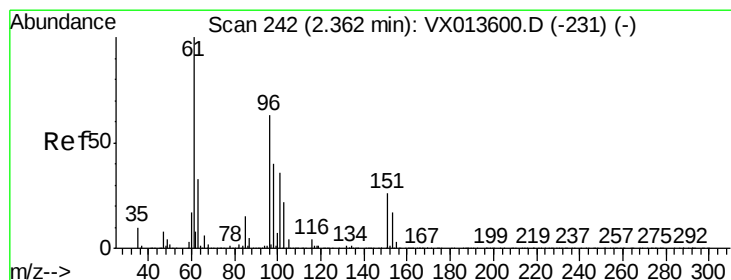
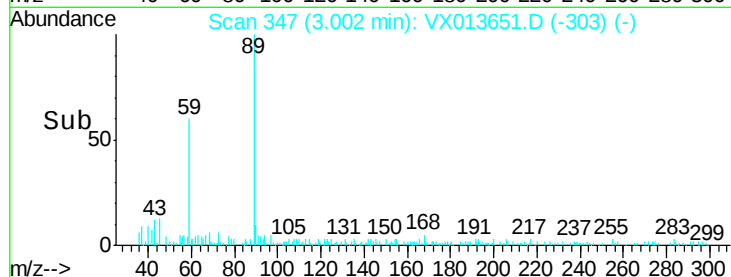
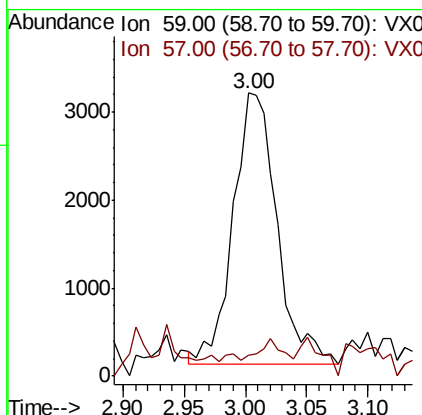
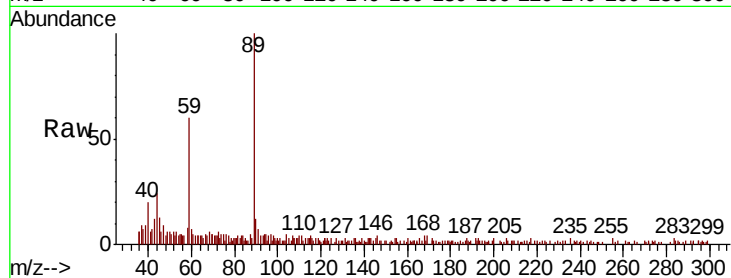


#11

Tert butyl alcohol  
Concen: 4.062 ug/l  
RT: 3.00 min Scan# 347  
Delta R.T. -0.03 min  
Lab File: VX013651.D  
Acq: 27 Nov 2019 14:37

Instrument :  
MSVOA\_X  
ClientSampleId :  
48BR-20191120DL

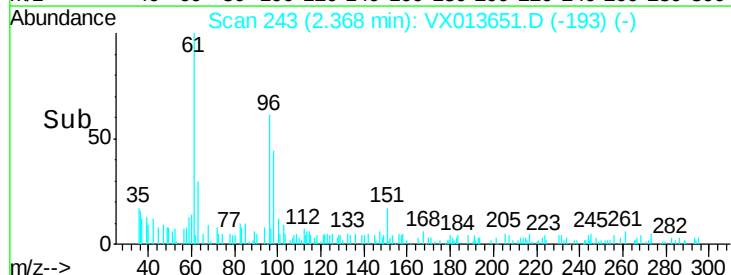
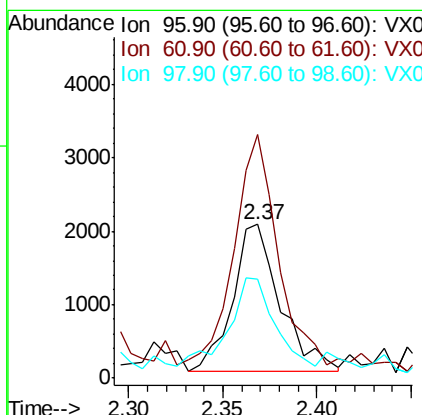
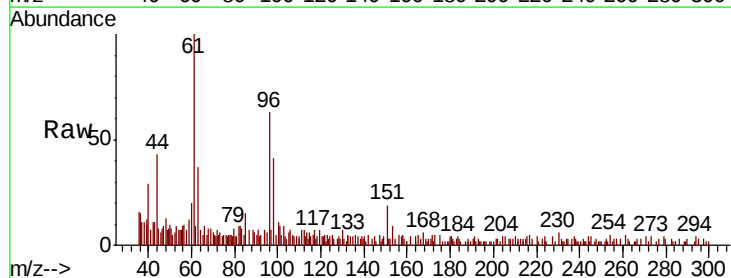
Tot Ion: 59 Resp: 7687  
Ion Ratio Lower Upper  
59 100  
57 3.5 7.8 11.6#

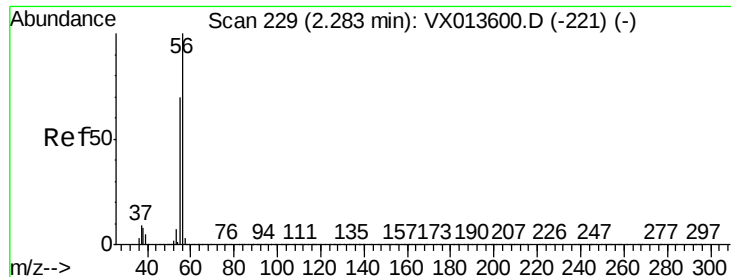


#12

1,1-Dichloroethene  
Concen: 0.557 ug/l  
RT: 2.37 min Scan# 243  
Delta R.T. 0.01 min  
Lab File: VX013651.D  
Acq: 27 Nov 2019 14:37

Tgt Ion: 96 Resp: 3500  
Ion Ratio Lower Upper  
96 100  
61 153.0 126.6 190.0  
98 54.4 50.6 76.0





#13

Acrolein

Concen: 6.522 ug/l

RT: 2.28 min Scan# 229

Delta R.T. 0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

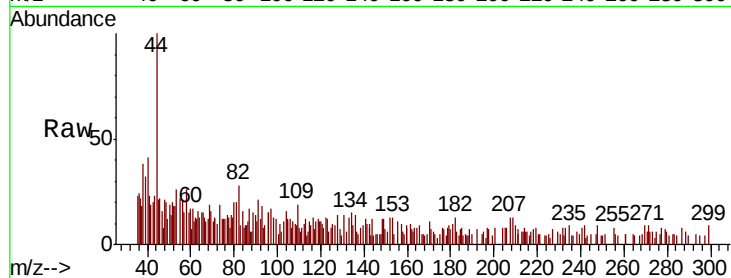
48BR-20191120DL

Tot Ion: 56 Resp: 672

Ion Ratio Lower Upper

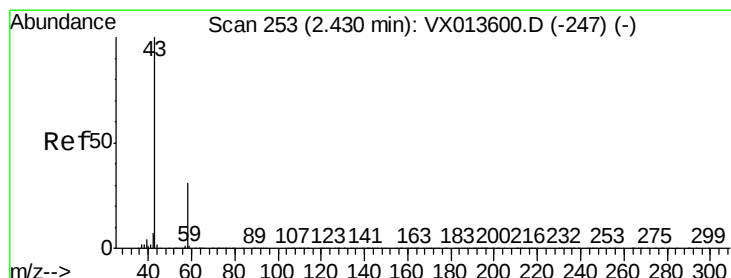
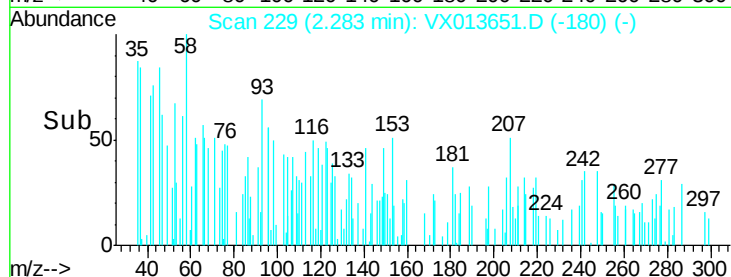
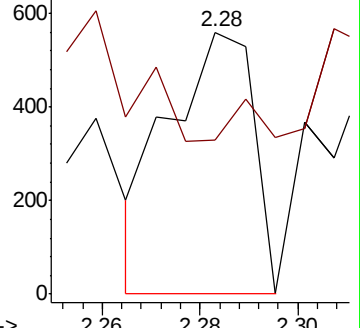
56 100

55 0.0 56.2 84.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 0.836 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.00 min

Lab File: VX013651.D

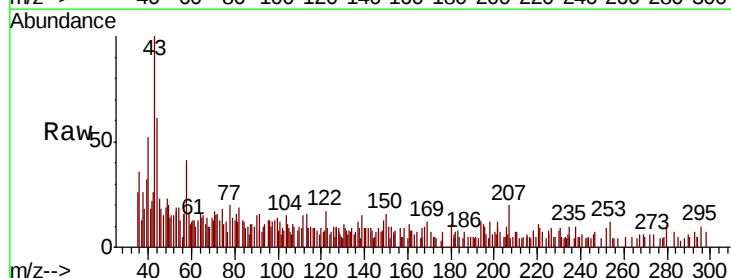
Acq: 27 Nov 2019 14:37

Tgt Ion: 43 Resp: 3163

Ion Ratio Lower Upper

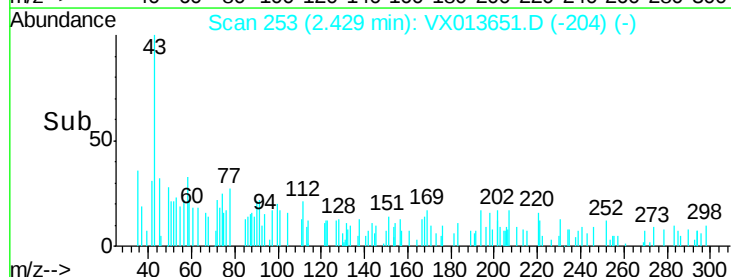
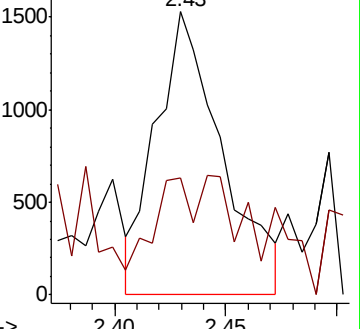
43 100

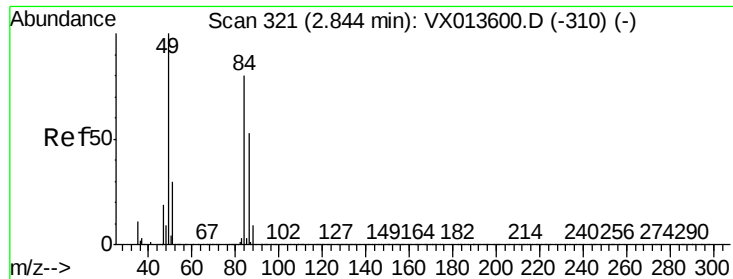
58 44.5 24.6 36.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

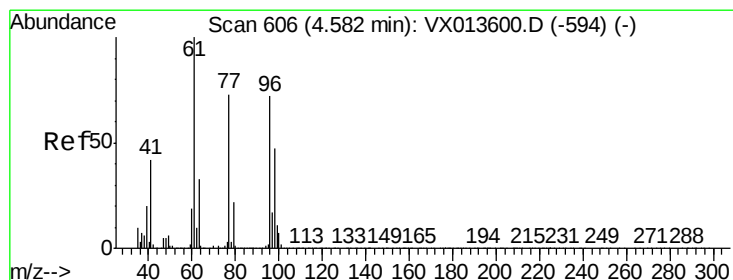
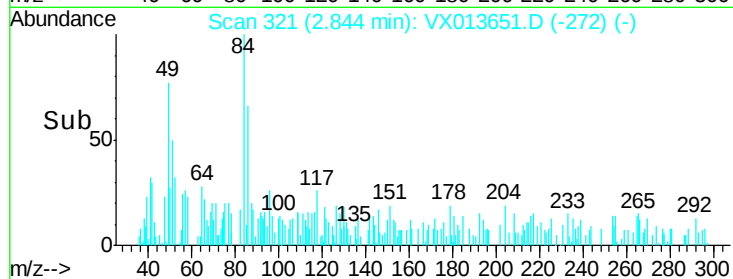
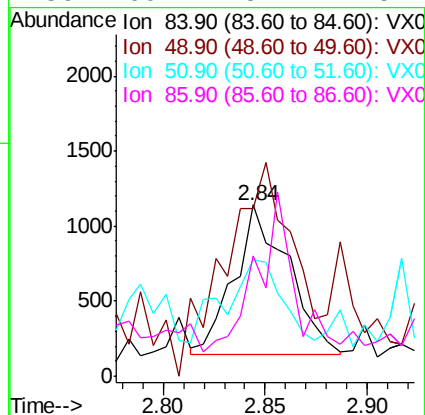
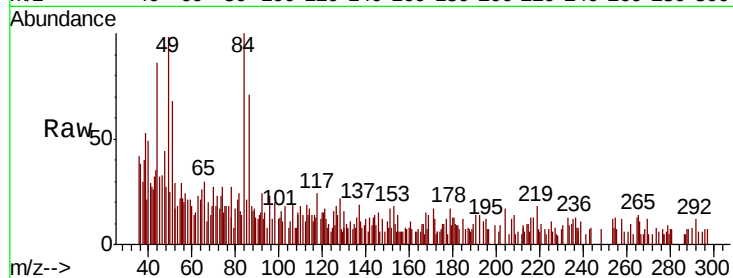




#20  
Methvlene Chloride  
Concen: 0.253 ug/l  
RT: 2.84 min Scan# 321  
Delta R.T. -0.00 min  
Lab File: VX013651.D  
Acq: 27 Nov 2019 14:37

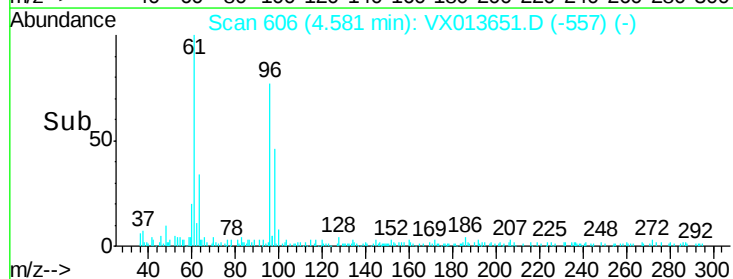
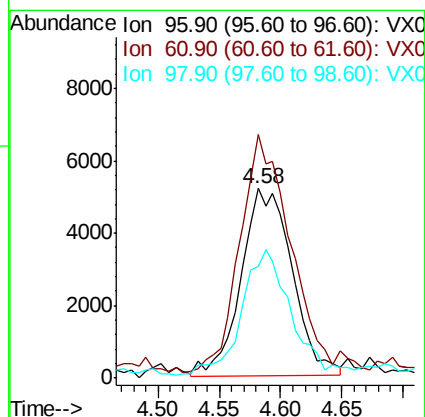
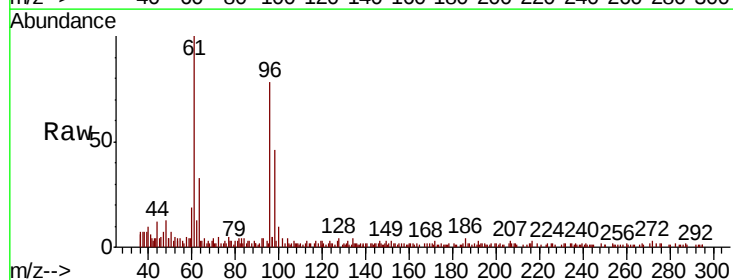
Instrument :  
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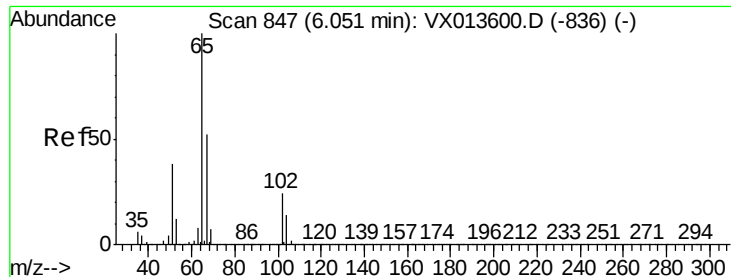
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 84    | Resp: | 1840   |
| Ion      | Ratio | Lower | Upper  |
| 84       | 100   |       |        |
| 49       | 70.1  | 99.7  | 149.5# |
| 51       | 65.8  | 29.9  | 44.9#  |
| 86       | 69.7  | 52.2  | 78.4   |



#27  
cis-1,2-Dichloroethene  
Concen: 1.908 ug/l  
RT: 4.58 min Scan# 606  
Delta R.T. -0.00 min  
Lab File: VX013651.D  
Acq: 27 Nov 2019 14:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 96    | Resp: | 15000 |
| Ion      | Ratio | Lower | Upper |
| 96       | 100   |       |       |
| 61       | 124.6 | 0.0   | 286.4 |
| 98       | 67.3  | 0.0   | 127.4 |





#33

1,2-Dichloroethane-d4

Concen: 49.735 ug/l

RT: 6.05 min Scan# 847

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

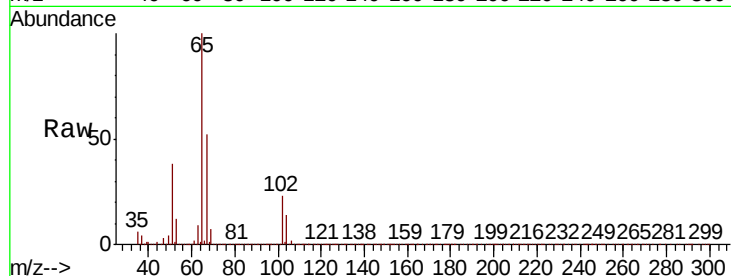
48BR-20191120DL

Tot Ion: 65 Resp: 381284

Ion Ratio Lower Upper

65 100

67 52.3 0.0 104.4



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

6.05

150000

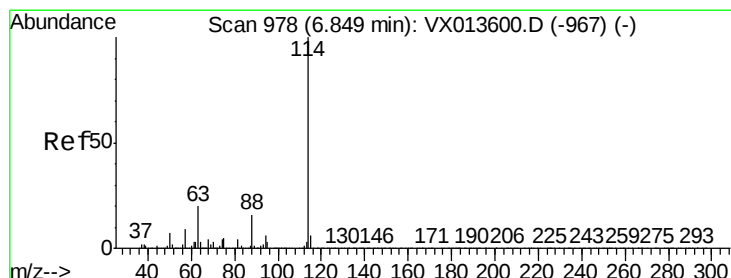
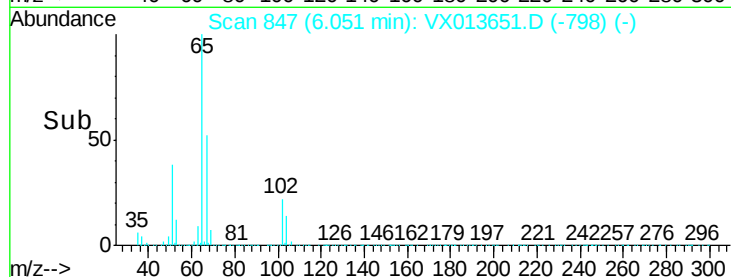
100000

50000

0

Time-->

5.90 6.00 6.10 6.20



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

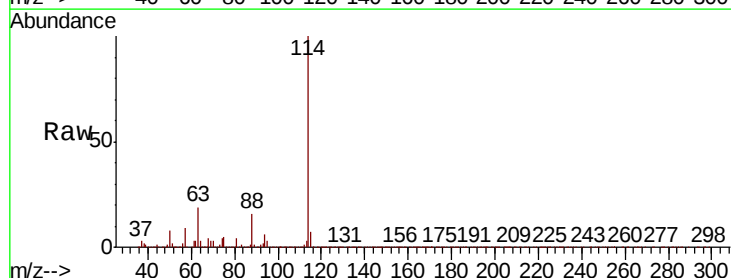
Tgt Ion: 114 Resp: 1047285

Ion Ratio Lower Upper

114 100

63 19.1 0.0 39.6

88 15.7 0.0 31.4



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

600000

500000

400000

300000

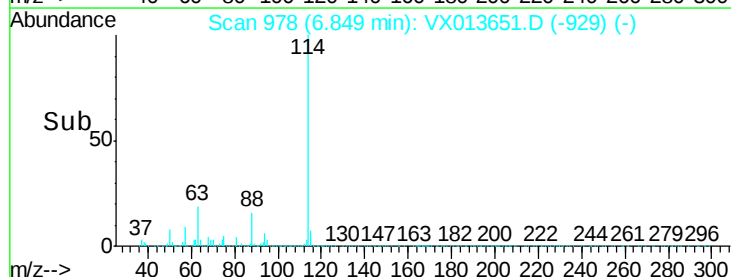
200000

100000

0

Time-->

6.70 6.80 6.90 7.00





#35

Dibromofluoromethane

Concen: 48.759 ug/l

RT: 5.49 min Scan# 755

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

48BR-20191120DL

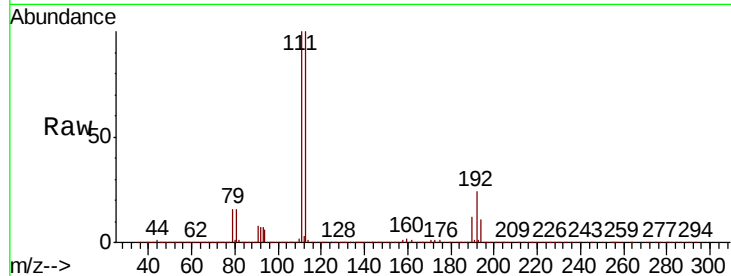
Tot Ion:113 Resp: 315687

Ion Ratio Lower Upper

113 100

111 101.1 83.6 125.4

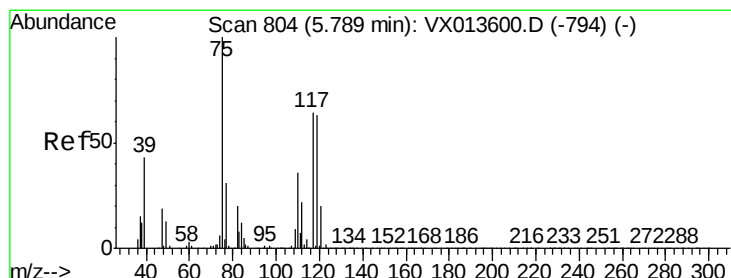
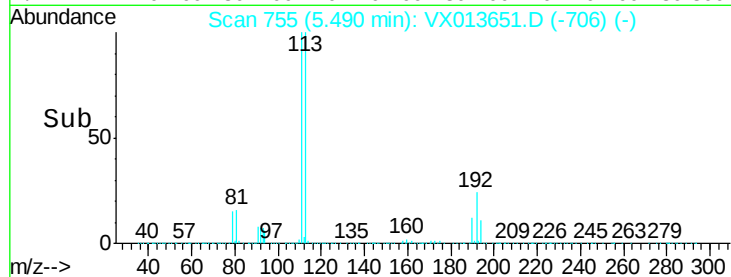
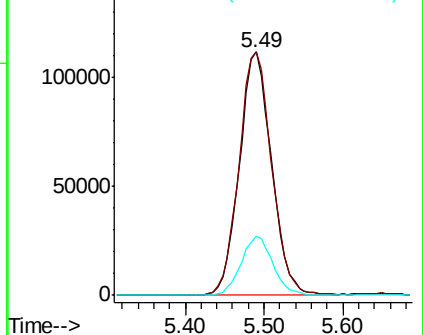
192 23.8 19.2 28.8



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: 4.508 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

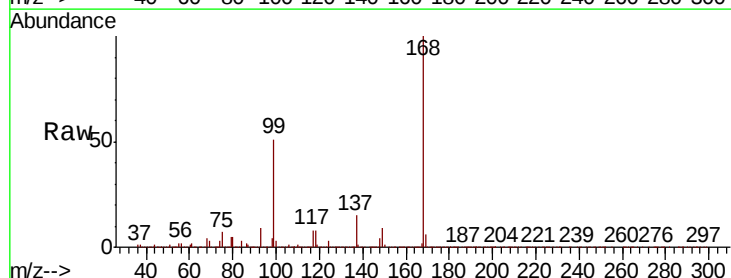
Tgt Ion: 75 Resp: 42854

Ion Ratio Lower Upper

75 100

110 11.0 18.1 54.1#

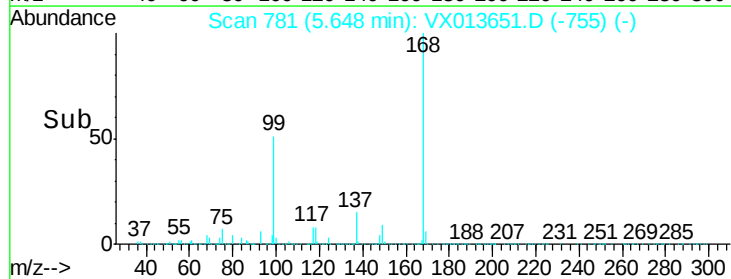
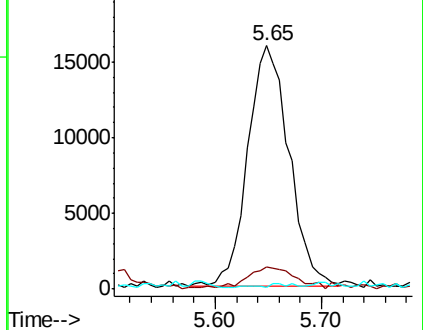
77 0.3 24.5 36.7#

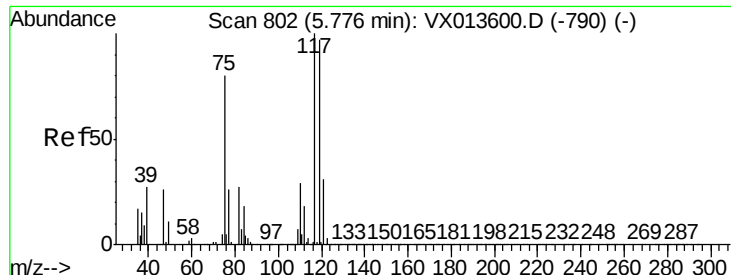


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.599 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

48BR-20191120DL

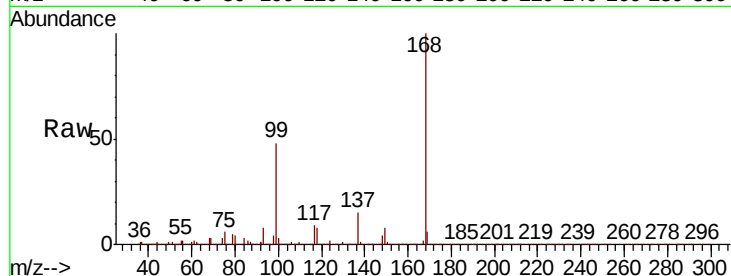
Tot Ion:117 Resp: 57850

Ion Ratio Lower Upper

117 100

119 3.3 77.5 116.3#

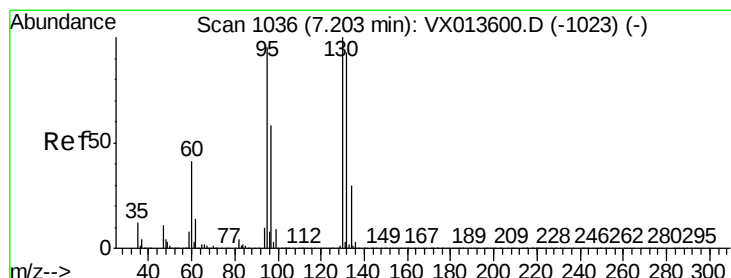
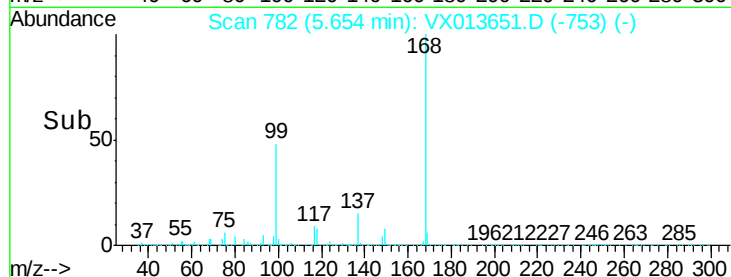
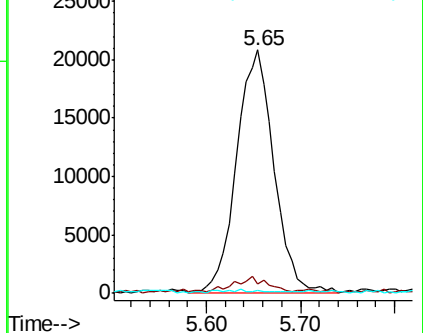
121 1.3 25.0 37.6#



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



#44

Trichloroethene

Concen: 56.869 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. 0.01 min

Lab File: VX013651.D

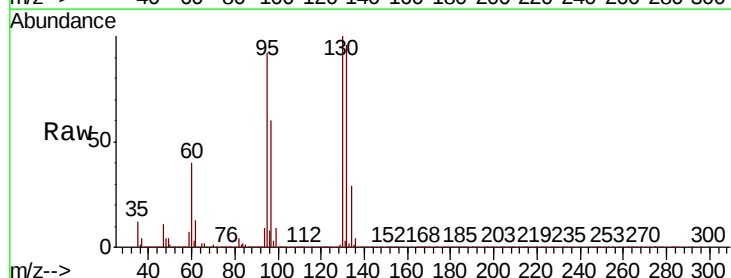
Acq: 27 Nov 2019 14:37

Tgt Ion:130 Resp: 451907

Ion Ratio Lower Upper

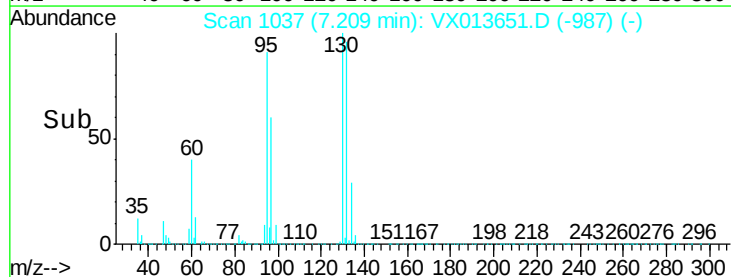
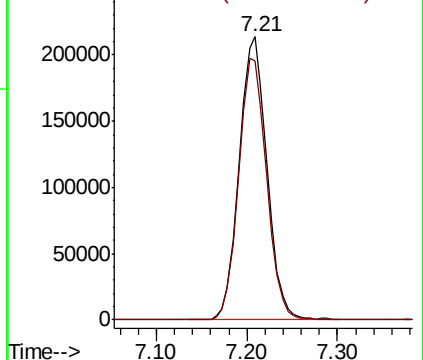
130 100

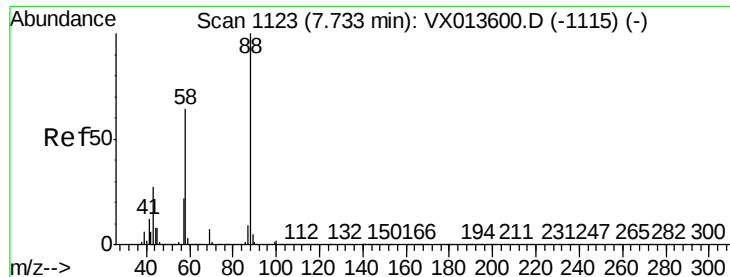
95 91.5 0.0 190.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0





#49

1,4-Dioxane

Concen: 1.896 ug/l

RT: 7.73 min Scan# 1122

Delta R.T. -0.01 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

48BR-20191120DL

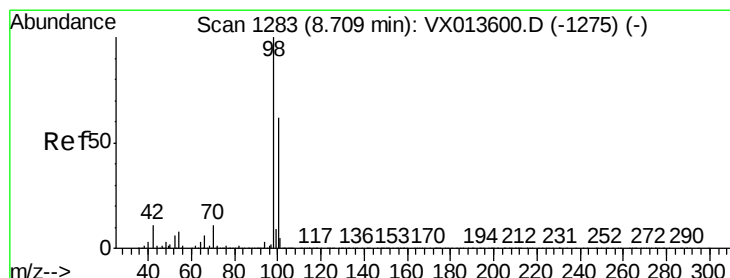
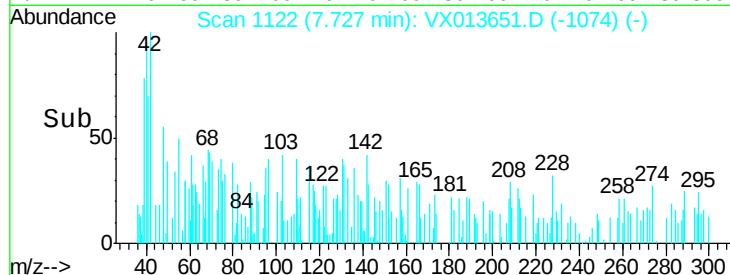
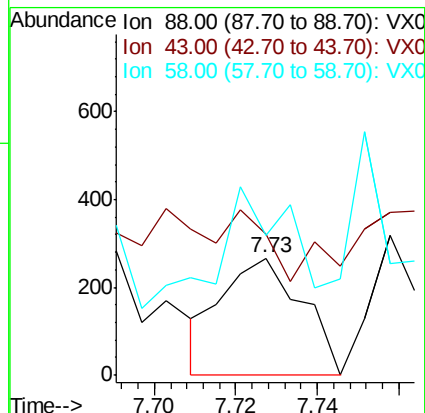
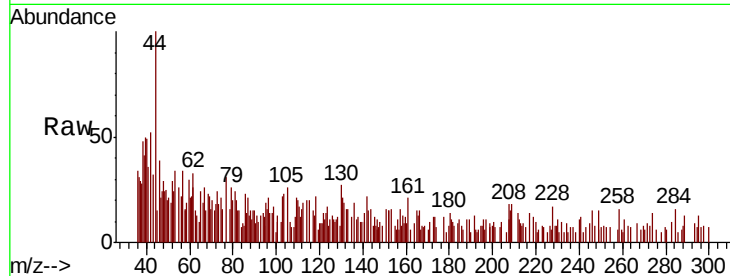
Tot Ion: 88 Resp: 362

Ion Ratio Lower Upper

88 100

43 0.0 25.8 38.6#

58 58.0 54.6 82.0



#50

Toluene-d8

Concen: 49.457 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX013651.D

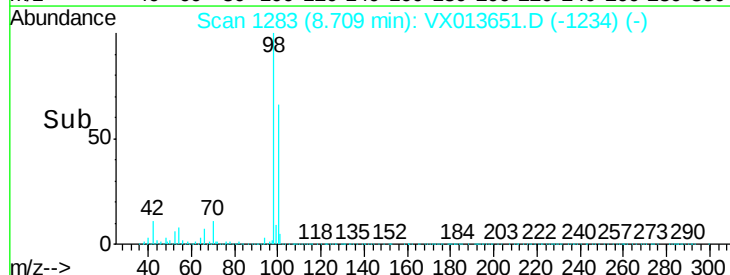
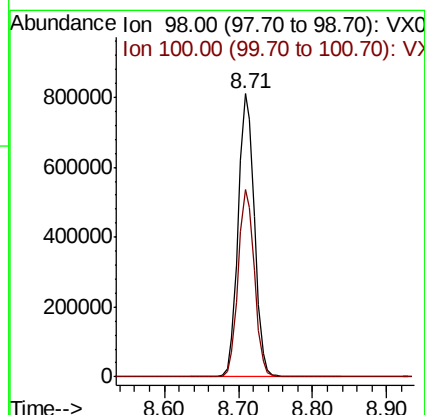
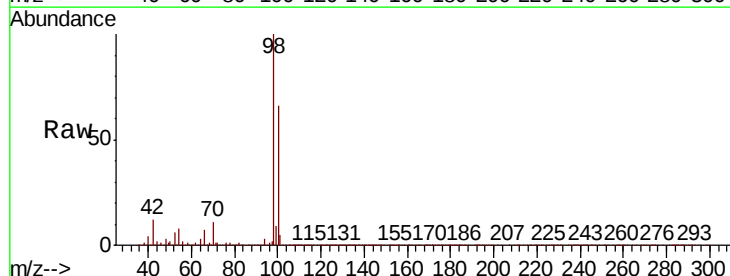
Acq: 27 Nov 2019 14:37

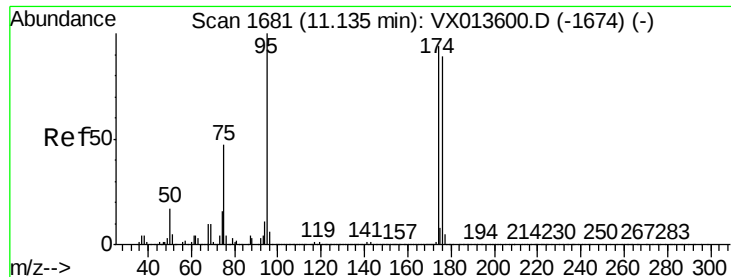
Tgt Ion: 98 Resp: 1247573

Ion Ratio Lower Upper

98 100

100 66.0 53.1 79.7





#62

4-Bromofluorobenzene

Concen: 46.021 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

48BR-20191120DL

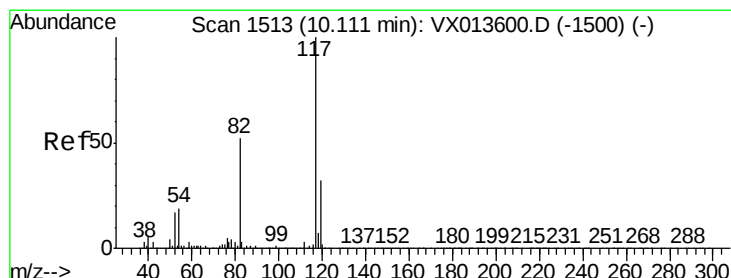
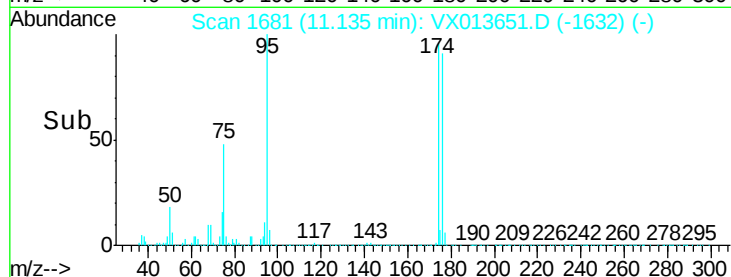
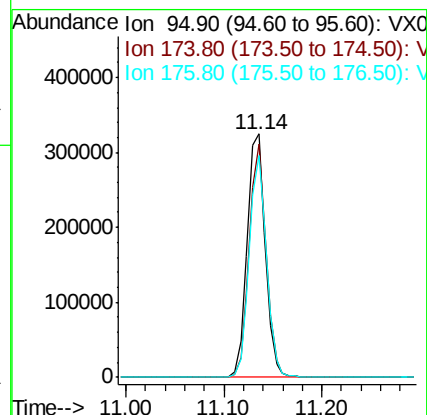
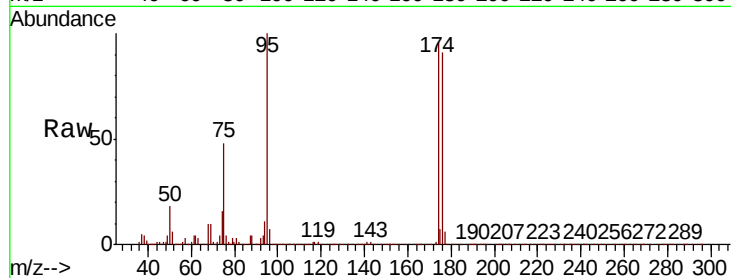
Tot Ion: 95 Resp: 418615

Ion Ratio Lower Upper

95 100

174 90.1 0.0 180.0

176 87.2 0.0 173.6



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

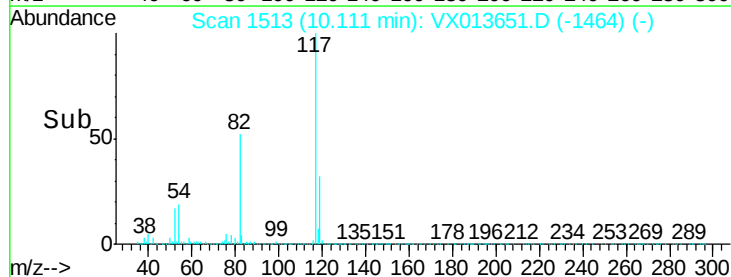
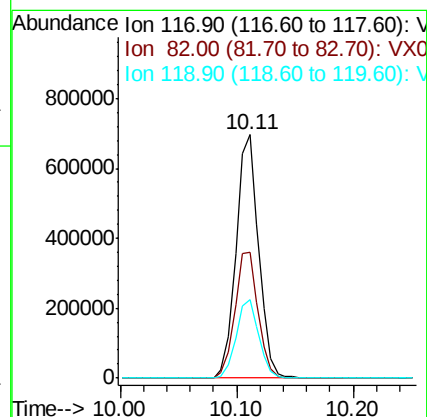
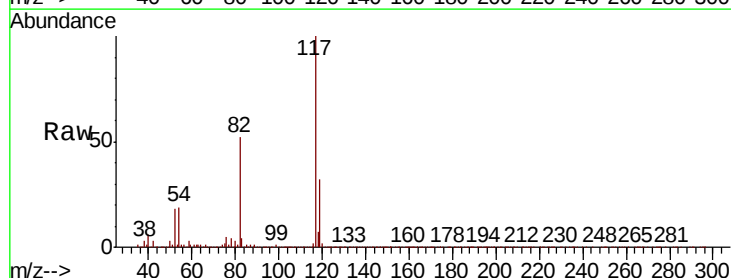
Tgt Ion: 117 Resp: 936717

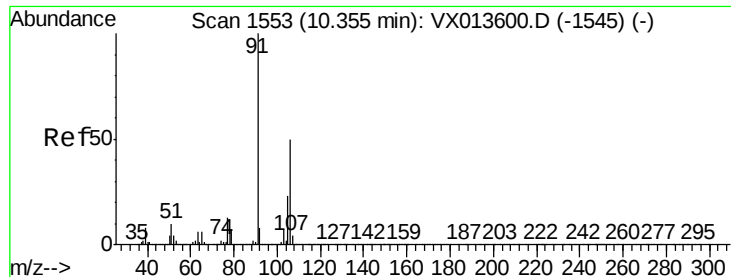
Ion Ratio Lower Upper

117 100

82 51.9 41.8 62.8

119 32.3 25.8 38.8





#68

m/p-Xvlenes

Concen: 0.518 ug/l

RT: 10.35 min Scan# 1553

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

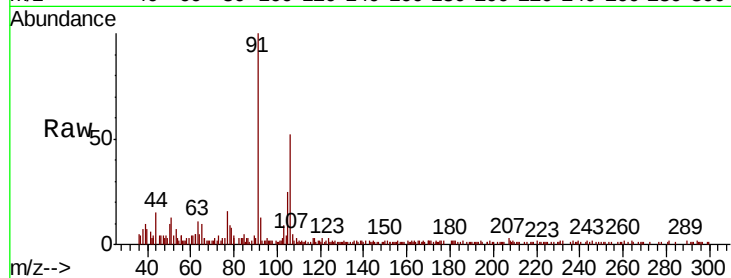
48BR-20191120DL

Tot Ion:106 Resp: 6626

Ion Ratio Lower Upper

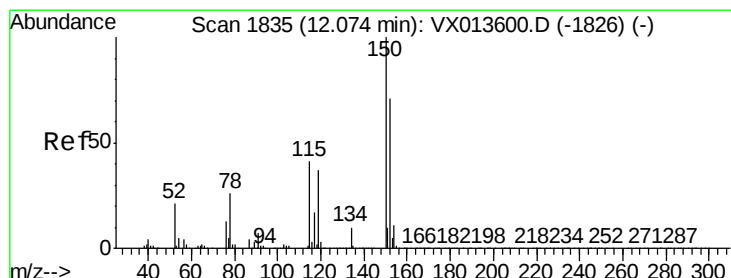
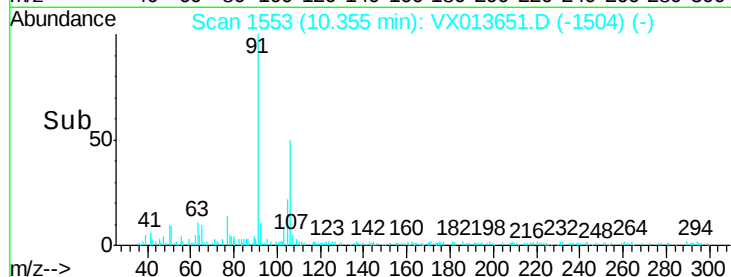
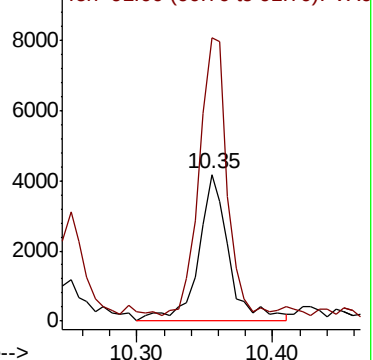
106 100

91 171.7 159.0 238.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

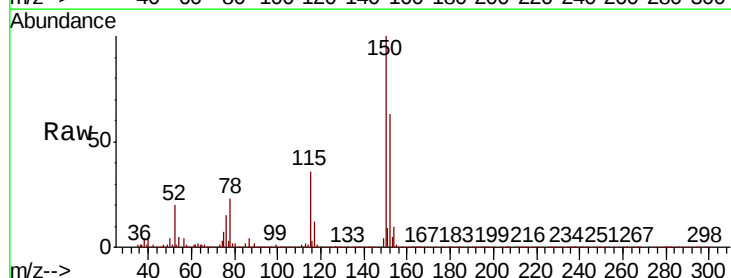
Tgt Ion:152 Resp: 415099

Ion Ratio Lower Upper

152 100

115 56.2 38.4 115.1

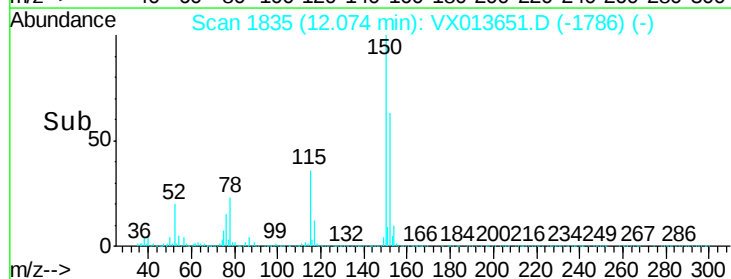
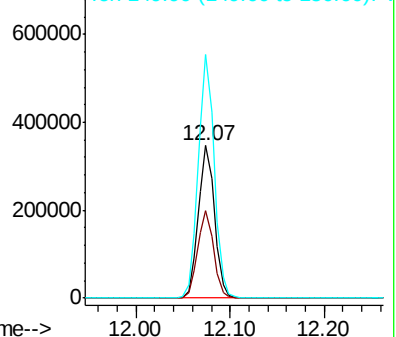
150 157.6 0.0 346.8

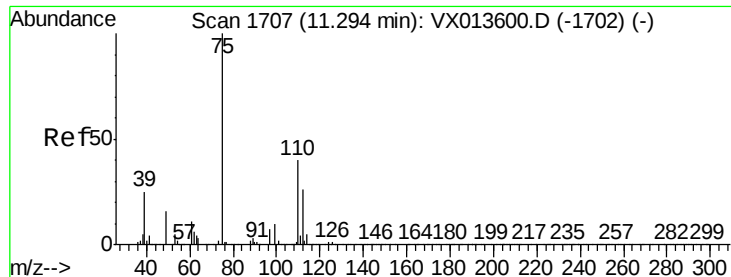


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 21.956 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

Instrument :

MSVOA\_X

ClientSampleId :

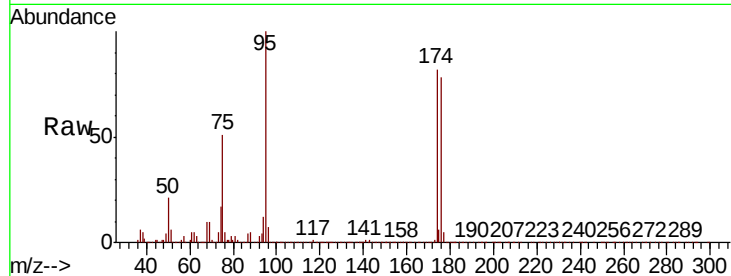
48BR-20191120DL

Tot Ion: 75 Resp: 204989

Ion Ratio Lower Upper

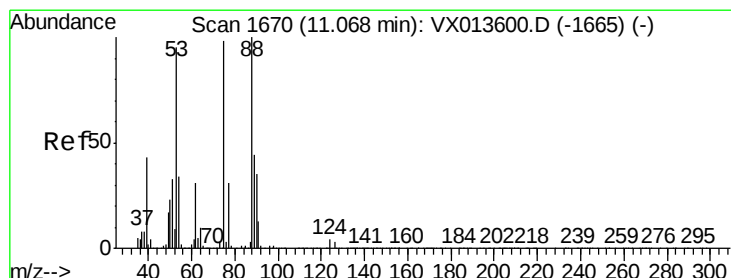
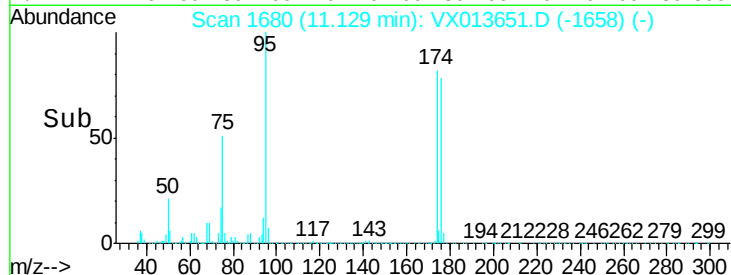
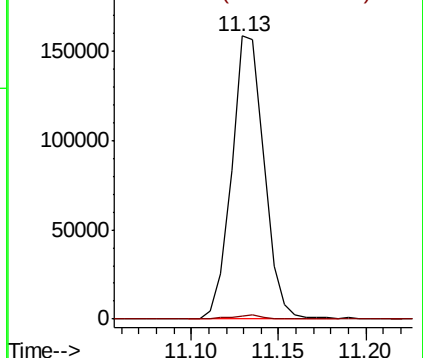
75 100

77 1.4 19.1 57.5#



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: 60.068 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX013651.D

Acq: 27 Nov 2019 14:37

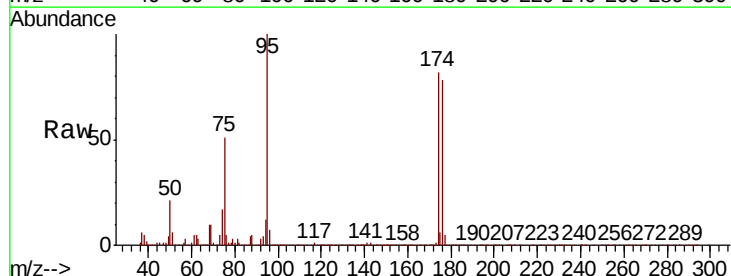
Tgt Ion: 75 Resp: 204989

Ion Ratio Lower Upper

75 100

53 0.2 78.2 117.2#

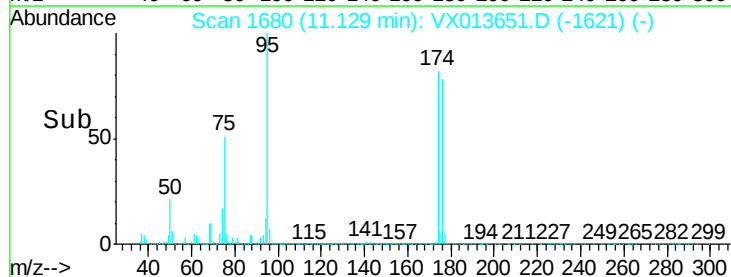
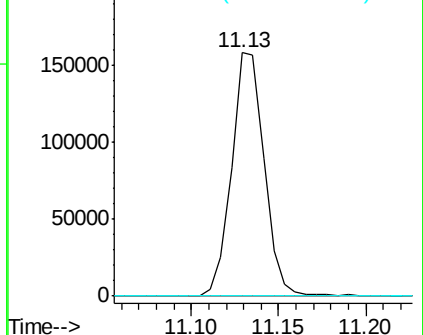
89 0.1 35.4 53.2#

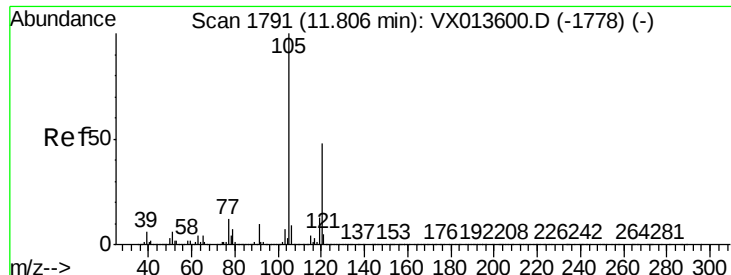


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#84  
 1,2,4-Trimethylbenzene  
 Concen: 0.230 ug/l  
 RT: 11.81 min Scan# 1791  
 Delta R.T. -0.00 min  
 Lab File: VX013651.D  
 Acq: 27 Nov 2019 14:37

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 48BR-20191120DL

Tot Ion:105 Resp: 5568  
 Ion Ratio Lower Upper  
 105 100  
 120 48.4 23.1 69.3

