

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX120619\  
 Data File : VX013830.D  
 Acq On : 07 Dec 2019 03:54  
 Operator : JC/SP  
 Sample : K6185-01 20X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 48 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE103D1-20191204DL

Quant Time: Dec 07 05:45:10 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

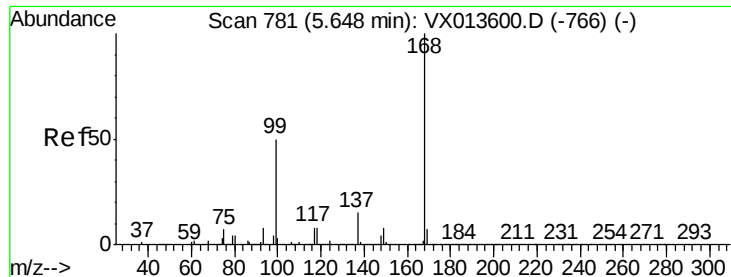
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 613742   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 933856   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 834753   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 365120   | 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   | 341258   | 47.90 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.80% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 278035   | 48.16 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.32% |          |
| 50) Toluene-d8              | 8.71  | 98   | 1106797  | 49.21 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.42% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 371698   | 45.83 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.66% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 9) 1,1,2-Trichlorotrifluoroet  | 2.37  | 101  | 2323     | 0.397  | ug/l # | 76     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 9677     | 5.503  | ug/l # | 87     |
| 12) 1,1-Dichloroethene         | 2.36  | 96   | 1496     | 0.256  | ug/l # | 68     |
| 13) Acrolein                   | 2.25  | 56   | 899      | 6.750  | ug/l # | 48     |
| 15) Acrylonitrile              | 3.11  | 53   | 1044     | 0.288  | ug/l # | 53     |
| 16) Acetone                    | 2.43  | 43   | 6637     | 1.887  | ug/l   | 99     |
| 20) Methylene Chloride         | 2.84  | 84   | 3111     | 0.460  | ug/l # | 75     |
| 25) 2-Butanone                 | 4.66  | 43   | 1276     | 0.244  | ug/l   | 99     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 40314    | 4.756  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 52625    | 6.732  | ug/l # | 15     |
| 41) Methacrylonitrile          | 5.02  | 41   | 1263     | 0.242  | ug/l # | 43     |
| 44) Trichloroethene            | 7.21  | 130  | 223759   | 31.579 | ug/l   | 100    |
| 49) 1,4-Dioxane                | 7.71  | 88   | 135      | 0.793  | ug/l # | 1      |
| 64) Tetrachloroethene          | 9.33  | 164  | 1832     | 0.294  | ug/l   | 93     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 181955   | 22.157 | ug/l # | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 181955   | 60.617 | ug/l # | 11     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Instrument :

MSVOA\_X

ClientSampleId :

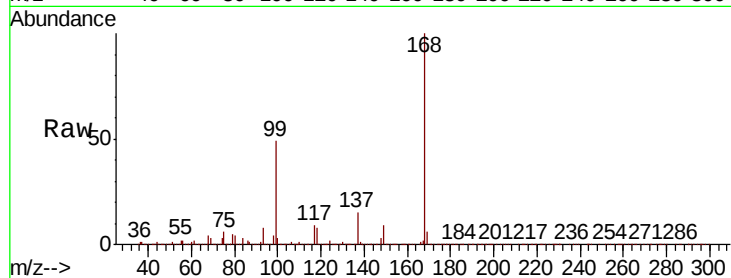
RE103D1-20191204DL

Tot Ion:168 Resp: 613742

Ion Ratio Lower Upper

168 100

99 49.1 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

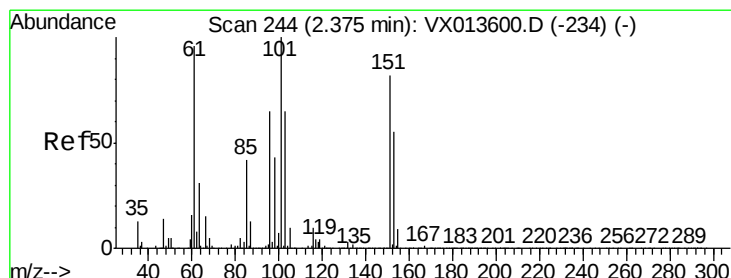
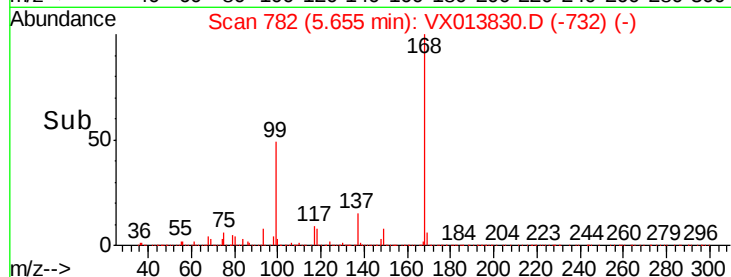
150000

100000

50000

0

Time-->



#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.397 ug/l

RT: 2.37 min Scan# 244

Delta R.T. -0.00 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

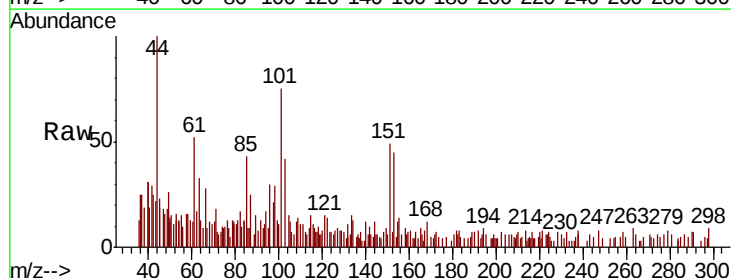
Tgt Ion:101 Resp: 2323

Ion Ratio Lower Upper

101 100

85 54.4 33.9 50.9#

151 104.4 64.2 96.2#



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V

2.37

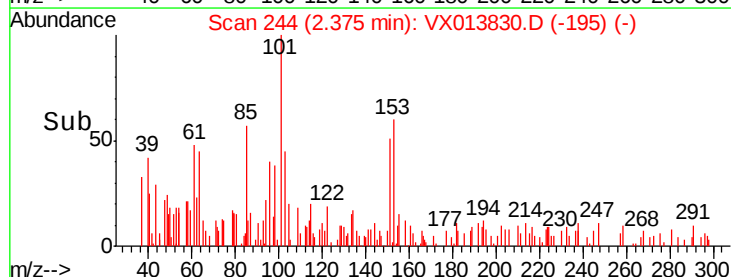
1500

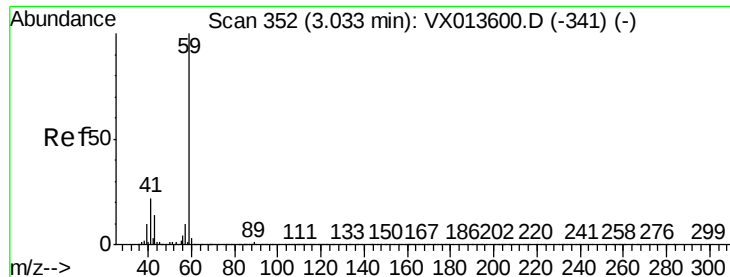
1000

500

0

Time-->



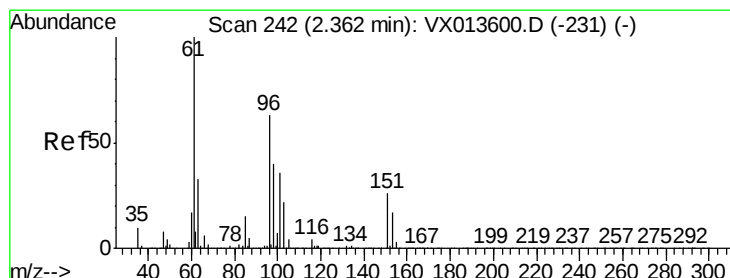
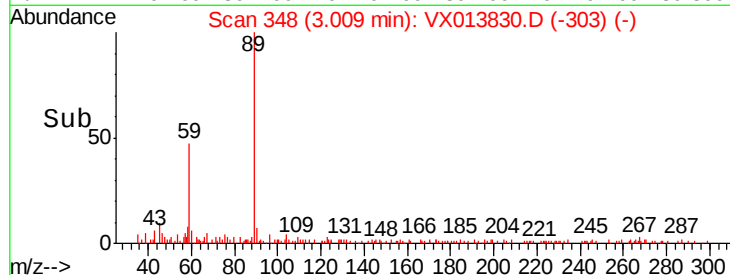
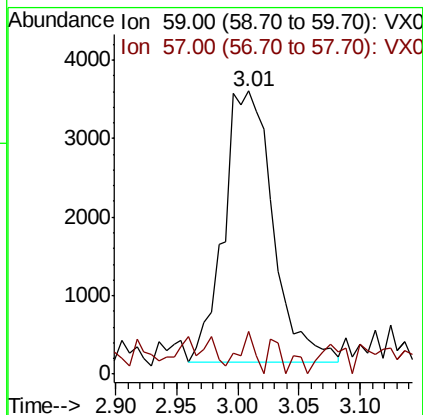
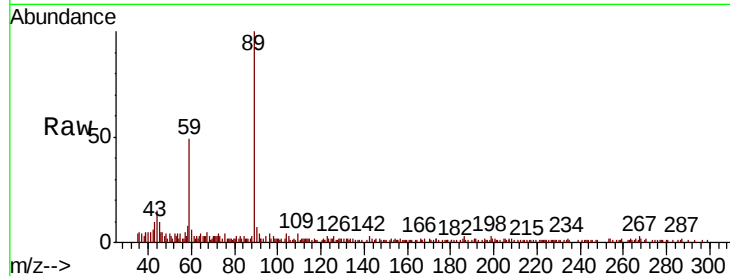


#11

Tert butyl alcohol  
Concen: 5.503 ug/l  
RT: 3.01 min Scan# 348  
Delta R.T. -0.02 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE103D1-20191204DL

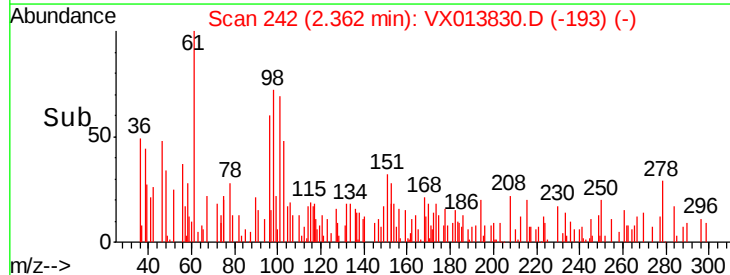
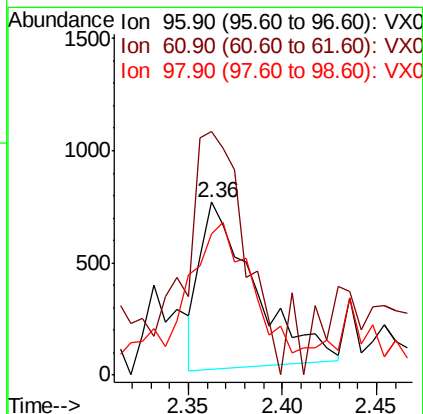
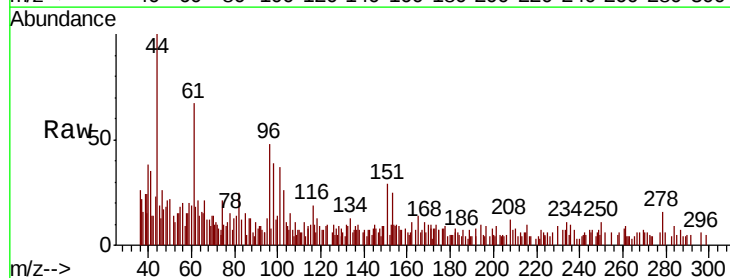
Tot Ion: 59 Resp: 9677  
Ion Ratio Lower Upper  
59 100  
57 4.9 7.8 11.6#

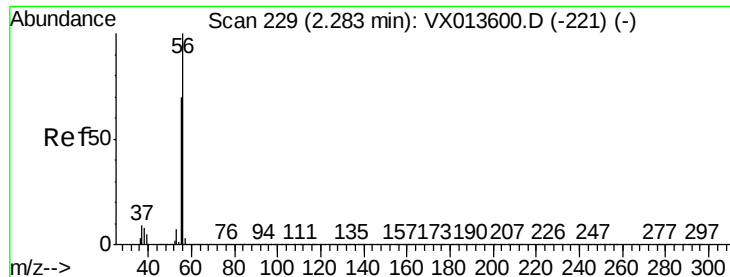


#12

1,1-Dichloroethene  
Concen: 0.256 ug/l  
RT: 2.36 min Scan# 242  
Delta R.T. -0.00 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Tgt Ion: 96 Resp: 1496  
Ion Ratio Lower Upper  
96 100  
61 107.6 126.6 190.0#  
98 75.2 50.6 76.0

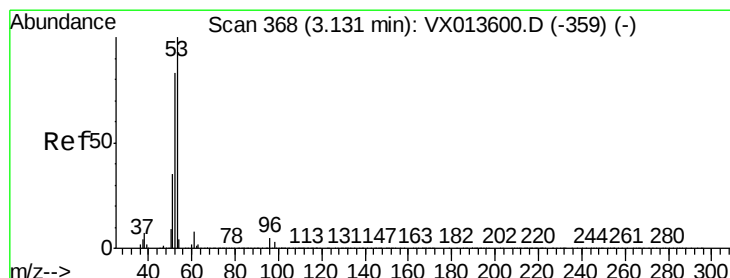
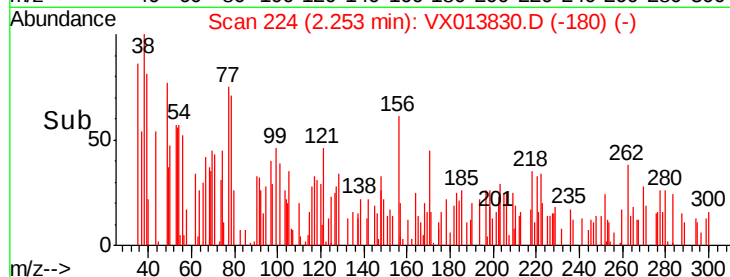
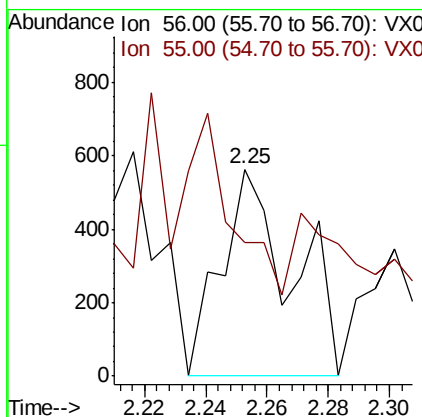
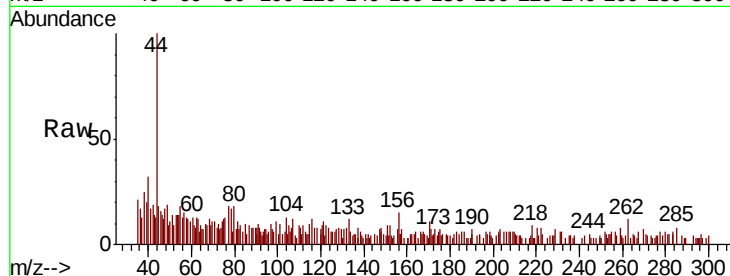




#13  
Acrolein  
Concen: 6.750 ug/l  
RT: 2.25 min Scan# 224  
Delta R.T. -0.03 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

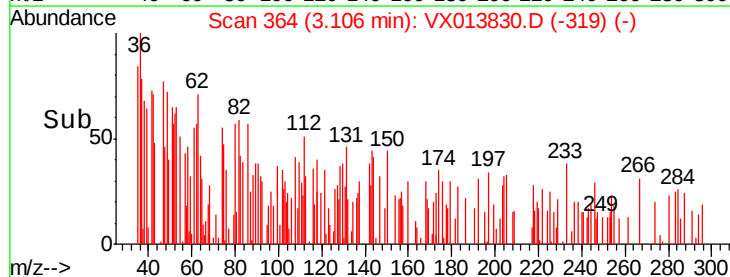
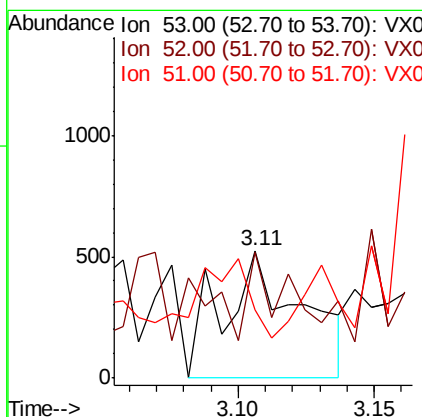
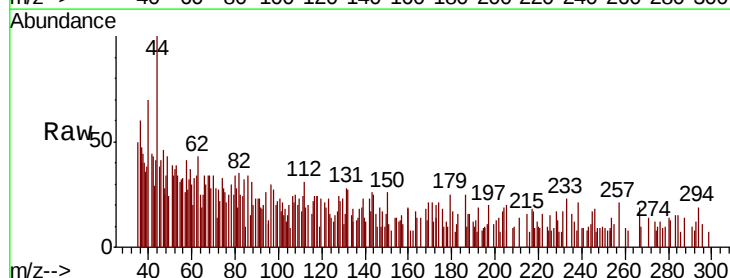
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE103D1-20191204DL

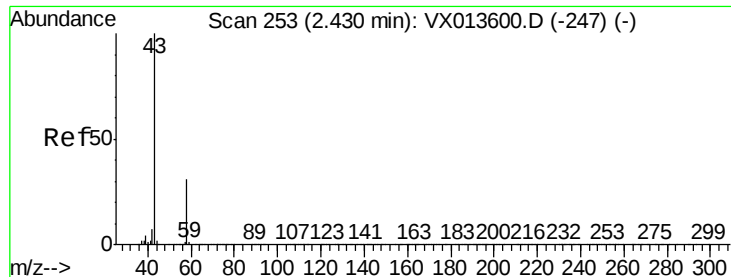
Tot Ion: 56 Resp: 899  
Ion Ratio Lower Upper  
56 100  
55 27.3 56.2 84.4#



#15  
Acrylonitrile  
Concen: 0.288 ug/l  
RT: 3.11 min Scan# 364  
Delta R.T. -0.02 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Tgt Ion: 53 Resp: 1044  
Ion Ratio Lower Upper  
53 100  
52 32.9 66.2 99.2#  
51 52.9 29.0 43.6#





#16

Acetone

Concen: 1.887 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.00 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Instrument :

MSVOA\_X

ClientSampleId :

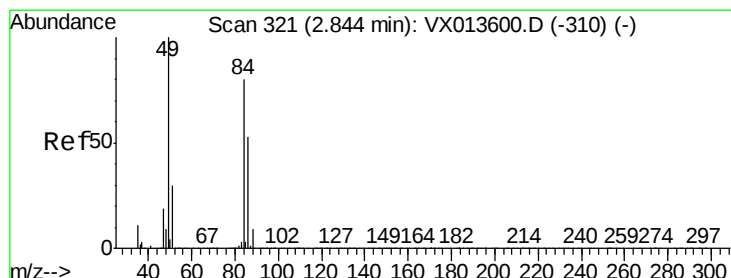
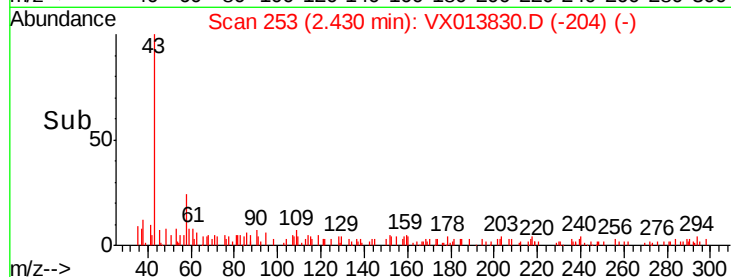
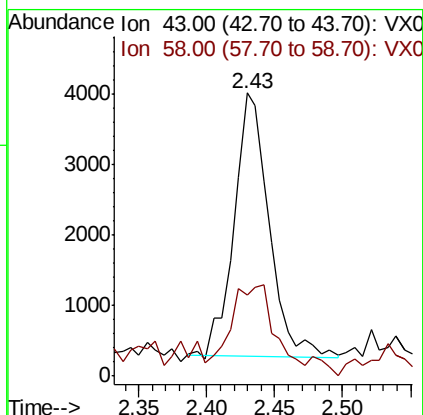
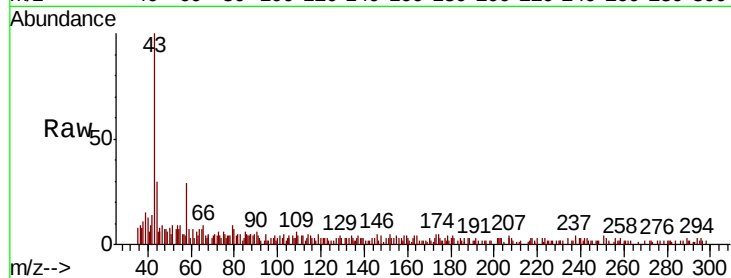
RE103D1-20191204DL

Tot Ion: 43 Resp: 6637

Ion Ratio Lower Upper

43 100

58 31.3 24.6 36.8



#20

Methylene Chloride

Concen: 0.460 ug/l

RT: 2.84 min Scan# 321

Delta R.T. -0.00 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Tgt Ion: 84 Resp: 3111

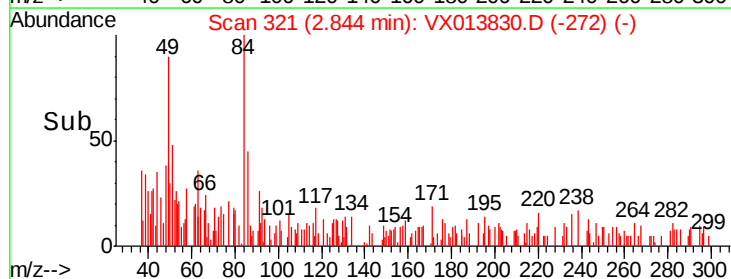
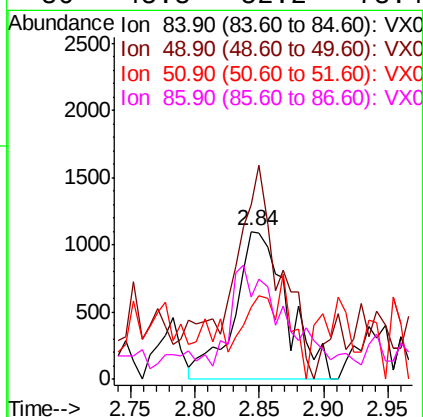
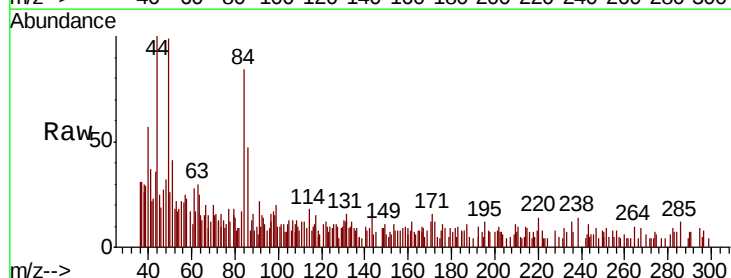
Ion Ratio Lower Upper

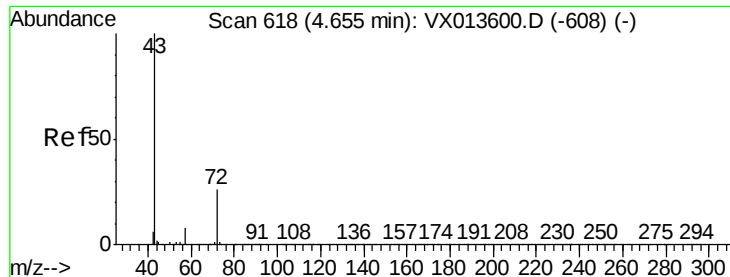
84 100

49 90.9 99.7 149.5#

51 29.5 29.9 44.9#

86 45.8 52.2 78.4#

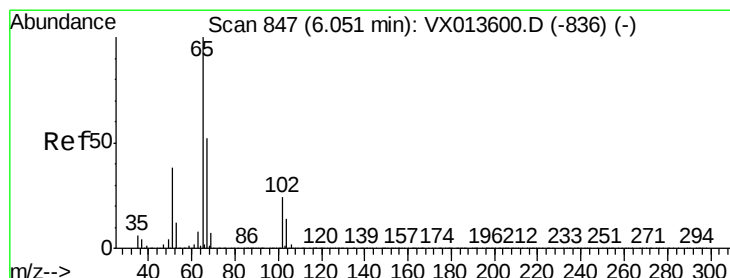
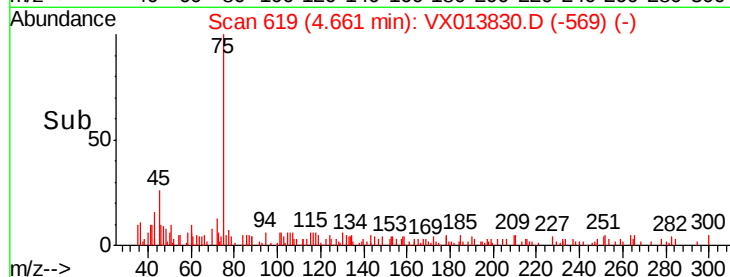
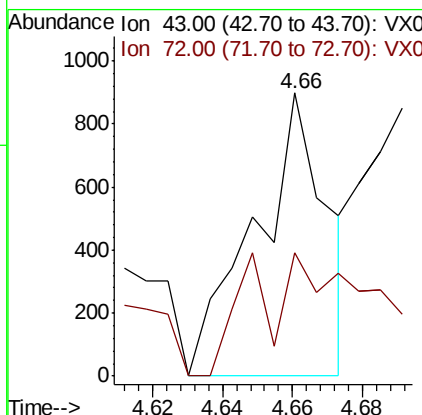
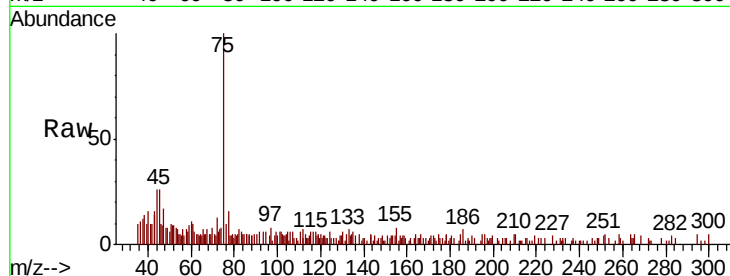




#25  
2-Butanone  
Concen: 0.244 ug/l  
RT: 4.66 min Scan# 619  
Delta R.T. 0.01 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

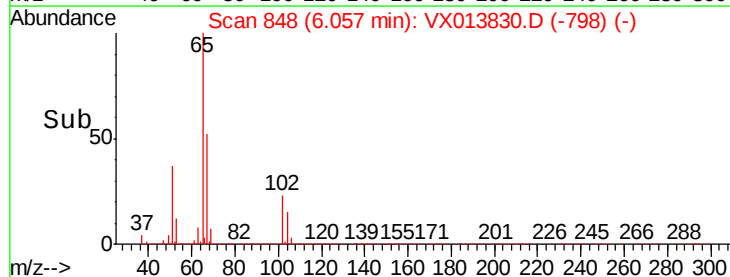
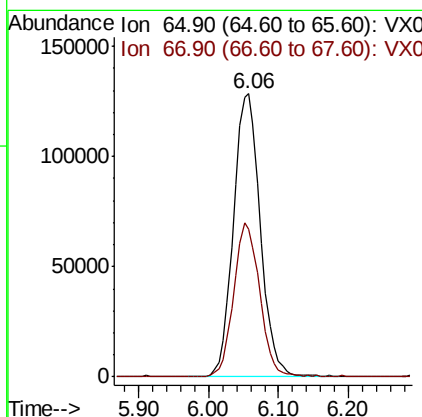
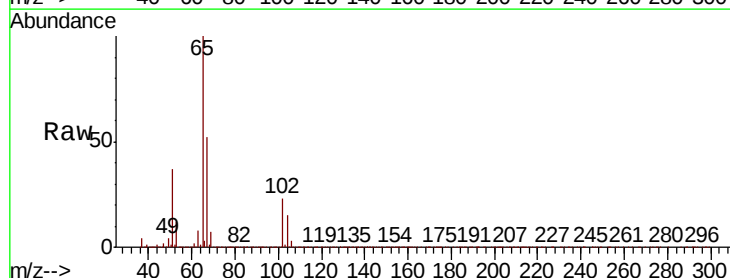
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE103D1-20191204DL

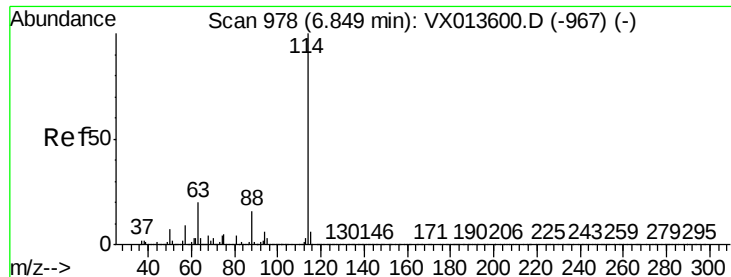
Tot Ion: 43 Resp: 1276  
Ion Ratio Lower Upper  
43 100  
72 26.3 20.6 31.0



#33  
1,2-Dichloroethane-d4  
Concen: 47.902 ug/l  
RT: 6.06 min Scan# 848  
Delta R.T. 0.01 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Tgt Ion: 65 Resp: 341258  
Ion Ratio Lower Upper  
65 100  
67 52.7 0.0 104.4

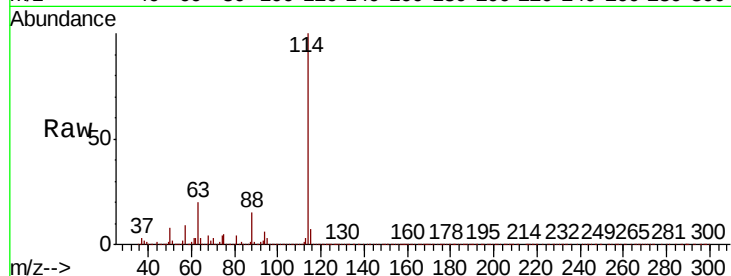




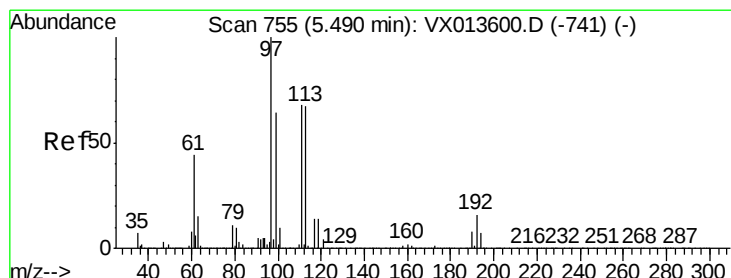
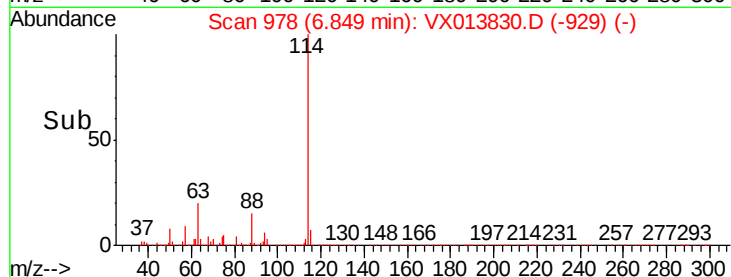
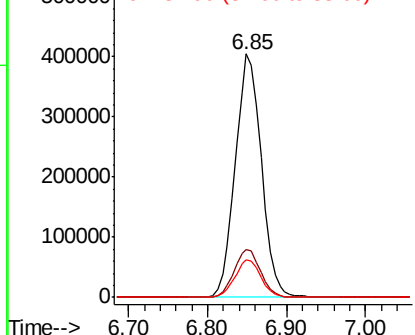
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.85 min Scan# 978  
Delta R.T. -0.00 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE103D1-20191204DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 19.8  | 0.0   | 39.6  |
| 88      | 15.4  | 0.0   | 31.4  |

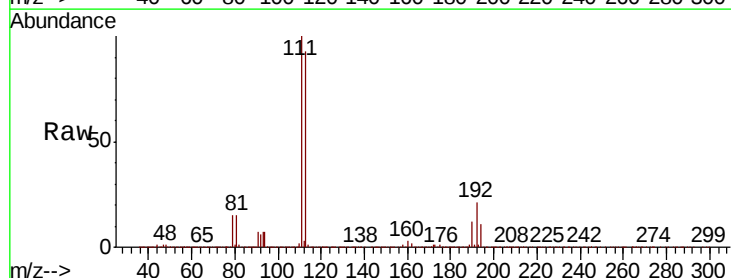


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VX0  
Ion 87.90 (87.60 to 88.60): VX0

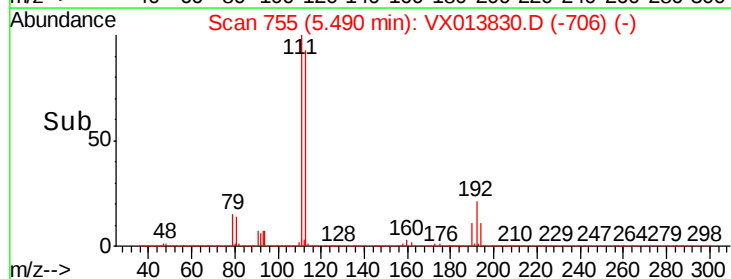
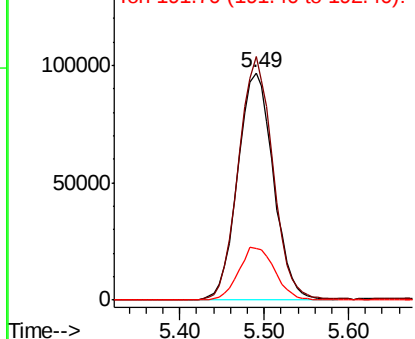


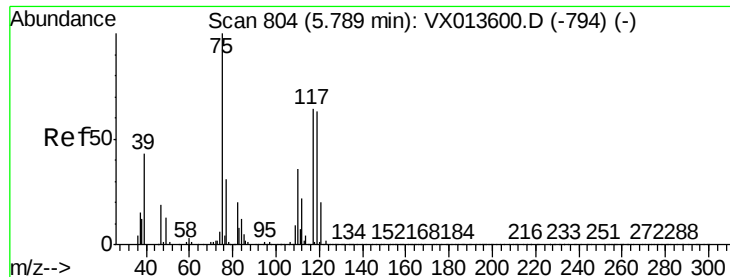
#35  
Dibromofluoromethane  
Concen: 48.160 ug/l  
RT: 5.49 min Scan# 755  
Delta R.T. -0.00 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.8 | 83.6  | 125.4 |
| 192     | 23.7  | 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: 4.756 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Instrument :

MSVOA\_X

ClientSampleId :

RE103D1-20191204DL

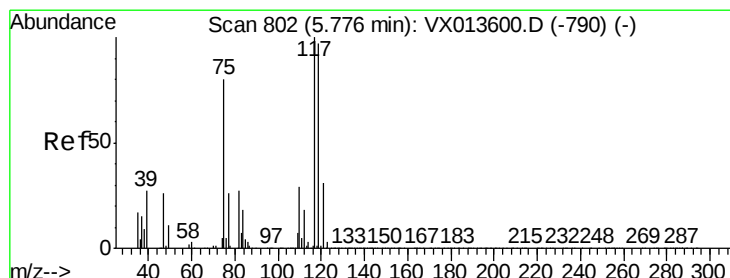
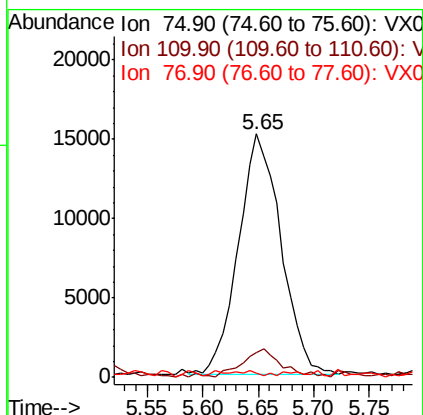
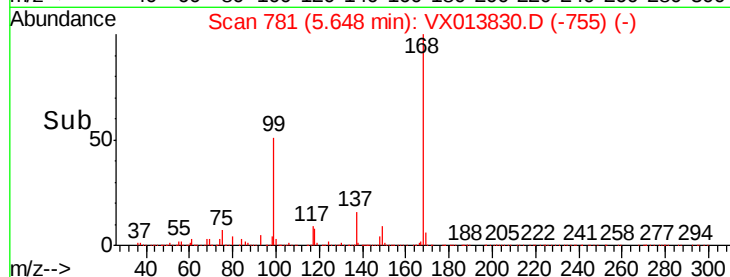
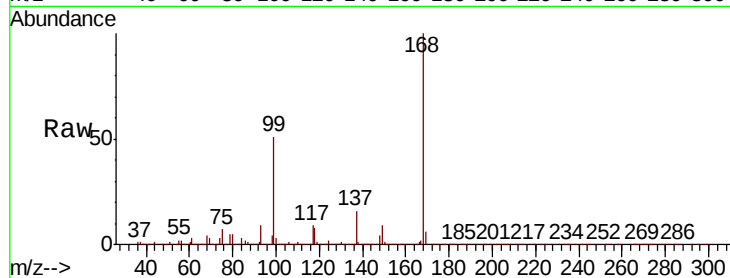
Tot Ion: 75 Resp: 40314

Ion Ratio Lower Upper

75 100

110 11.0 18.1 54.1#

77 0.0 24.5 36.7#



#38

Carbon Tetrachloride

Concen: 6.732 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

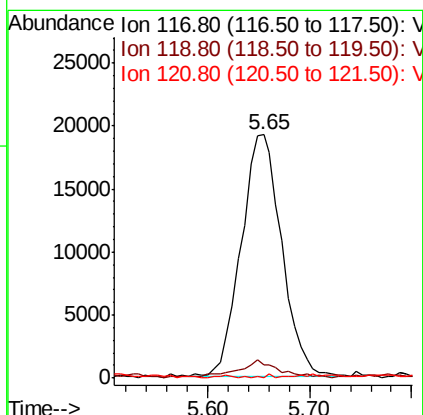
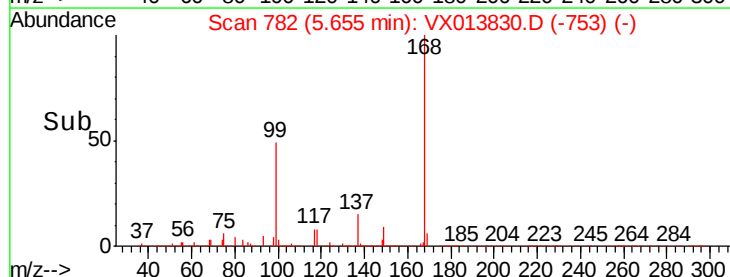
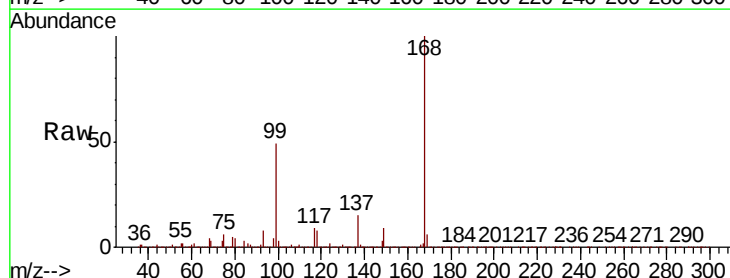
Tgt Ion: 117 Resp: 52625

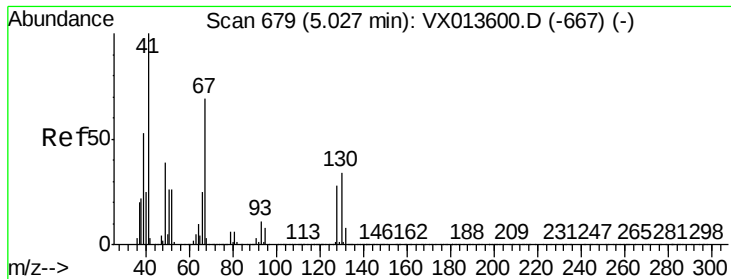
Ion Ratio Lower Upper

117 100

119 4.7 77.5 116.3#

121 0.6 25.0 37.6#

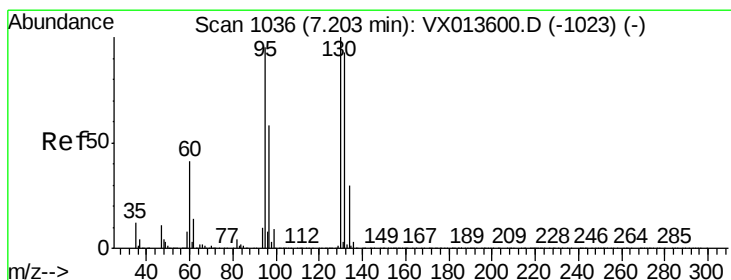
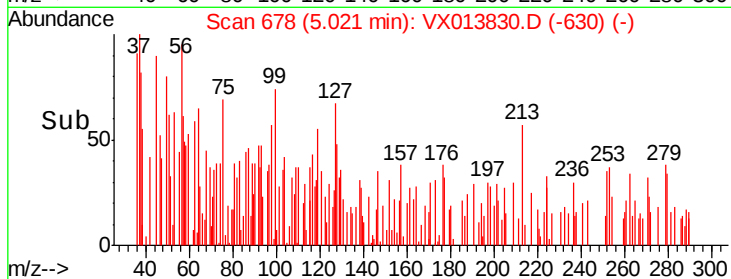
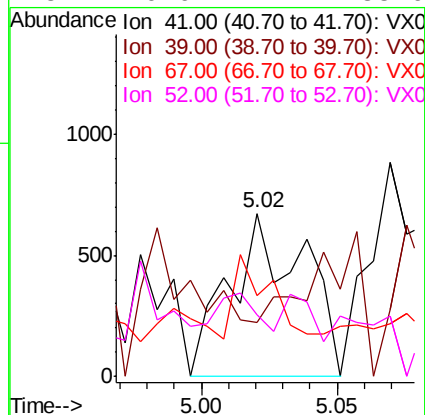
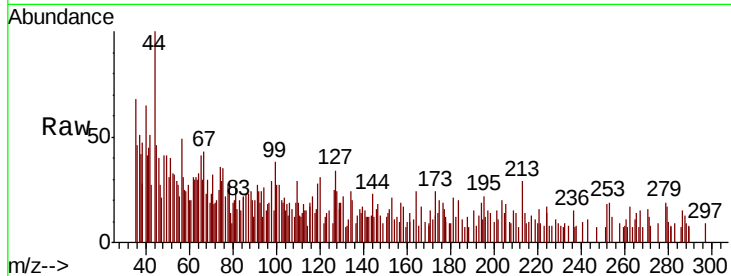




#41  
Methacrylonitrile  
Concen: 0.242 ug/l  
RT: 5.02 min Scan# 678  
Delta R.T. -0.01 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

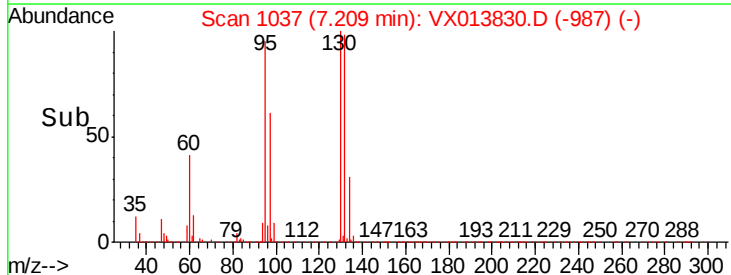
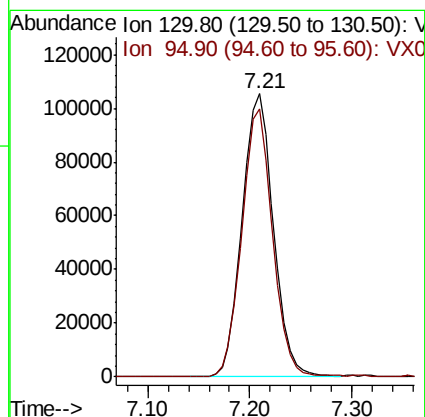
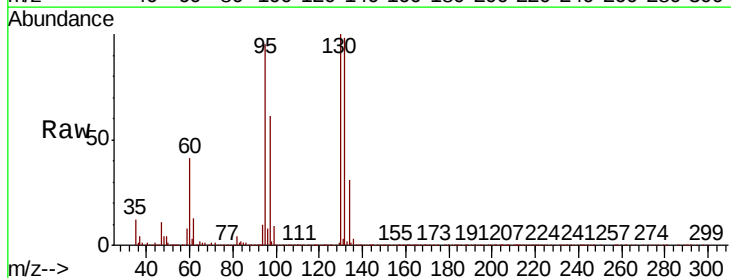
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE103D1-20191204DL

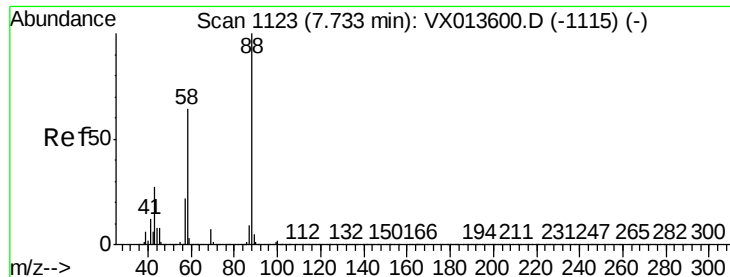
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 41    | Resp: | 1263  |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 0.0   | 42.9  | 64.3# |
| 67       | 24.4  | 57.4  | 86.0# |
| 52       | 16.6  | 22.4  | 33.6# |



#44  
Trichloroethene  
Concen: 31.579 ug/l  
RT: 7.21 min Scan# 1037  
Delta R.T. 0.01 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 130   | Resp: | 223759 |
| Ion      | Ratio | Lower | Upper  |
| 130      | 100   |       |        |
| 95       | 94.9  | 0.0   | 190.8  |





#49

1,4-Dioxane

Concen: 0.793 ug/l

RT: 7.71 min Scan# 1119

Delta R.T. -0.02 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Instrument :

MSVOA\_X

ClientSampleId :

RE103D1-20191204DL

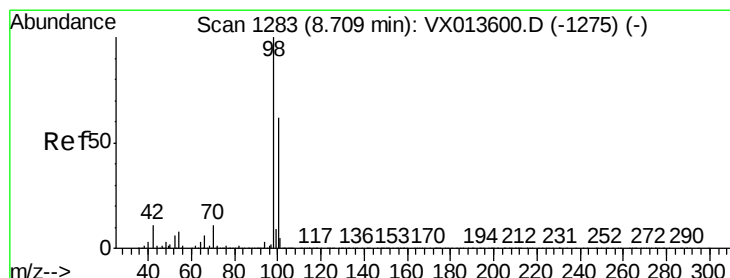
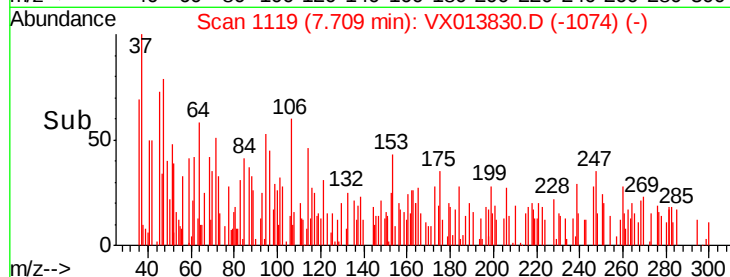
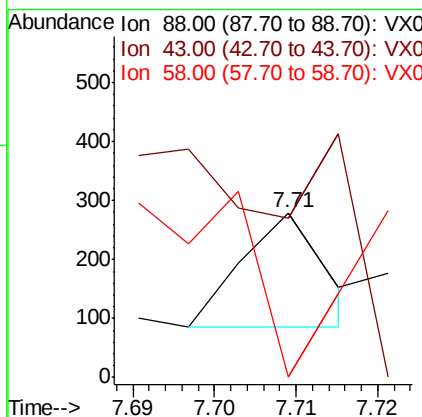
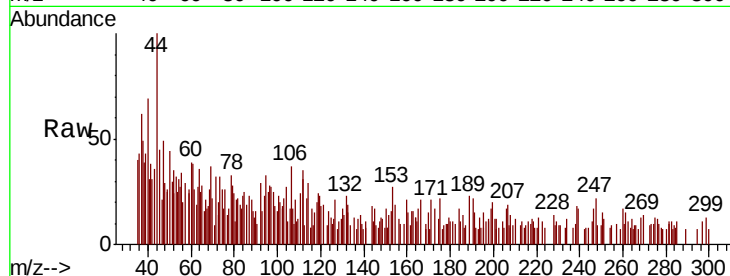
Tot Ion: 88 Resp: 135

Ion Ratio Lower Upper

88 100

43 469.6 25.8 38.6#

58 0.0 54.6 82.0#



#50

Toluene-d8

Concen: 49.206 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX013830.D

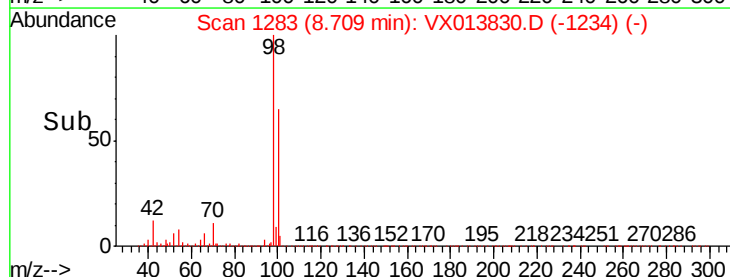
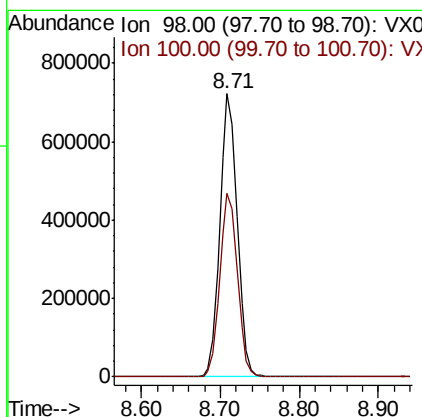
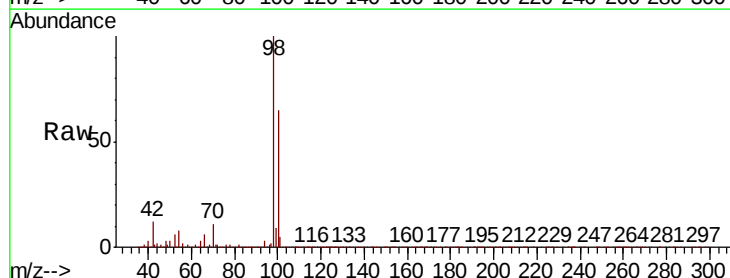
Acq: 07 Dec 2019 03:54

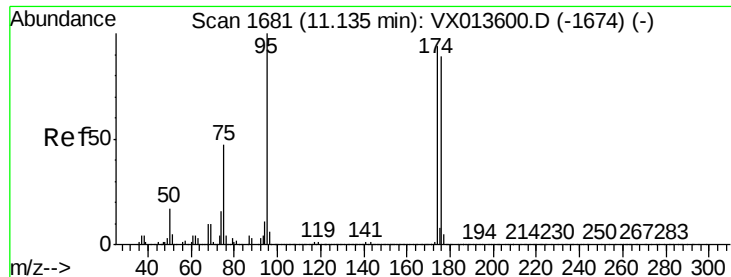
Tgt Ion: 98 Resp: 1106797

Ion Ratio Lower Upper

98 100

100 65.9 53.1 79.7





#62

4-Bromofluorobenzene

Concen: 45.826 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.00 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Instrument :

MSVOA\_X

ClientSampleId :

RE103D1-20191204DL

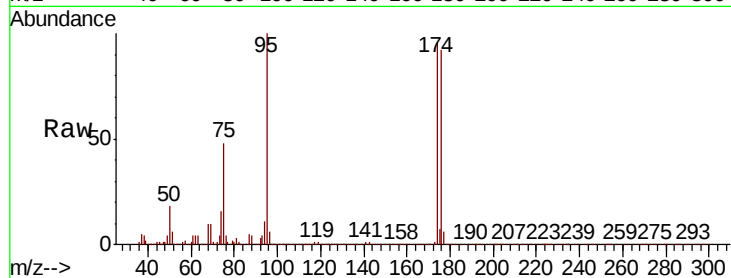
Tot Ion: 95 Resp: 371698

Ion Ratio Lower Upper

95 100

174 89.7 0.0 180.0

176 85.8 0.0 173.6



Abundance Ion 94.90 (94.60 to 95.60): VX013600.D (-1674) (-)

Ion 173.80 (173.50 to 174.50): VX013600.D (-1674) (-)

Ion 175.80 (175.50 to 176.50): VX013600.D (-1674) (-)

11.14

300000

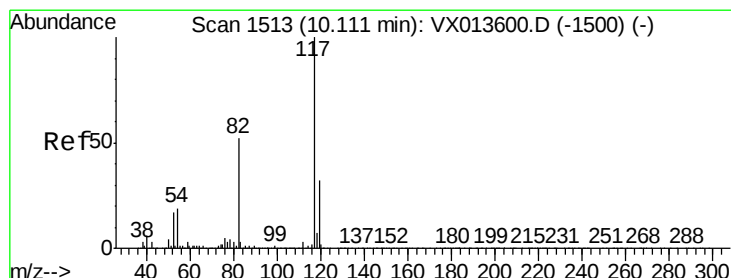
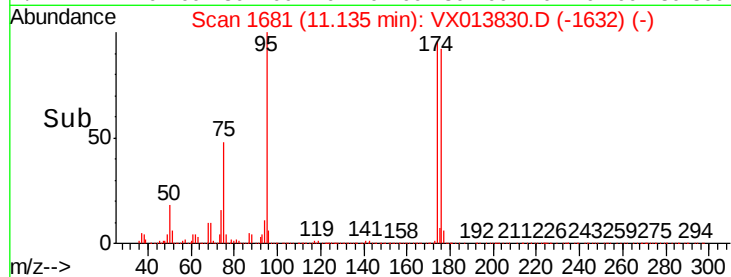
200000

100000

0

11.10 11.20

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

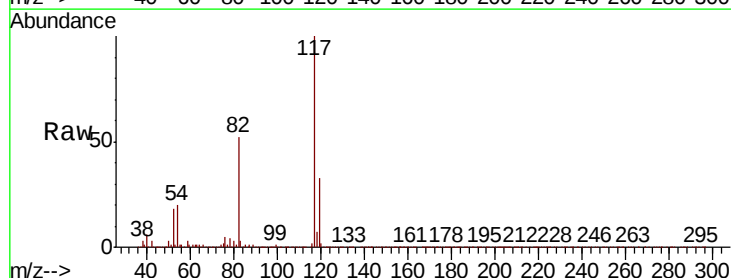
Tgt Ion: 117 Resp: 834753

Ion Ratio Lower Upper

117 100

82 52.2 41.8 62.8

119 32.8 25.8 38.8



Abundance Ion 116.90 (116.60 to 117.60): VX013600.D (-1500) (-)

Ion 82.00 (81.70 to 82.70): VX013600.D (-1500) (-)

Ion 118.90 (118.60 to 119.60): VX013600.D (-1500) (-)

10.11

800000

600000

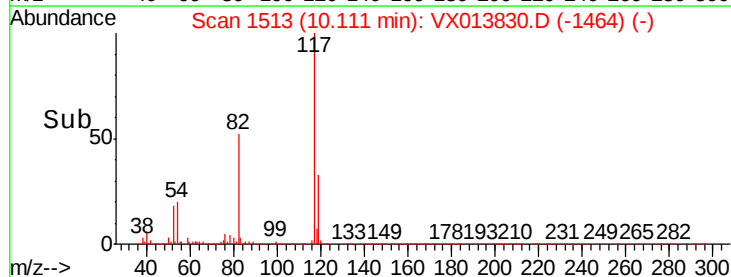
400000

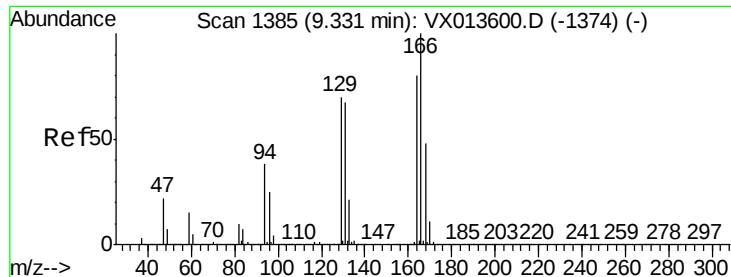
200000

0

10.10 10.20

Time-->

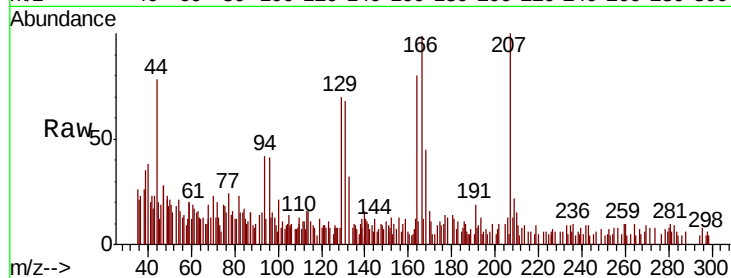




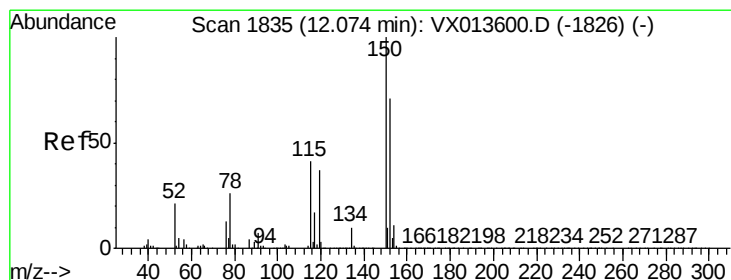
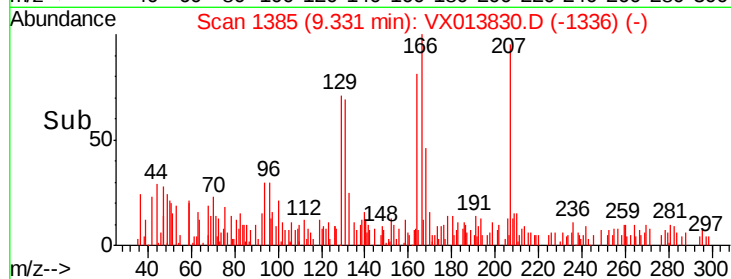
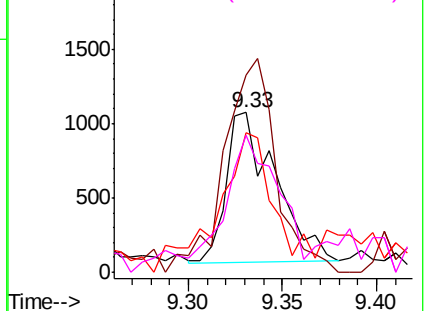
#64  
Tetrachloroethene  
Concen: 0.294 ug/l  
RT: 9.33 min Scan# 1385  
Delta R.T. -0.00 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE103D1-20191204DL

Tot Ion:164 Resp: 1832  
Ion Ratio Lower Upper  
164 100  
166 133.0 99.7 149.5  
129 77.9 70.1 105.1  
131 82.2 66.9 100.3

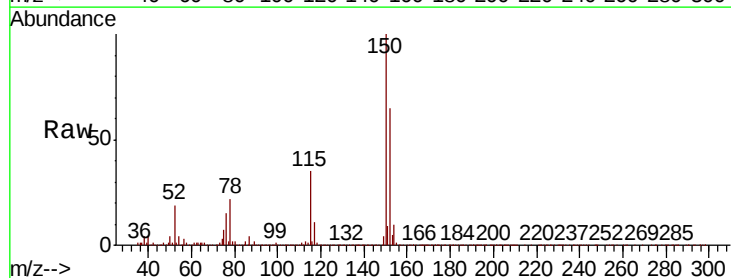


Abundance Ion 163.80 (163.50 to 164.50): V  
Ion 165.80 (165.50 to 166.50): V  
Ion 128.80 (128.50 to 129.50): V  
Ion 130.80 (130.50 to 131.50): V

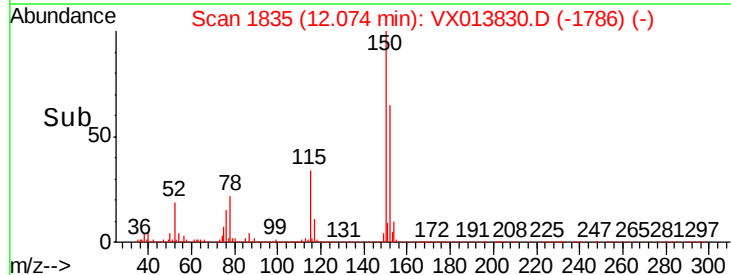
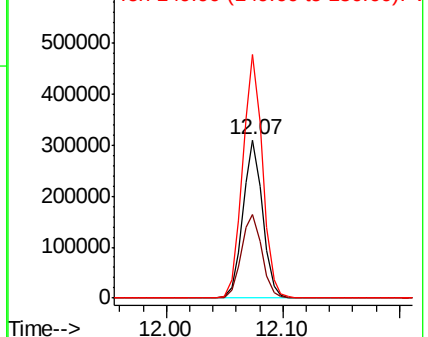


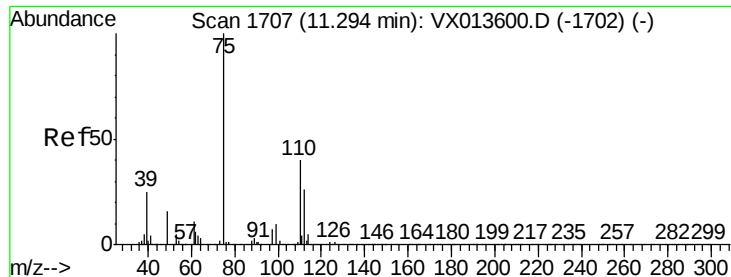
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. -0.00 min  
Lab File: VX013830.D  
Acq: 07 Dec 2019 03:54

Tgt Ion:152 Resp: 365120  
Ion Ratio Lower Upper  
152 100  
115 55.2 38.4 115.1  
150 155.4 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: 22.157 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

Instrument :

MSVOA\_X

ClientSampleId :

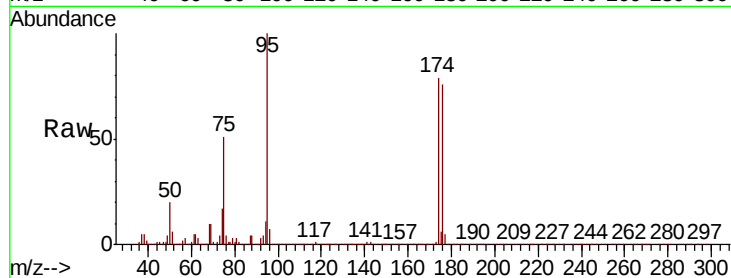
RE103D1-20191204DL

Tot Ion: 75 Resp: 181955

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

11.13

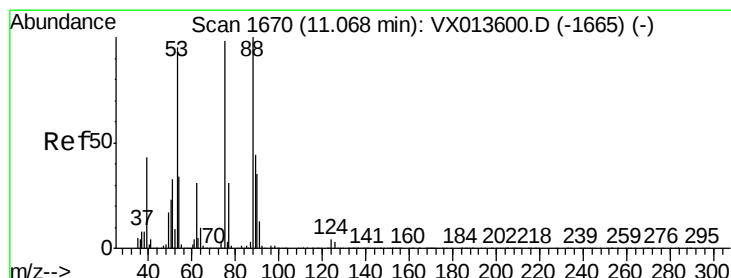
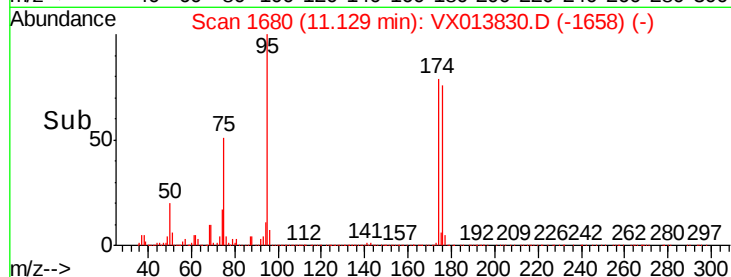
150000

100000

50000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 60.617 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX013830.D

Acq: 07 Dec 2019 03:54

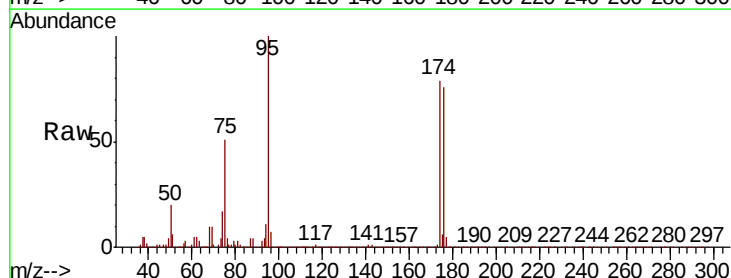
Tgt Ion: 75 Resp: 181955

Ion Ratio Lower Upper

75 100

53 0.0 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

11.13

150000

100000

50000

0

Time-->

