

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX042120\  
 Data File : VX015824.D  
 Acq On : 22 Apr 2020 03:36  
 Operator : JC/SP  
 Sample : L2356-06  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 46 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BFB

Quant Time: Apr 22 07:19:57 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032720W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 27 09:35:51 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 1000130  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 1522144  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 1500153  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 844343   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.04  | 65   | 551091   | 39.07 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 78.14%  |          |
| 35) Dibromofluoromethane    | 5.47  | 113  | 438790   | 45.10 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.20%  |          |
| 50) Toluene-d8              | 8.70  | 98   | 1847059  | 51.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.12% |          |
| 62) 4-Bromofluorobenzene    | 11.12 | 95   | 779505   | 53.54 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.08% |          |

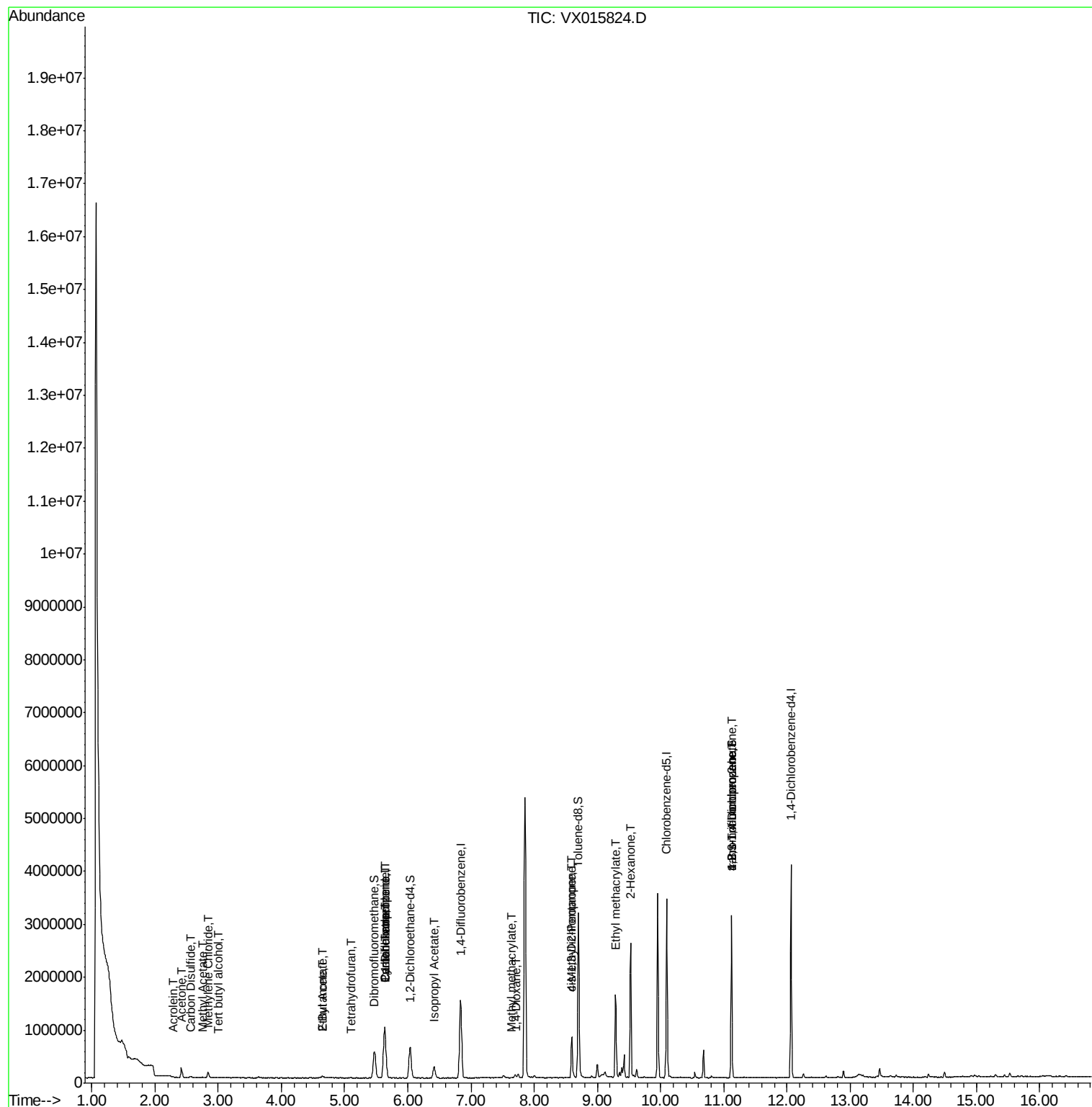
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.62  | 94   | 258      | Below Cal | #      | 3      |
| 11) Tert butyl alcohol         | 3.01  | 59   | 2320     | 0.687     | ug/l   | 100    |
| 13) Acrolein                   | 2.28  | 56   | 1021     | 0.531     | ug/l # | 14     |
| 16) Acetone                    | 2.42  | 43   | 219299   | 36.187    | ug/l   | 96     |
| 17) Carbon Disulfide           | 2.56  | 76   | 26371    | 0.916     | ug/l # | 91     |
| 18) Methyl Acetate             | 2.75  | 43   | 13170    | 0.851     | ug/l # | 54     |
| 20) Methylene Chloride         | 2.84  | 84   | 47835    | 4.226     | ug/l   | 97     |
| 25) 2-Butanone                 | 4.64  | 43   | 32715    | 3.357     | ug/l   | 95     |
| 29) Tetrahydrofuran            | 5.11  | 42   | 3962     | 0.632     | ug/l # | 58     |
| 31) Cyclohexane                | 5.64  | 56   | 17321    | 0.970     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 66630    | 4.751     | ug/l # | 54     |
| 37) Ethyl Acetate              | 4.64  | 43   | 32802    | 1.796     | ug/l # | 79     |
| 38) Carbon Tetrachloride       | 5.63  | 117  | 90191    | 5.937     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 6.42  | 43   | 313938   | 10.184    | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.65  | 41   | 20132    | 1.307     | ug/l # | 19     |
| 49) 1,4-Dioxane                | 7.72  | 88   | 3151     | 10.970    | ug/l # | 48     |
| 51) 4-Methyl-2-Pentanone       | 8.59  | 43   | 303130   | 17.351    | ug/l # | 54     |
| 54) cis-1,3-Dichloropropene    | 8.60  | 75   | 126810   | 6.757     | ug/l # | 50     |
| 56) Ethyl methacrylate         | 9.29  | 69   | 3661     | 0.200     | ug/l # | 1      |
| 59) 2-Hexanone                 | 9.53  | 43   | 301743   | 22.877    | ug/l # | 53     |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75   | 378594   | 21.804    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75   | 378594   | 52.319    | ug/l # | 10     |

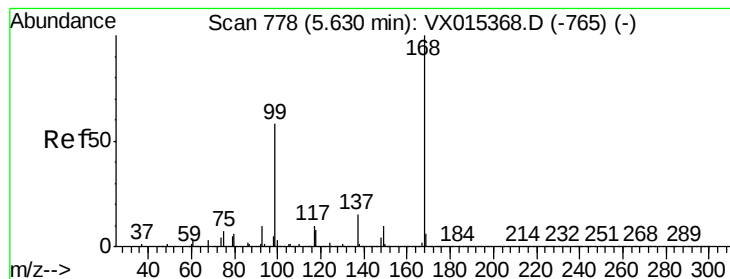
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX042120\  
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Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

Quant Time: Apr 22 07:19:57 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X032720W.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 27 09:35:51 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.64 min Scan# 779

Delta R.T. 0.01 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampleId :

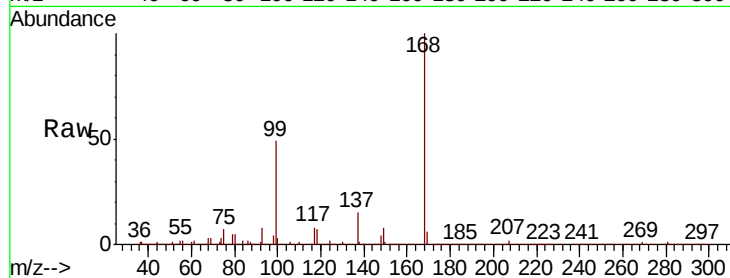
BFB

Tot Ion:168 Resp: 1000130

Ion Ratio Lower Upper

168 100

99 49.3 46.4 69.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.64

400000

300000

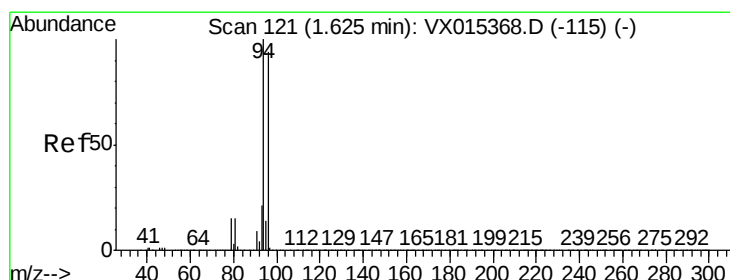
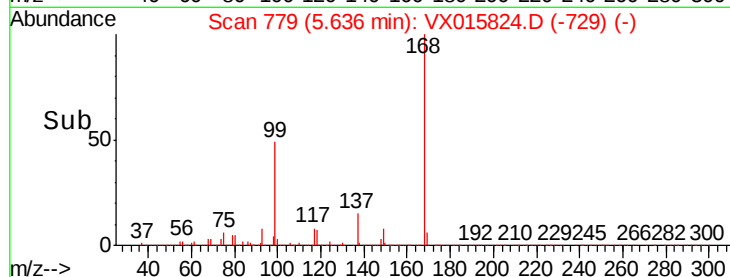
200000

100000

0

5.50 5.60 5.70 5.80

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 1.62 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX015824.D

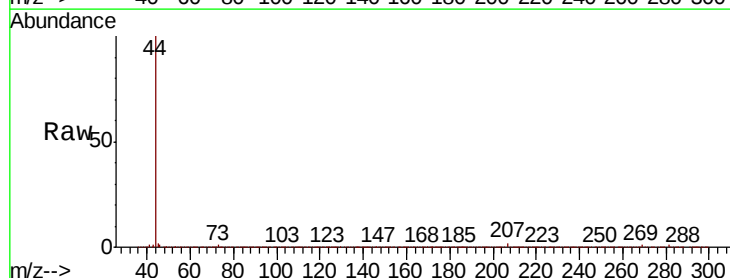
Acq: 22 Apr 2020 03:36

Tgt Ion: 94 Resp: 258

Ion Ratio Lower Upper

94 100

96 0.0 74.8 112.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1500

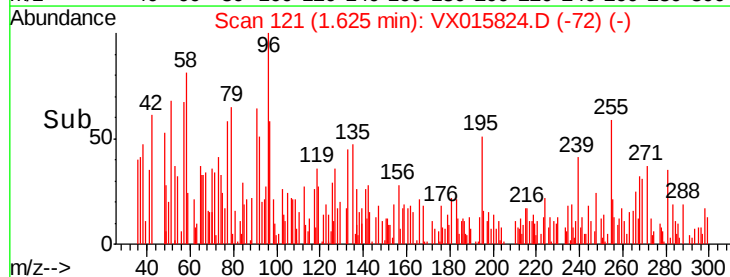
1000

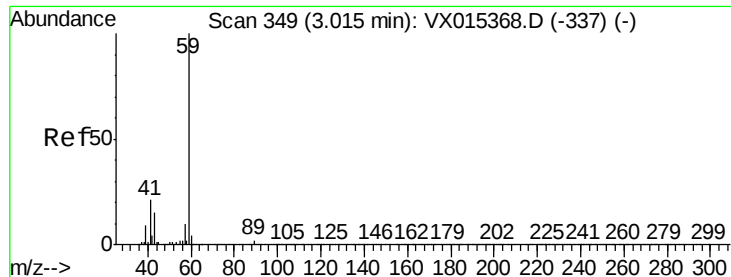
500

0

1.60 1.61 1.62 1.63

Time-->

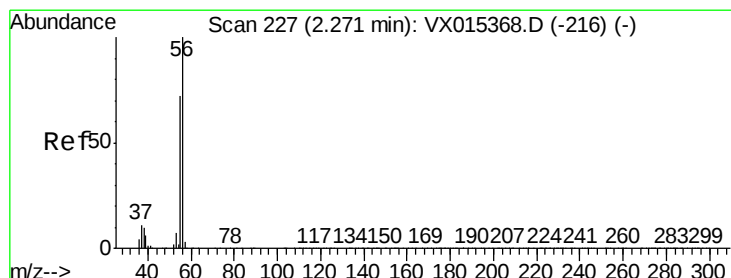
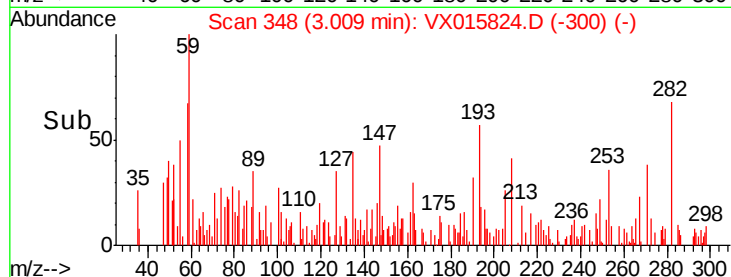
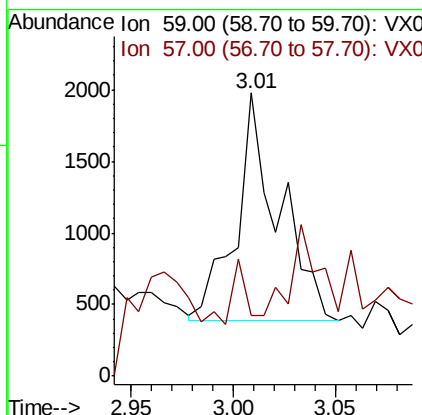
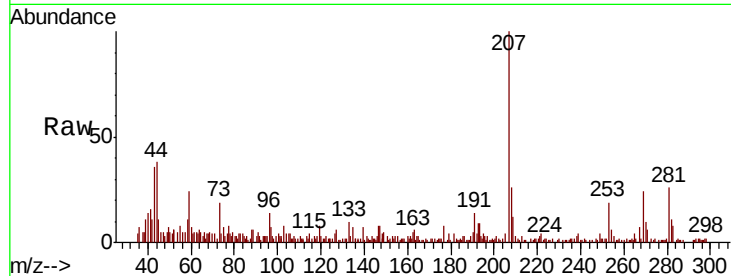




#11  
Tert butyl alcohol  
Concen: 0.687 ug/l  
RT: 3.01 min Scan# 348  
Delta R.T. -0.01 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

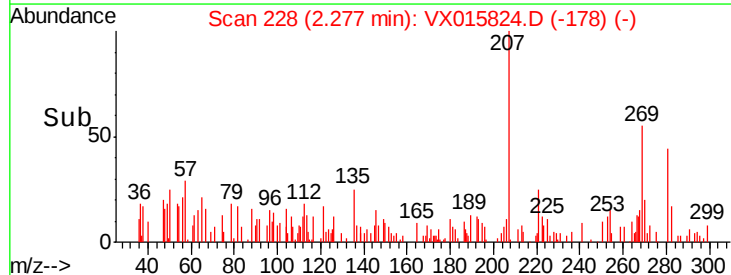
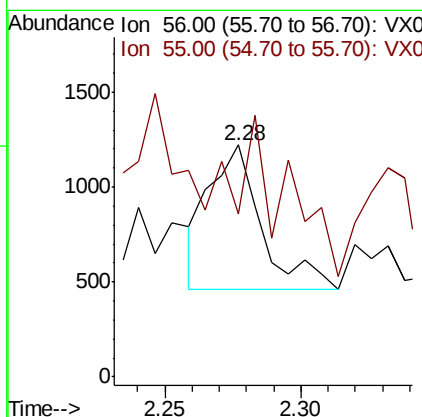
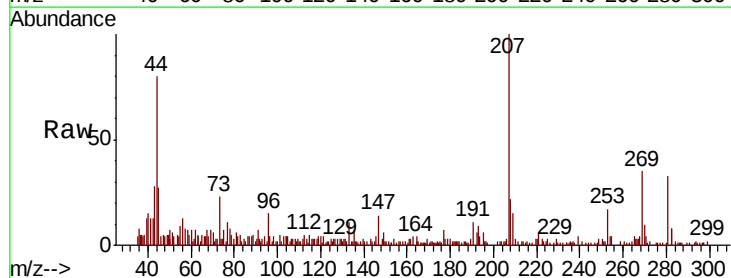
Instrument :  
MSVOA\_X  
ClientSampled :  
BFB

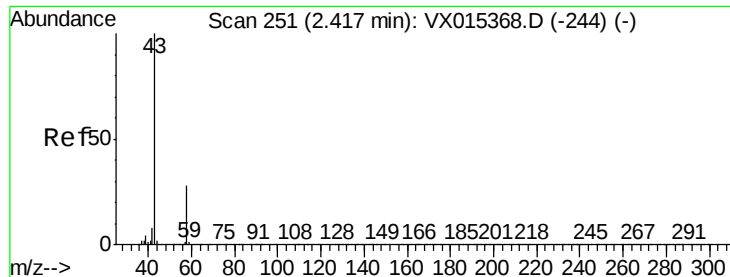
Tot Ion: 59 Resp: 2320  
Ion Ratio Lower Upper  
59 100  
57 10.2 8.1 12.1



#13  
Acrolein  
Concen: 0.531 ug/l  
RT: 2.28 min Scan# 228  
Delta R.T. 0.01 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion: 56 Resp: 1021  
Ion Ratio Lower Upper  
56 100  
55 0.0 57.0 85.4#





#16

Acetone

Concen: 36.187 ug/l

RT: 2.42 min Scan# 251

Delta R.T. -0.00 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampled :

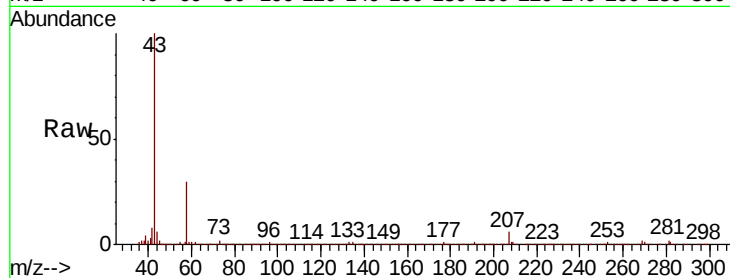
BFB

Tot Ion: 43 Resp: 219299

Ion Ratio Lower Upper

43 100

58 29.4 22.1 33.1



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.42

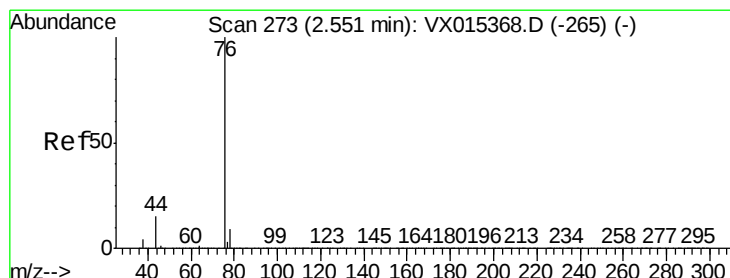
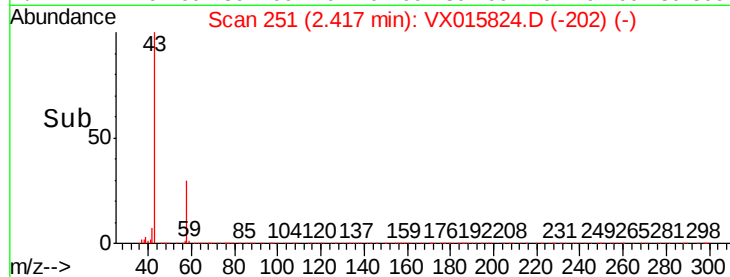
150000

100000

50000

0

Time-->



#17

Carbon Disulfide

Concen: 0.916 ug/l

RT: 2.56 min Scan# 274

Delta R.T. 0.01 min

Lab File: VX015824.D

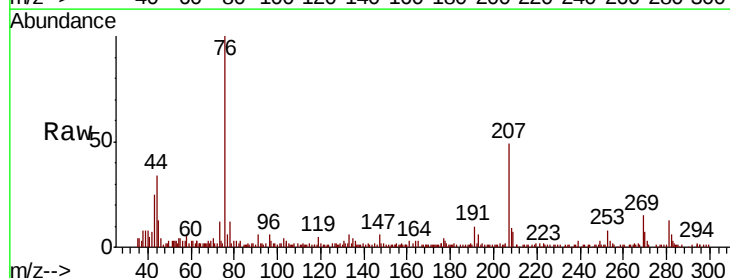
Acq: 22 Apr 2020 03:36

Tgt Ion: 76 Resp: 26371

Ion Ratio Lower Upper

76 100

78 5.8 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.56

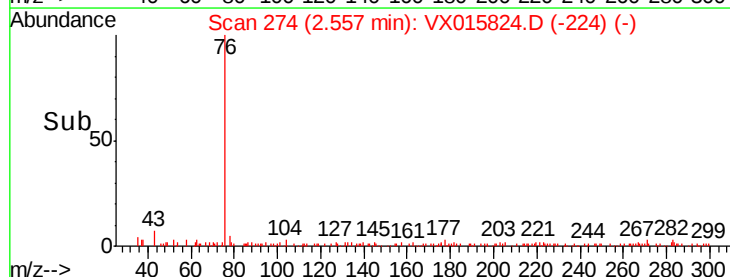
15000

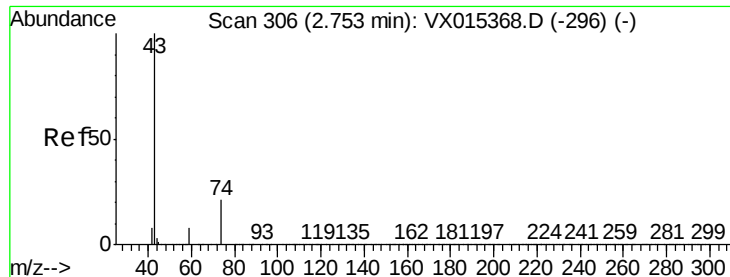
10000

5000

0

Time-->

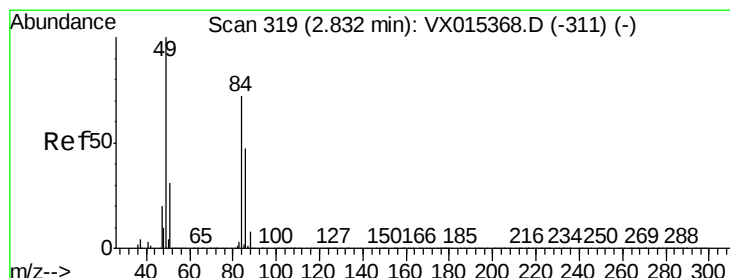
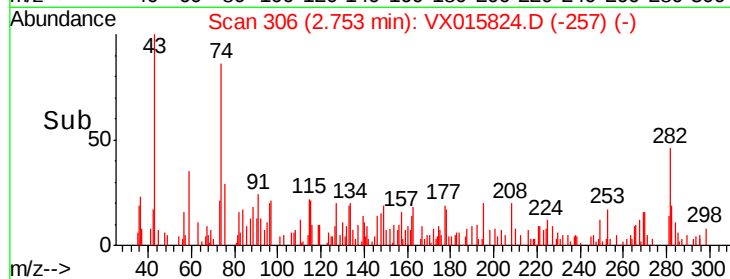
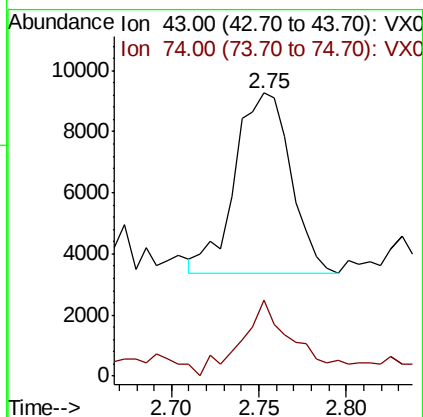
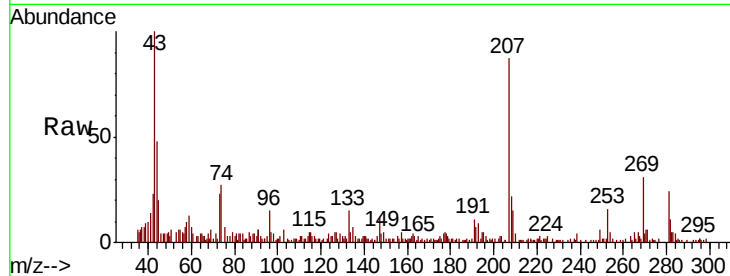




#18  
Methyl Acetate  
Concen: 0.851 ug/l  
RT: 2.75 min Scan# 306  
Delta R.T. -0.00 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

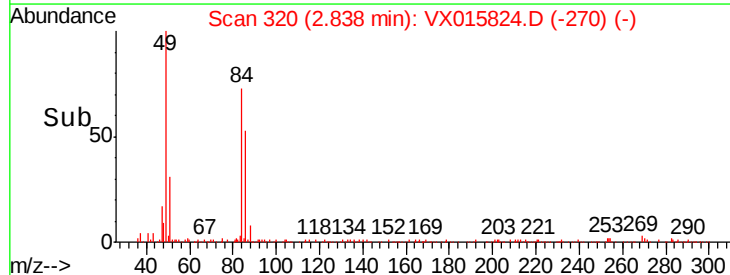
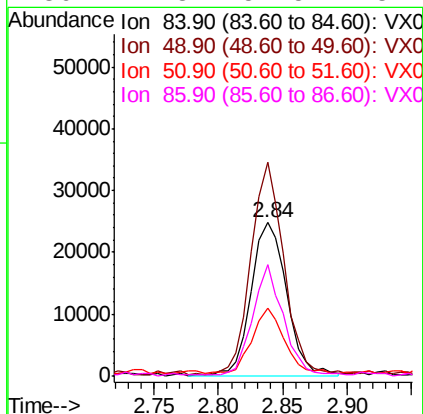
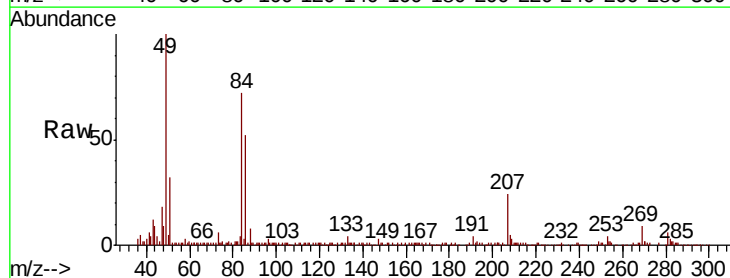
Instrument :  
MSVOA\_X  
ClientSampled :  
BFB

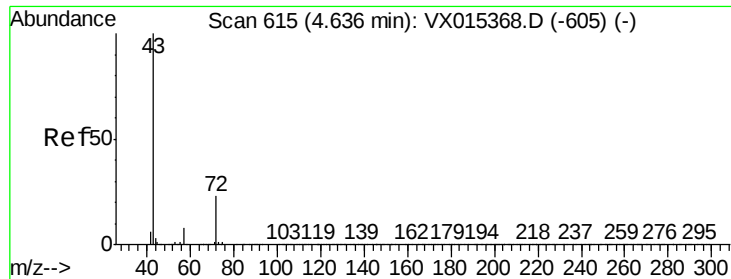
Tot Ion: 43 Resp: 13170  
Ion Ratio Lower Upper  
43 100  
74 42.1 16.5 24.7#



#20  
Methylene Chloride  
Concen: 4.226 ug/l  
RT: 2.84 min Scan# 320  
Delta R.T. 0.01 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion: 84 Resp: 47835  
Ion Ratio Lower Upper  
84 100  
49 138.3 111.3 166.9  
51 42.7 34.0 51.0  
86 71.8 52.5 78.7





#25

2-Butanone

Concen: 3.357 ug/l

RT: 4.64 min Scan# 616

Delta R.T. 0.01 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampled :

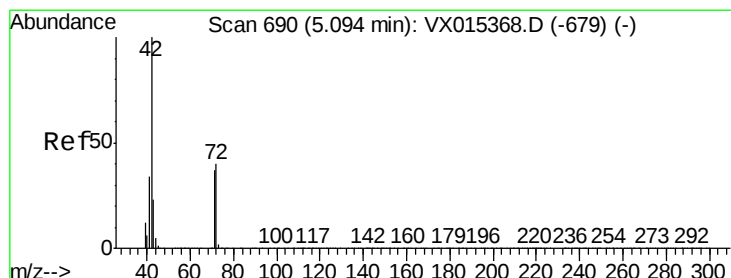
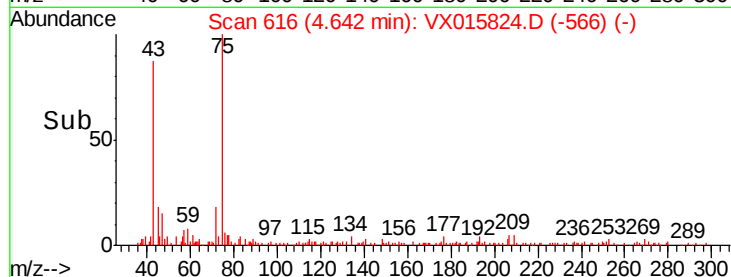
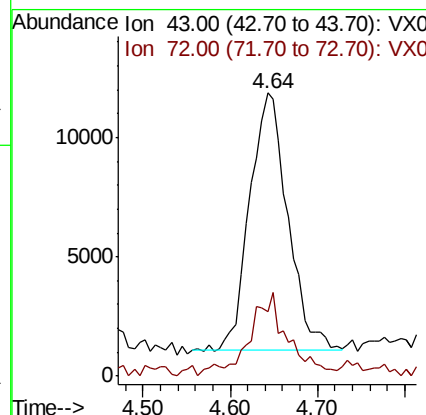
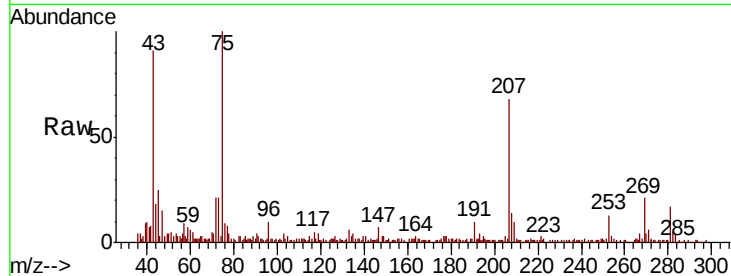
BFB

Tot Ion: 43 Resp: 32715

Ion Ratio Lower Upper

43 100

72 21.5 19.0 28.4



#29

Tetrahydrofuran

Concen: 0.632 ug/l

RT: 5.11 min Scan# 692

Delta R.T. 0.01 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

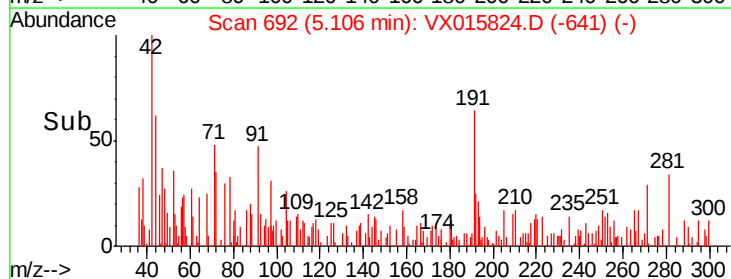
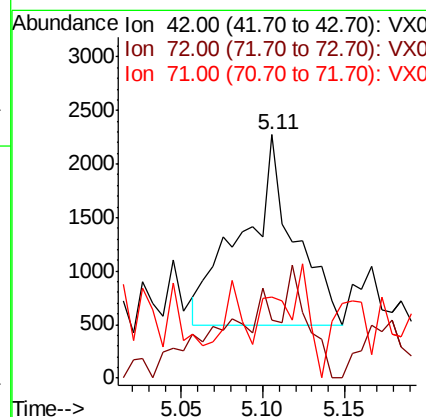
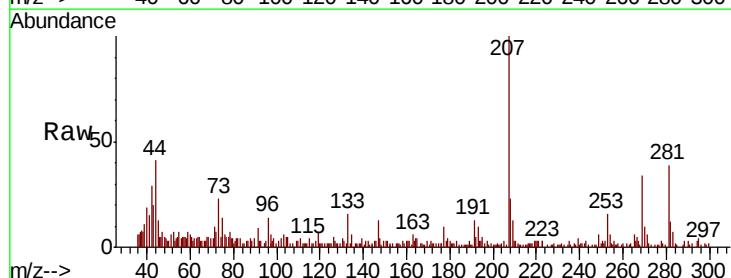
Tgt Ion: 42 Resp: 3962

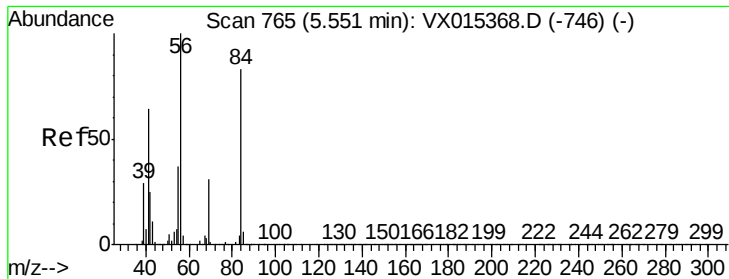
Ion Ratio Lower Upper

42 100

72 53.9 31.7 47.5#

71 0.0 29.6 44.4#

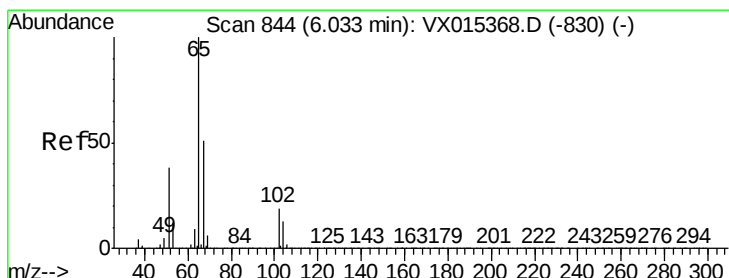
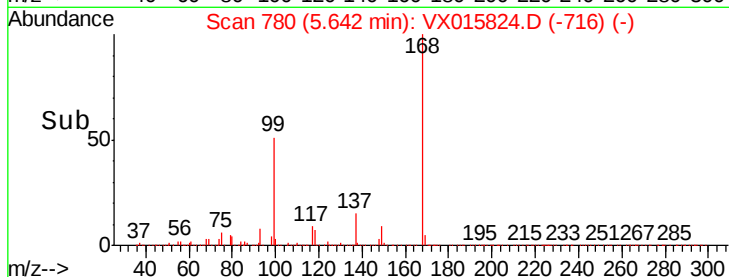
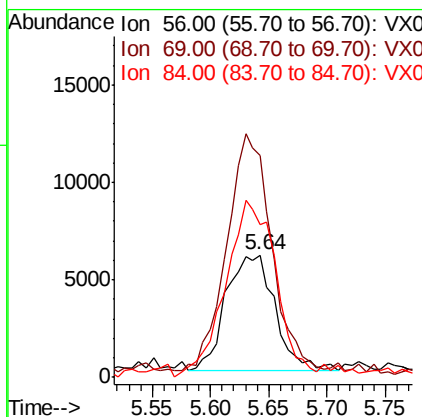
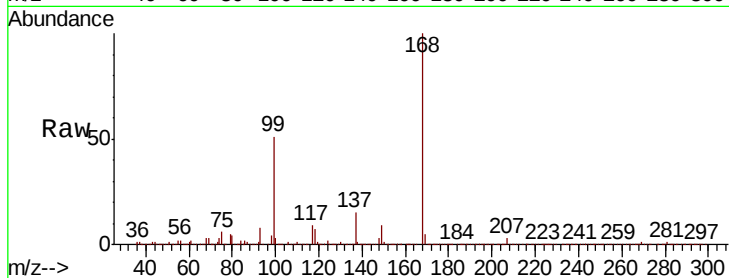




#31  
Cvclohexane  
Concen: 0.970 ug/l  
RT: 5.64 min Scan# 780  
Delta R.T. 0.09 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

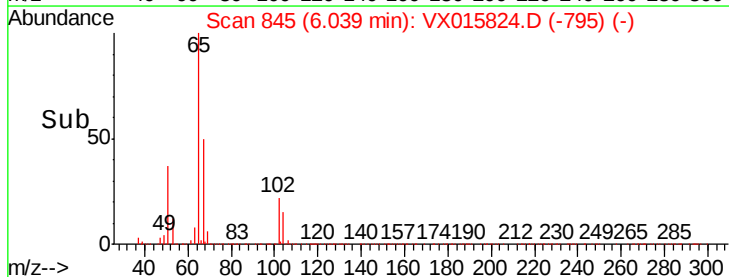
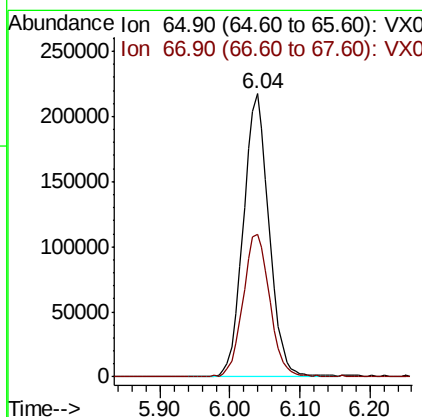
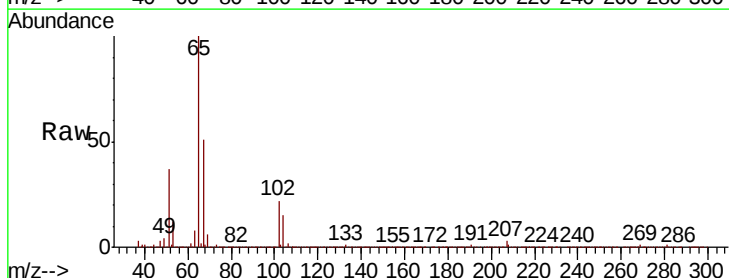
Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

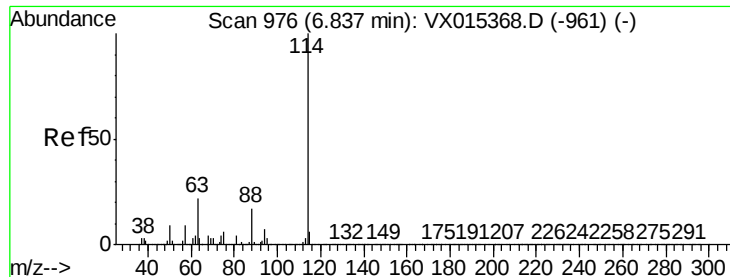
Tot Ion: 56 Resp: 17321  
Ion Ratio Lower Upper  
56 100  
69 179.5 24.6 36.8#  
84 122.5 66.1 99.1#



#33  
1,2-Dichloroethane-d4  
Concen: 39.069 ug/l  
RT: 6.04 min Scan# 845  
Delta R.T. 0.01 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion: 65 Resp: 551091  
Ion Ratio Lower Upper  
65 100  
67 52.1 0.0 102.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.84 min Scan# 976

Delta R.T. -0.00 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampleId :

BFB

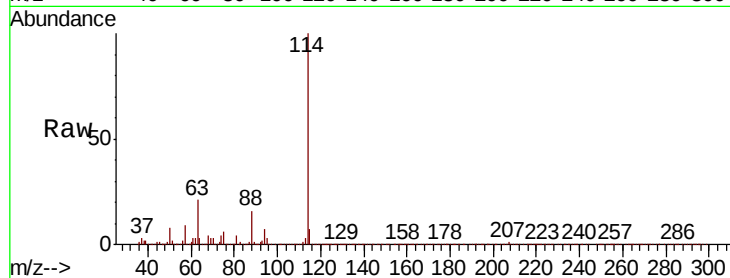
Tot Ion:114 Resp: 1522144

Ion Ratio Lower Upper

114 100

63 20.8 0.0 44.2

88 16.4 0.0 33.8



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

800000

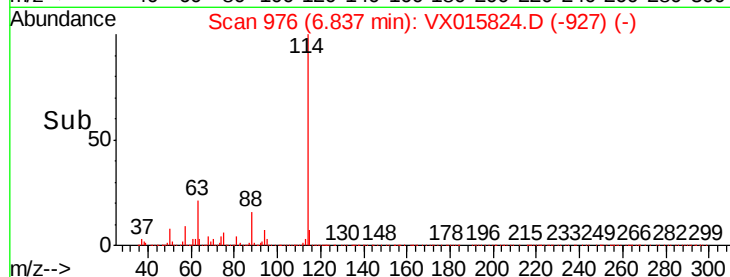
600000

400000

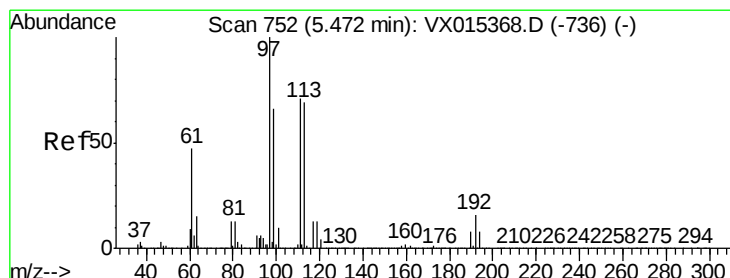
200000

0

6.70 6.80 6.90



Time-->



#35

Dibromofluoromethane

Concen: 45.097 ug/l

RT: 5.47 min Scan# 752

Delta R.T. -0.00 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

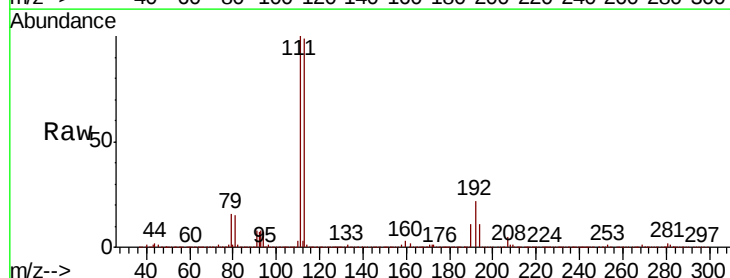
Tgt Ion:113 Resp: 438790

Ion Ratio Lower Upper

113 100

111 102.0 81.5 122.3

192 23.2 17.8 26.6



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

200000

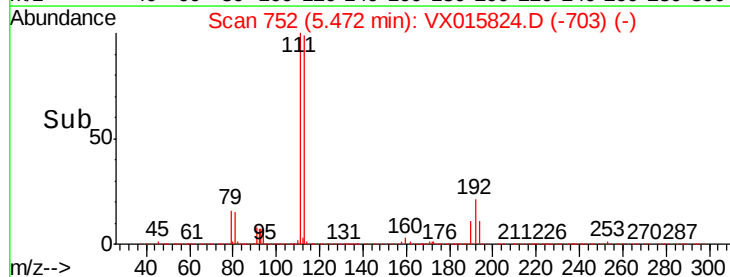
150000

100000

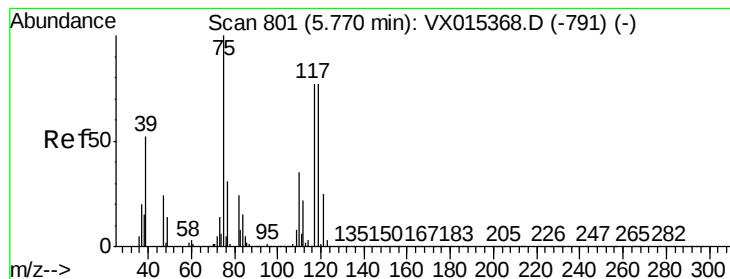
50000

0

5.30 5.40 5.50 5.60



Time-->



#36

1,1-Dichloropropene

Concen: 4.751 ug/l

RT: 5.63 min Scan# 778

Delta R.T. -0.14 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampleId :

BFB

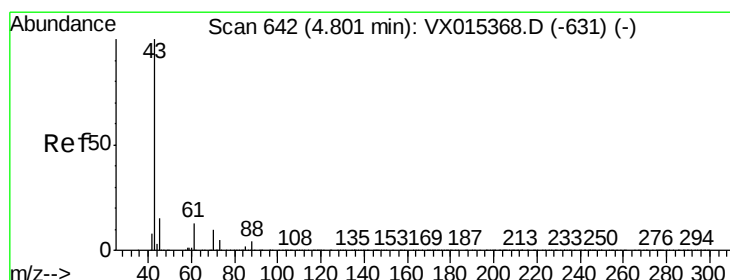
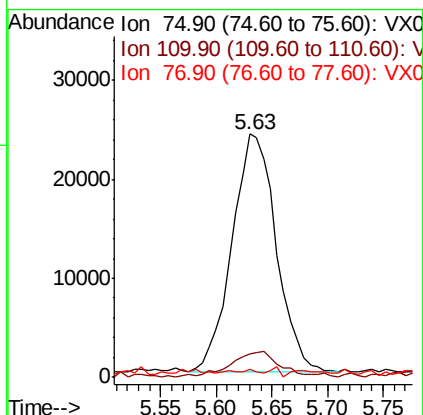
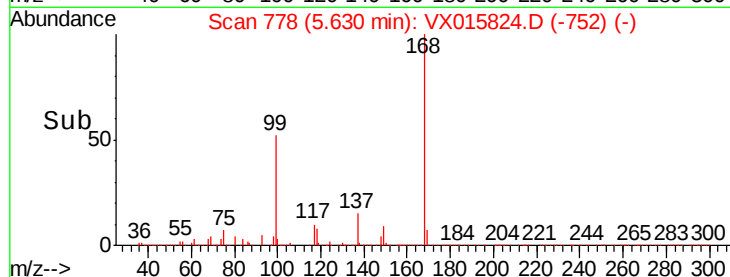
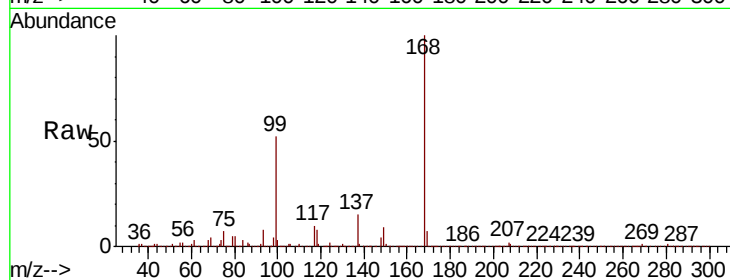
Tot Ion: 75 Resp: 66630

Ion Ratio Lower Upper

75 100

110 12.2 17.1 51.3#

77 1.0 24.6 36.8#



#37

Ethyl Acetate

Concen: 1.796 ug/l

RT: 4.64 min Scan# 616

Delta R.T. -0.16 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

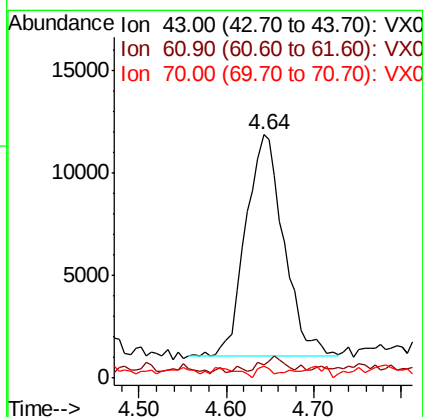
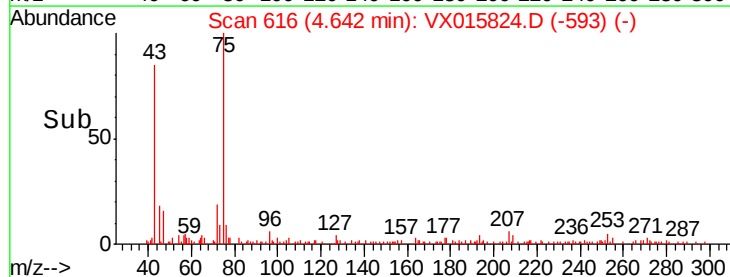
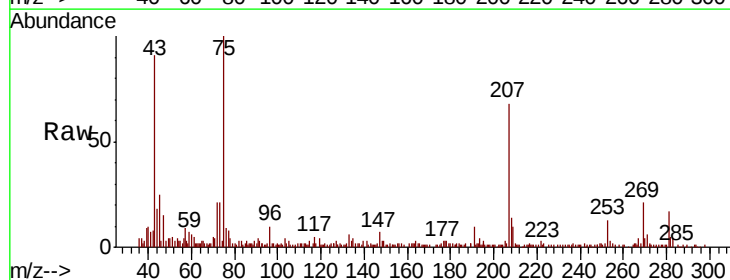
Tgt Ion: 43 Resp: 32802

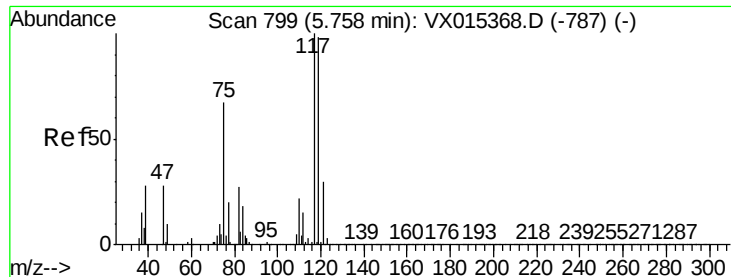
Ion Ratio Lower Upper

43 100

61 3.7 9.9 14.9#

70 2.6 8.1 12.1#





#38

Carbon Tetrachloride

Concen: 5.937 ug/l

RT: 5.63 min Scan# 778

Delta R.T. -0.13 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampled :

BFB

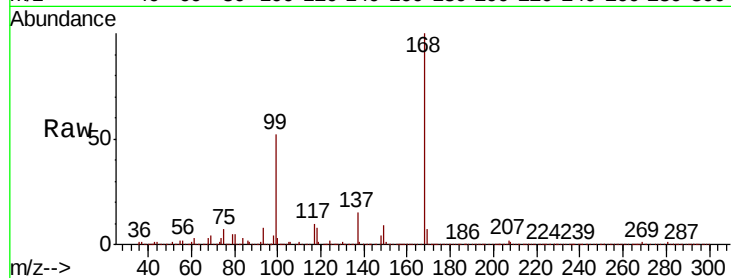
Tot Ion:117 Resp: 90191

Ion Ratio Lower Upper

117 100

119 6.0 78.0 117.0#

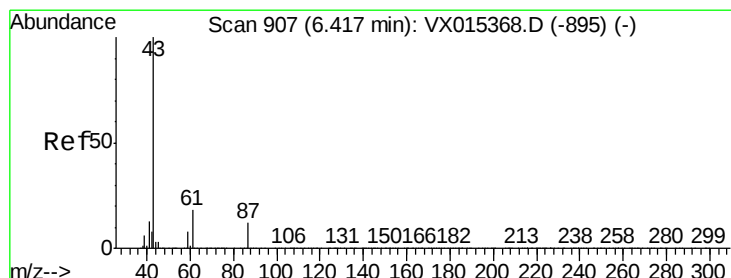
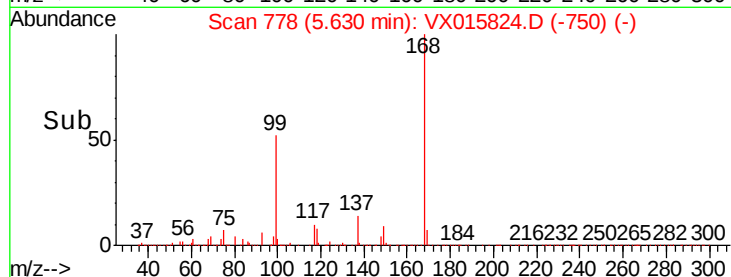
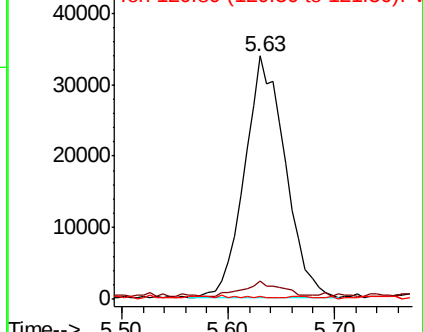
121 1.1 23.8 35.8#



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: 10.184 ug/l

RT: 6.42 min Scan# 907

Delta R.T. -0.00 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

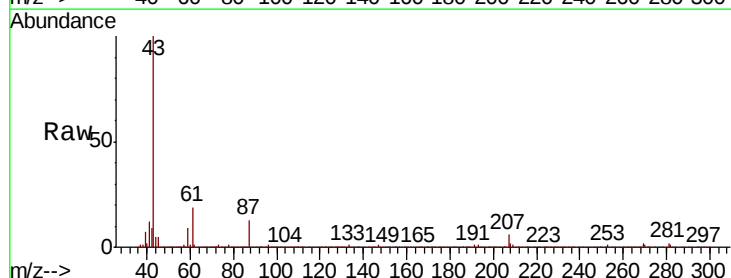
Tgt Ion: 43 Resp: 313938

Ion Ratio Lower Upper

43 100

61 19.2 14.8 22.2

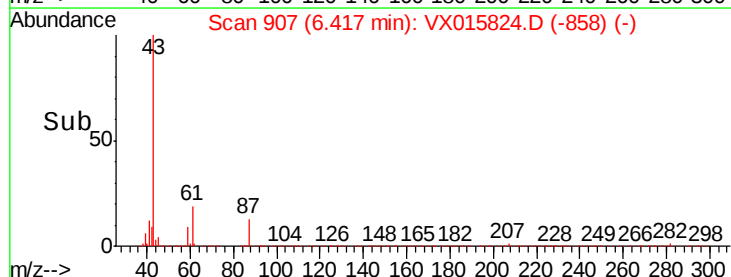
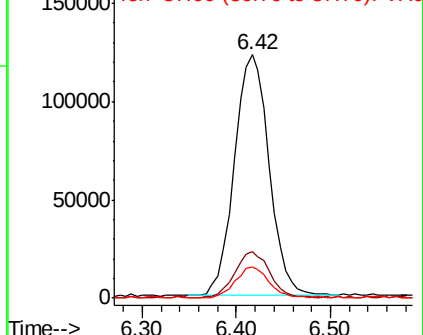
87 12.4 9.4 14.0

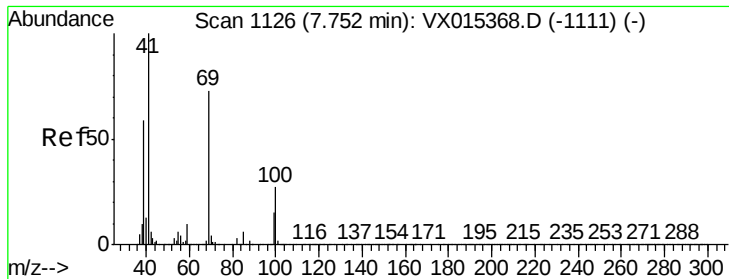


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

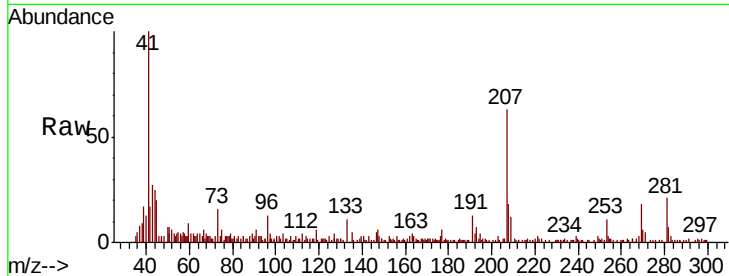




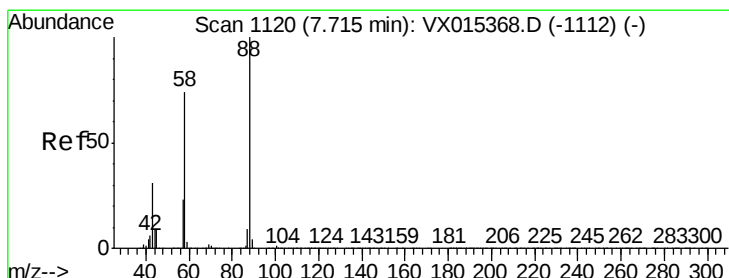
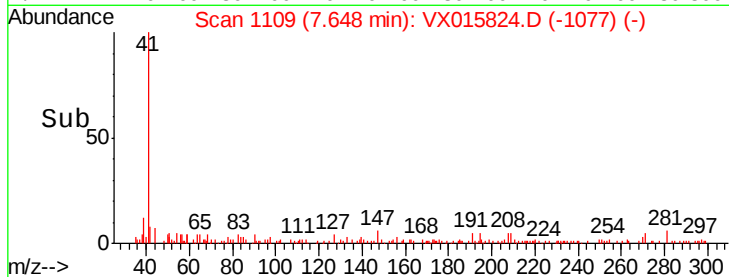
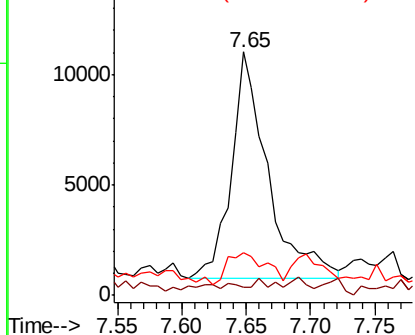
#48  
Methvl methacrylate  
Concen: 1.307 ug/l  
RT: 7.65 min Scan# 1109  
Delta R.T. -0.10 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Instrument :  
MSVOA\_X  
ClientSampled :  
BFB

Tot Ion: 41 Resp: 20132  
Ion Ratio Lower Upper  
41 100  
69 2.1 56.7 85.1#  
39 0.0 46.5 69.7#

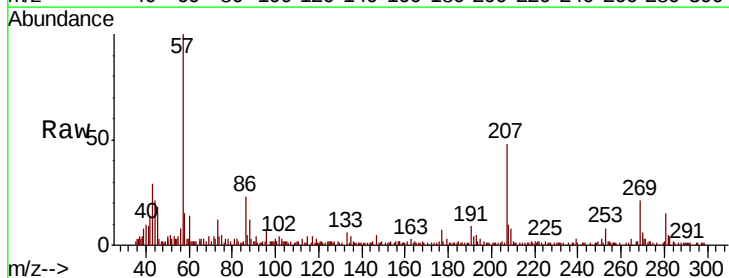


Abundance Ion 41.00 (40.70 to 41.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 39.00 (38.70 to 39.70): VX0

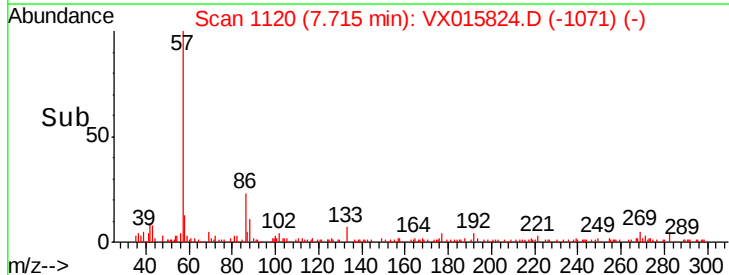
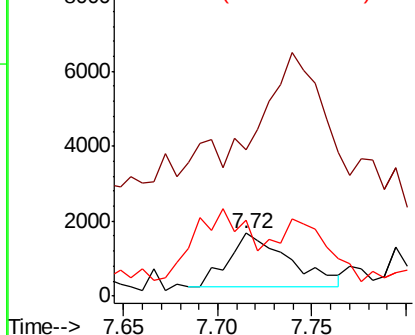


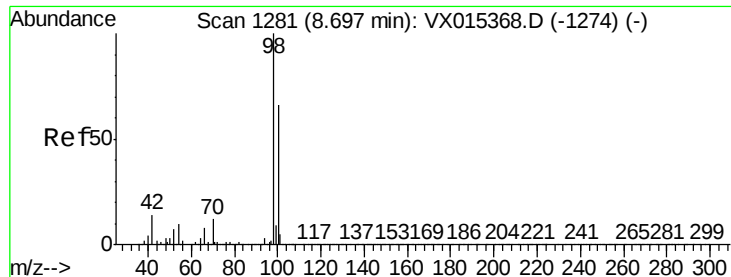
#49  
1,4-Dioxane  
Concen: 10.970 ug/l  
RT: 7.72 min Scan# 1120  
Delta R.T. -0.00 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion: 88 Resp: 3151  
Ion Ratio Lower Upper  
88 100  
43 0.0 30.1 45.1#  
58 116.2 60.6 90.8#



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

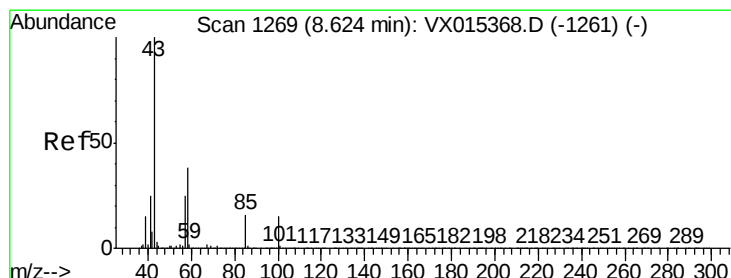
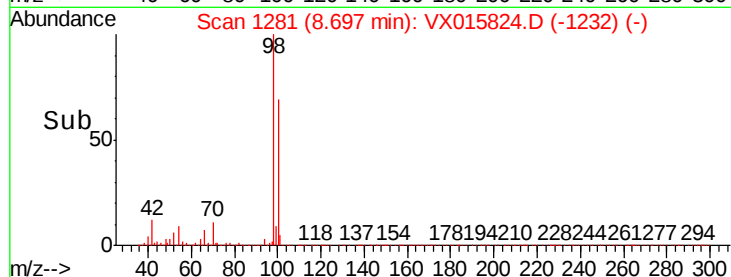
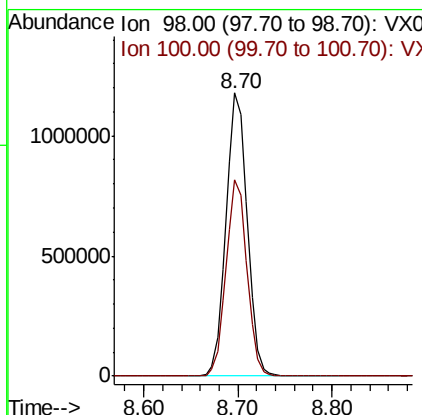
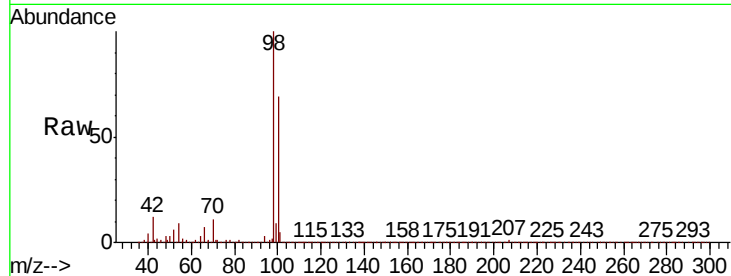




#50  
Toluene-d8  
Concen: 51.561 ug/l  
RT: 8.70 min Scan# 1281  
Delta R.T. -0.00 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

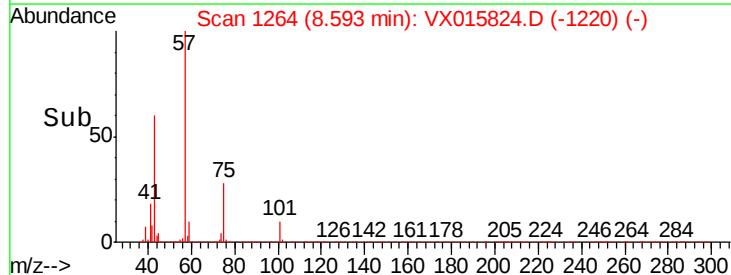
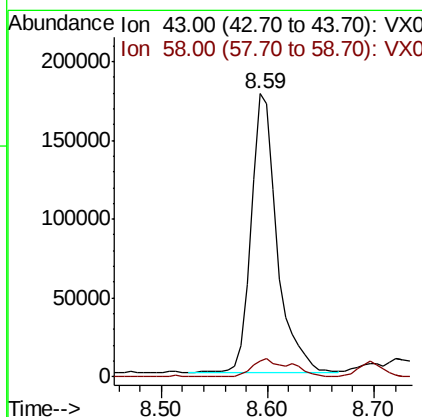
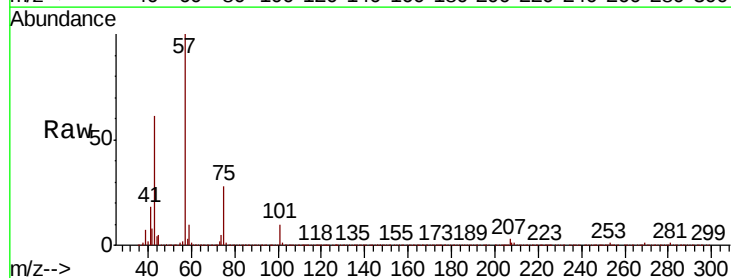
Instrument :  
MSVOA\_X  
ClientSampled :  
BFB

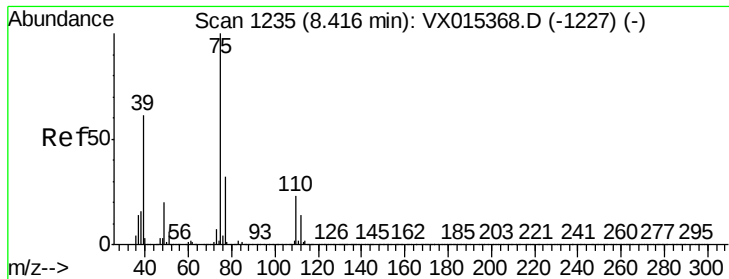
Tot Ion: 98 Resp: 1847059  
Ion Ratio Lower Upper  
98 100  
100 68.2 53.5 80.3



#51  
4-Methyl-2-Pentanone  
Concen: 17.351 ug/l  
RT: 8.59 min Scan# 1264  
Delta R.T. -0.03 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion: 43 Resp: 303130  
Ion Ratio Lower Upper  
43 100  
58 9.6 29.7 44.5#



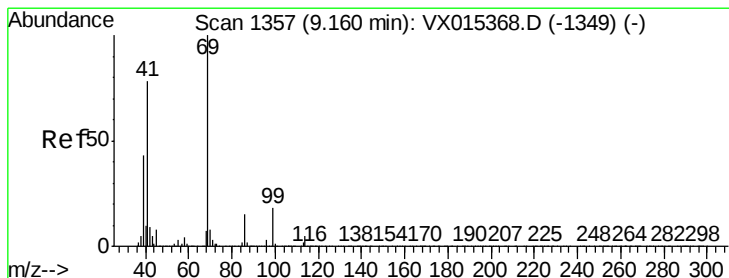
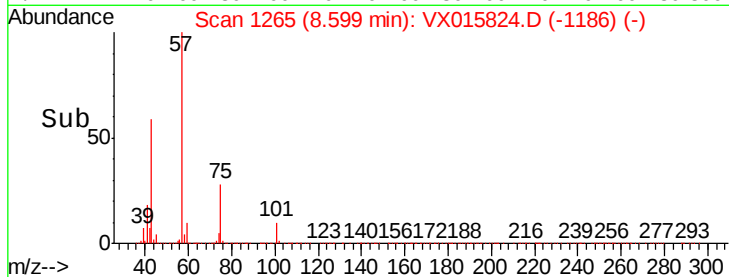
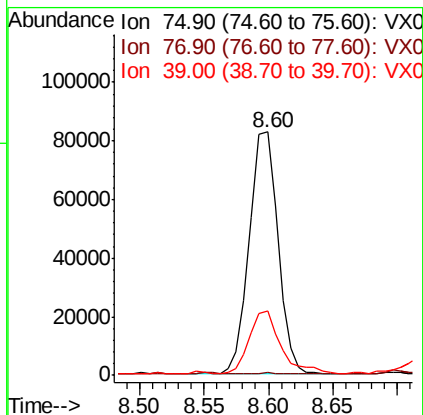
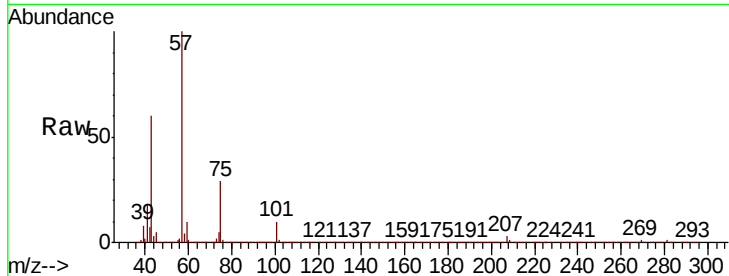


#54

cis-1,3-Dichloropropene  
 Concen: 6.757 ug/l  
 RT: 8.60 min Scan# 1265  
 Delta R.T. 0.18 min  
 Lab File: VX015824.D  
 Acq: 22 Apr 2020 03:36

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 BFB

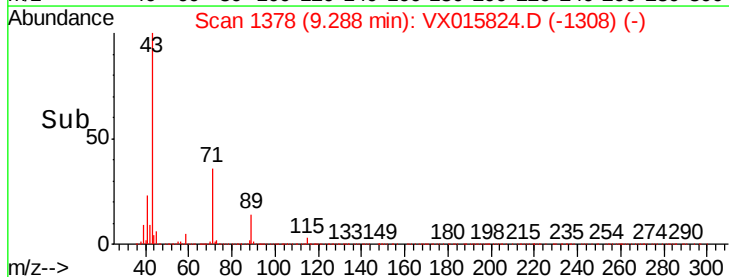
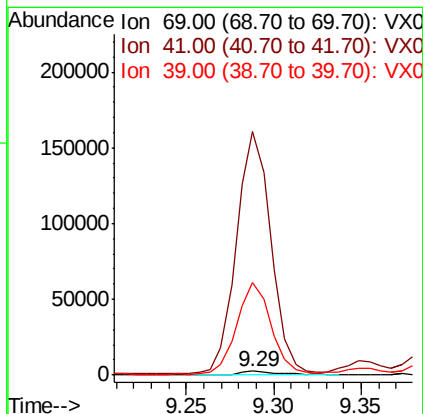
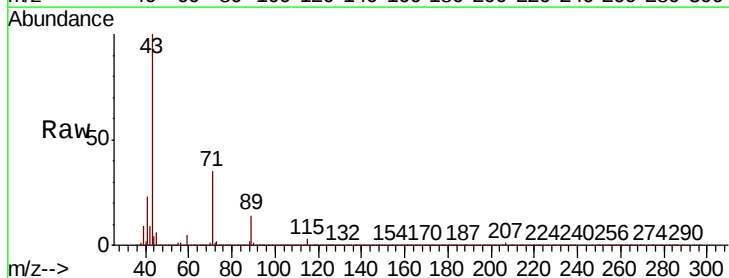
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 0.4   | 25.8  | 38.6# |
| 39      | 25.9  | 49.0  | 73.4# |

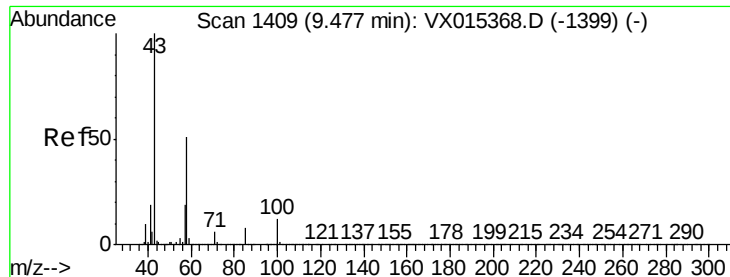


#56

Ethyl methacrylate  
 Concen: 0.200 ug/l  
 RT: 9.29 min Scan# 1378  
 Delta R.T. 0.13 min  
 Lab File: VX015824.D  
 Acq: 22 Apr 2020 03:36

| Tgt Ion | Ratio  | Lower | Upper |
|---------|--------|-------|-------|
| 69      | 100    |       |       |
| 41      | 6015.4 | 61.6  | 92.4# |
| 39      | 2230.8 | 34.0  | 51.0# |

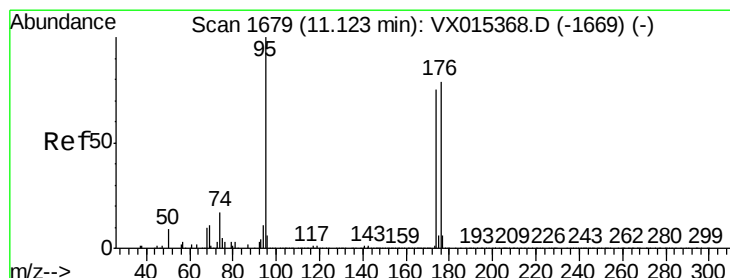
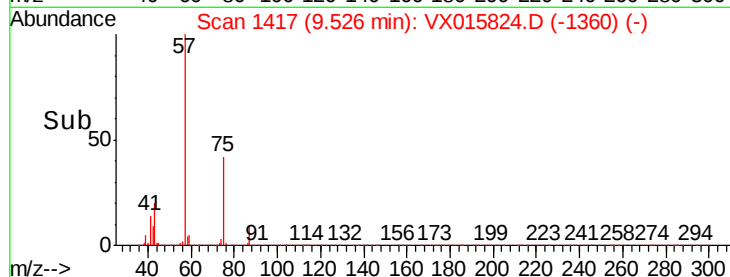
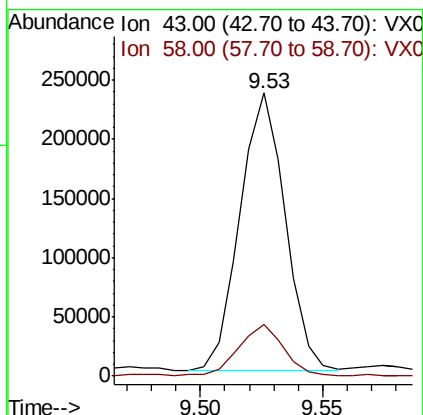
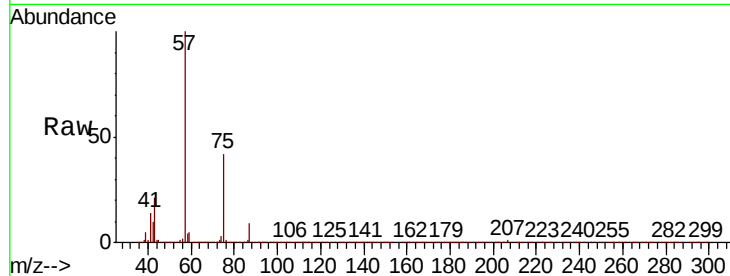




#59  
2-Hexanone  
Concen: 22.877 ug/l  
RT: 9.53 min Scan# 1417  
Delta R.T. 0.05 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

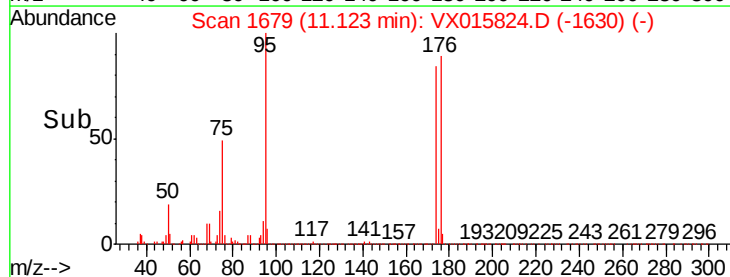
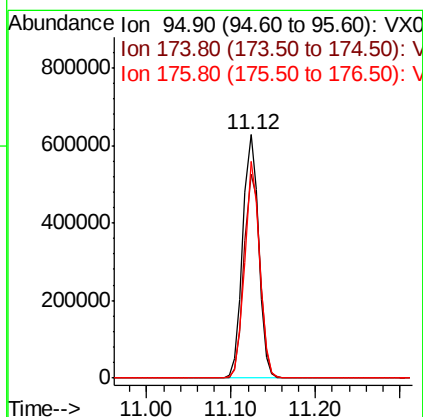
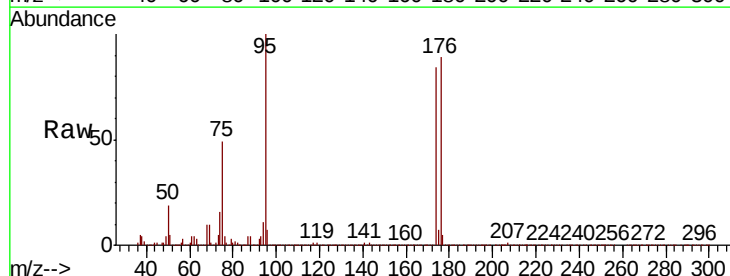
Instrument :  
MSVOA\_X  
ClientSampled :  
BFB

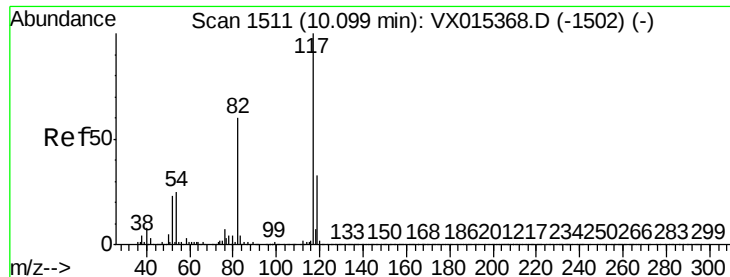
Tot Ion: 43 Resp: 301743  
Ion Ratio Lower Upper  
43 100  
58 18.0 25.6 76.6#



#62  
4-Bromofluorobenzene  
Concen: 53.543 ug/l  
RT: 11.12 min Scan# 1679  
Delta R.T. -0.00 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion: 95 Resp: 779505  
Ion Ratio Lower Upper  
95 100  
174 85.3 0.0 158.6  
176 84.1 0.0 159.0

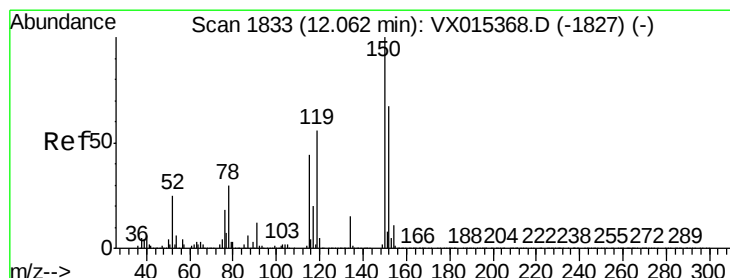
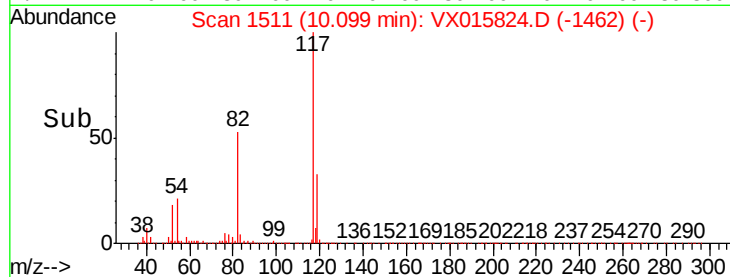
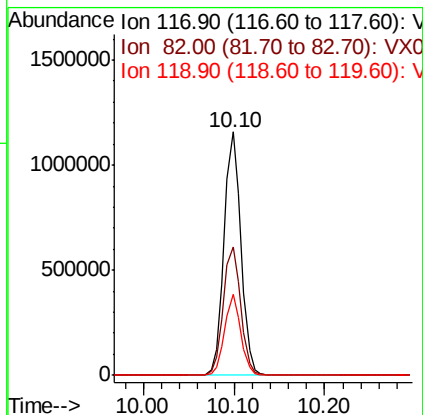
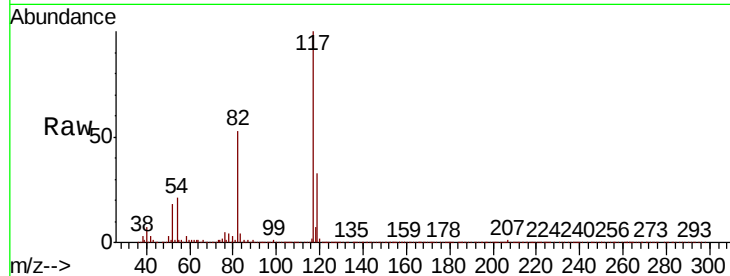




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1511  
Delta R.T. -0.00 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

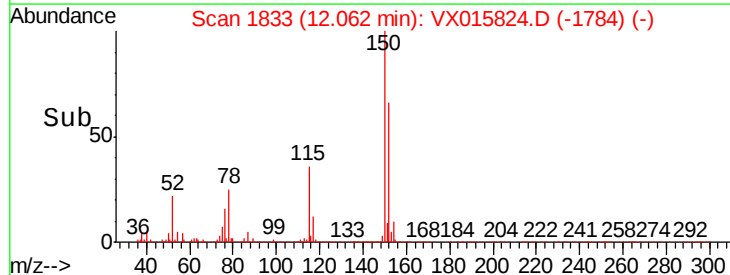
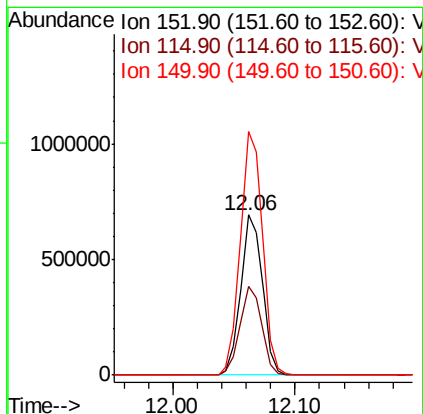
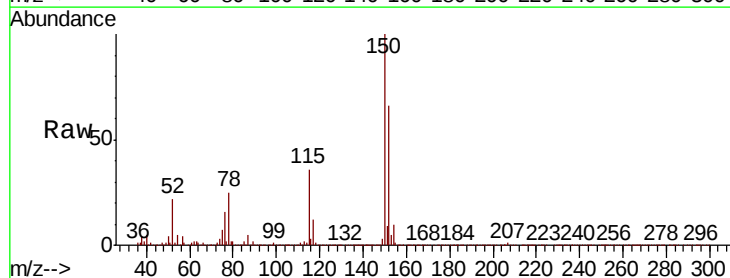
Instrument :  
MSVOA\_X  
ClientSampled :  
BFB

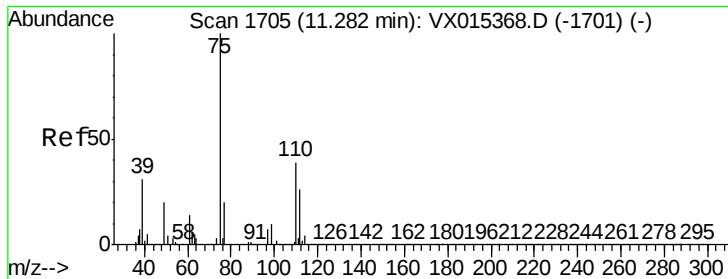
Tot Ion:117 Resp: 1500153  
Ion Ratio Lower Upper  
117 100  
82 52.9 47.8 71.8  
119 33.2 26.8 40.2



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.06 min Scan# 1833  
Delta R.T. -0.00 min  
Lab File: VX015824.D  
Acq: 22 Apr 2020 03:36

Tgt Ion:152 Resp: 844343  
Ion Ratio Lower Upper  
152 100  
115 55.6 39.0 116.9  
150 155.4 0.0 340.8





#76

1,2,3-Trichloropropane

Concen: 21.804 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. -0.16 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

Instrument :

MSVOA\_X

ClientSampleId :

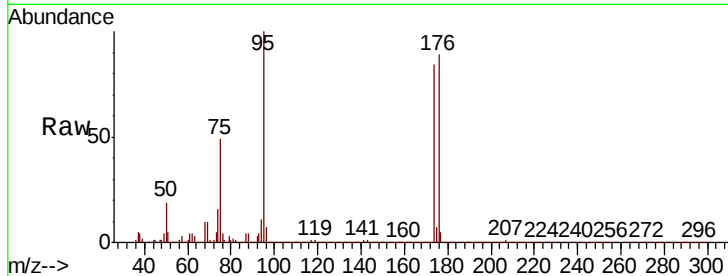
BFB

Tot Ion: 75 Resp: 378594

Ion Ratio Lower Upper

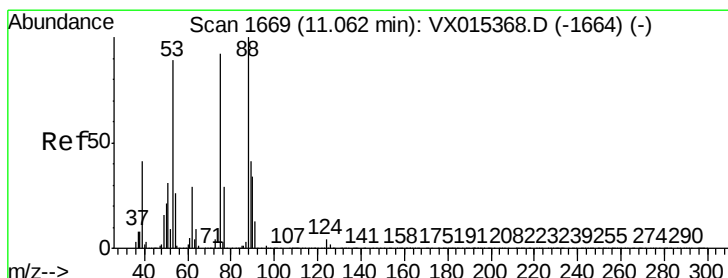
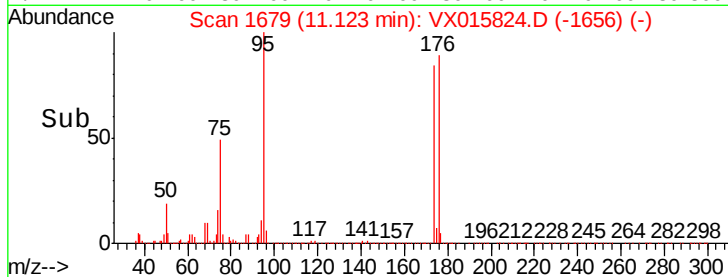
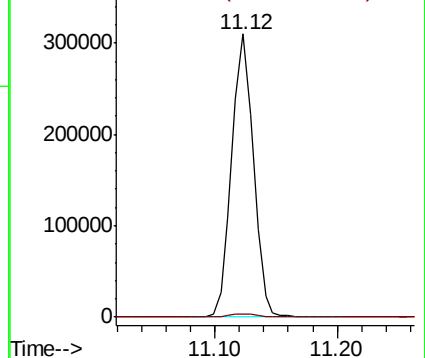
75 100

77 1.4 21.2 63.6#



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: 52.319 ug/l

RT: 11.12 min Scan# 1679

Delta R.T. 0.06 min

Lab File: VX015824.D

Acq: 22 Apr 2020 03:36

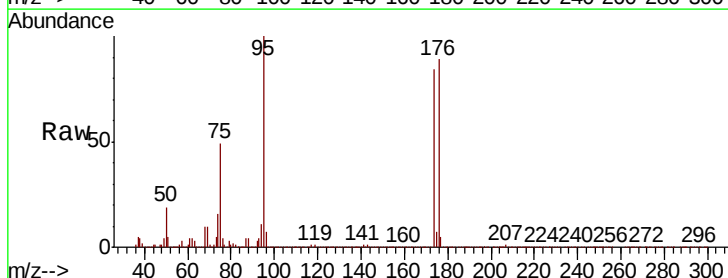
Tgt Ion: 75 Resp: 378594

Ion Ratio Lower Upper

75 100

53 0.3 80.1 120.1#

89 0.1 36.1 54.1#



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

