

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX111218\  
 Data File : VX005903.D  
 Acq On : 12 Nov 2018 16:28  
 Operator : JC/MD  
 Sample : J5899-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S36-TB-2018-3

Quant Time: Nov 13 04:42:09 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X110718W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 07 14:40:53 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 121623   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 174871   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 158438   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 77512    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 69636    | 49.80 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.60%  |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 55670    | 46.81 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.62%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 210399   | 53.21 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.42% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 71731    | 50.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.92% |          |

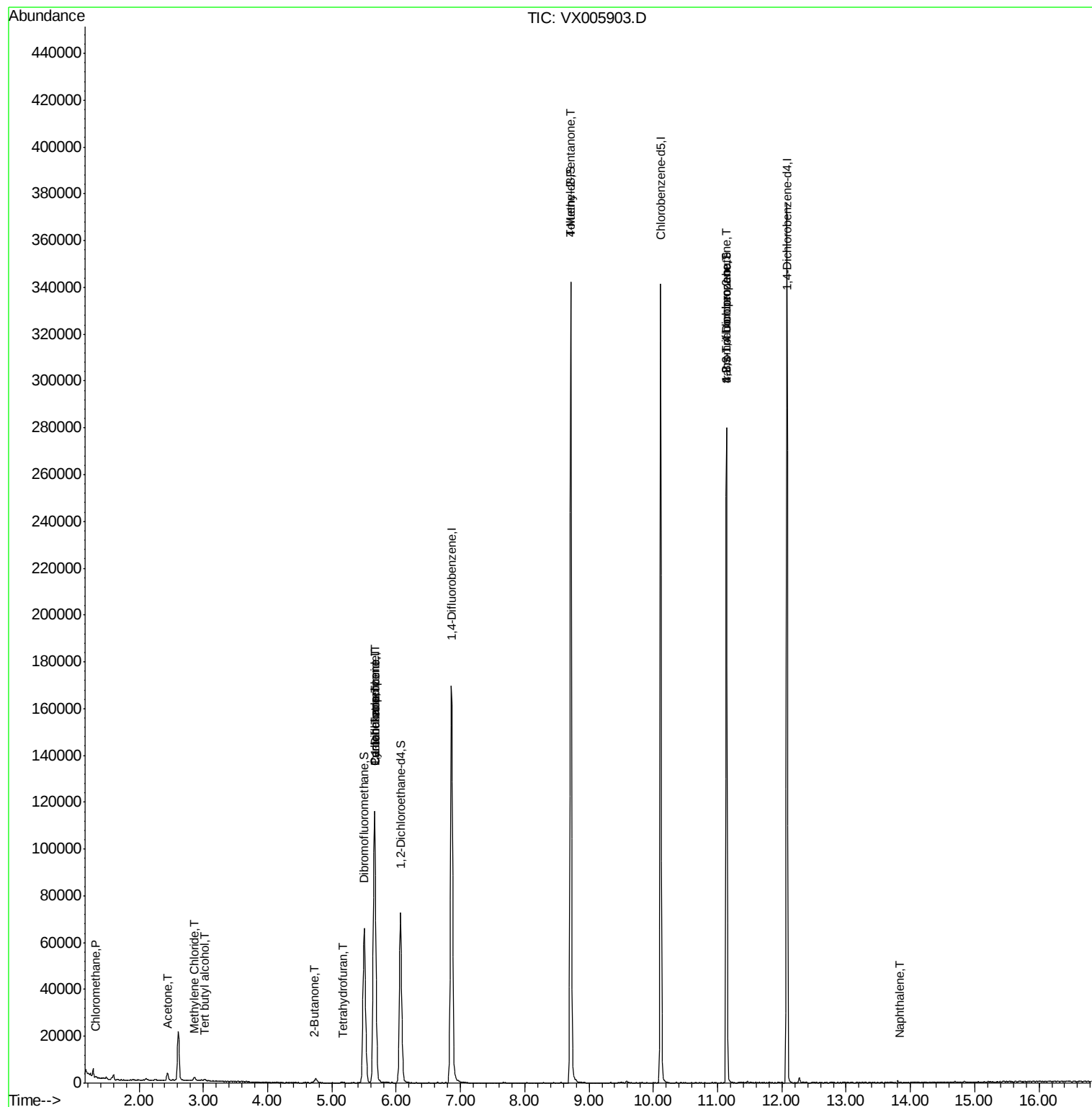
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 523      | 0.363     | ug/l   | 89     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 521      | 1.301     | ug/l # | 72     |
| 16) Acetone                    | 2.44  | 43   | 3510     | 4.662     | ug/l   | 99     |
| 18) Methyl Acetate             | 2.78  | 43   | 356      | Below Cal | #      | 55     |
| 20) Methylene Chloride         | 2.85  | 84   | 585      | 0.473     | ug/l # | 95     |
| 25) 2-Butanone                 | 4.71  | 43   | 325      | 0.275     | ug/l # | 51     |
| 29) Tetrahydrofuran            | 5.16  | 42   | 375      | 0.493     | ug/l # | 36     |
| 31) Cyclohexane                | 5.67  | 56   | 2120     | 1.088     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 8166     | 4.844     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 10598    | 6.280     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 8.71  | 43   | 930      | 0.459     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 35506    | 22.496    | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 35506    | 71.699    | ug/l # | 9      |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 116      | Below Cal | #      | 31     |
| 95) Naphthalene                | 13.83 | 128  | 183      | 1.209     | ug/l # | 69     |

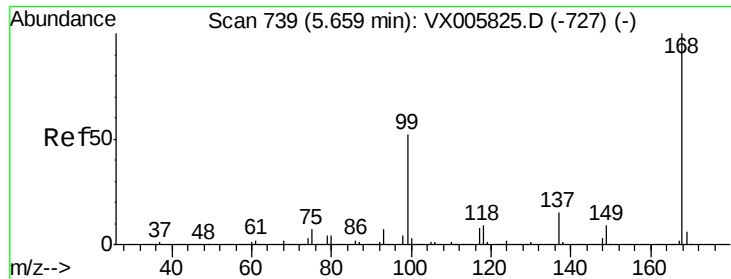
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX111218\  
Data File : VX005903.D  
Acq On : 12 Nov 2018 16:28  
Operator : JC/MD  
Sample : J5899-05  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
S36-TB-2018-3

Quant Time: Nov 13 04:42:09 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X110718W.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 07 14:40:53 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

Instrument :

MSVOA\_X

ClientSampleId :

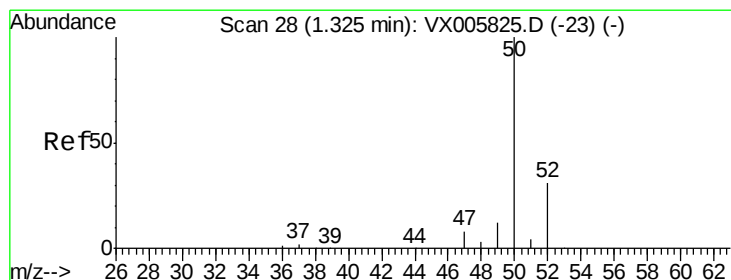
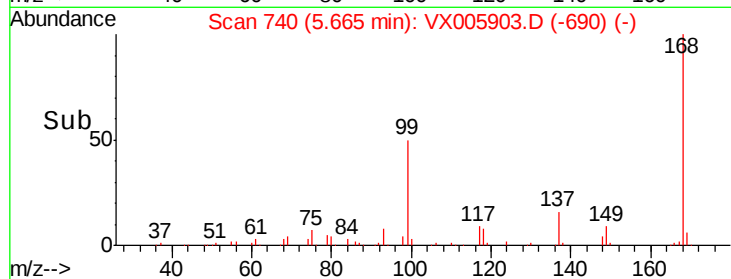
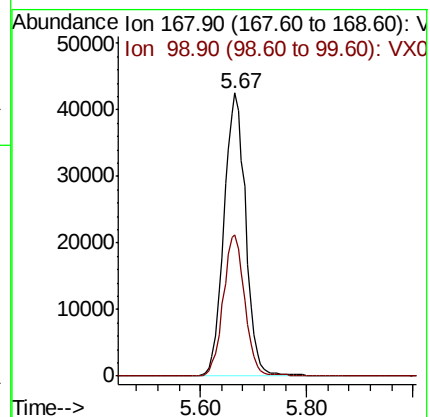
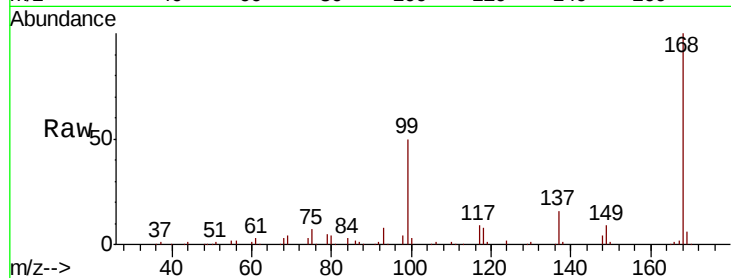
S36-TB-2018-3

Tot Ion:168 Resp: 121623

Ion Ratio Lower Upper

168 100

99 50.0 40.7 61.1



#3

Chloromethane

Concen: 0.363 ug/l

RT: 1.32 min Scan# 28

Delta R.T. -0.00 min

Lab File: VX005903.D

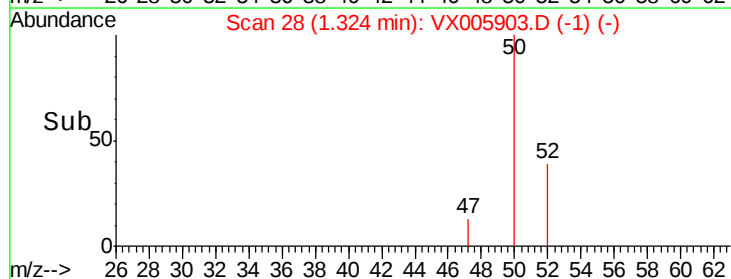
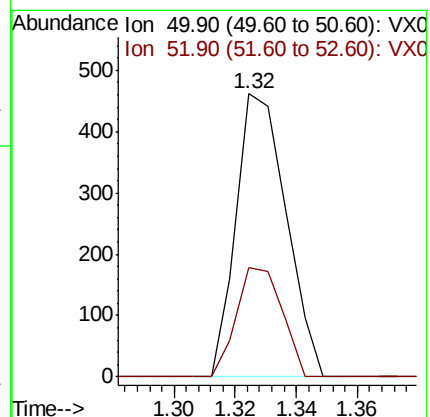
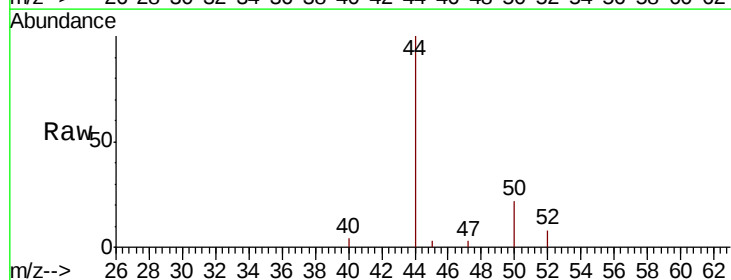
Acq: 12 Nov 2018 16:28

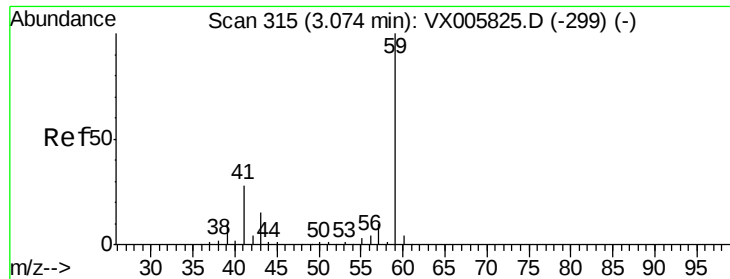
Tgt Ion: 50 Resp: 523

Ion Ratio Lower Upper

50 100

52 38.7 26.2 39.2

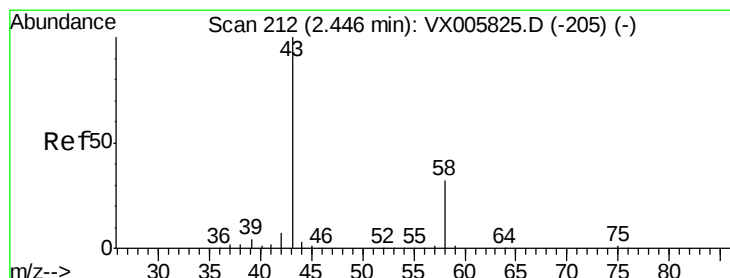
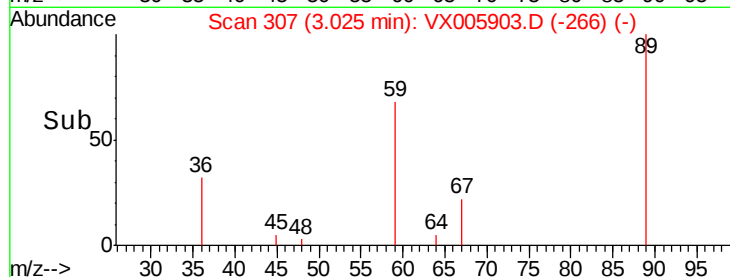
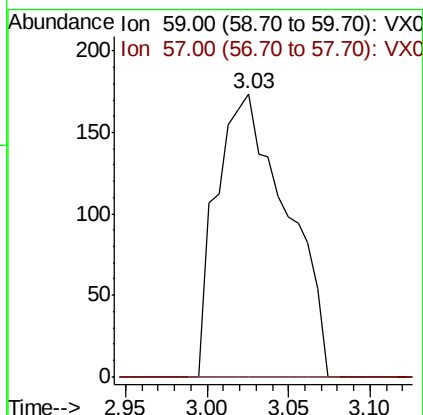
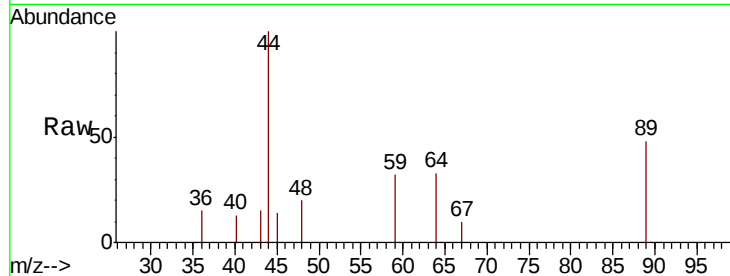




#11  
Tert butyl alcohol  
Concen: 1.301 ug/l  
RT: 3.03 min Scan# 307  
Delta R.T. -0.05 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

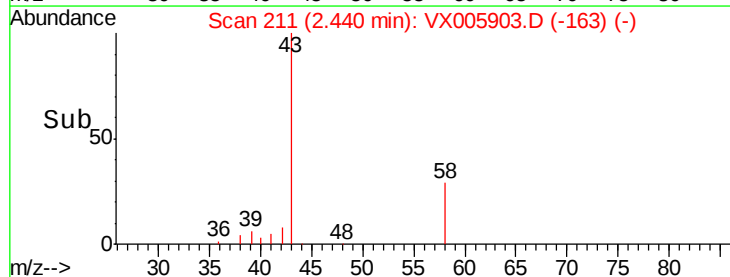
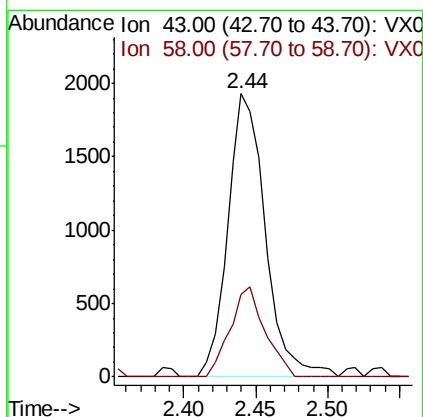
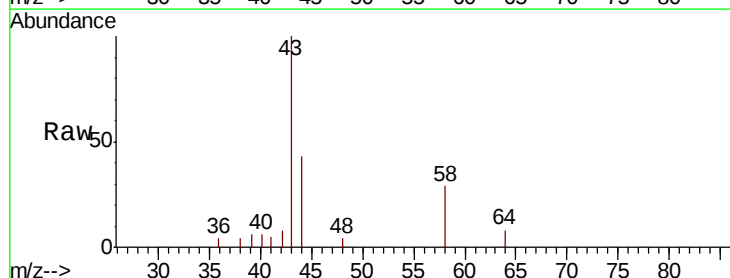
Instrument :  
MSVOA\_X  
ClientSampleId :  
S36-TB-2018-3

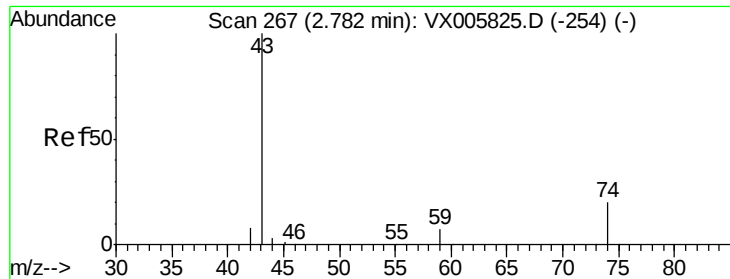
Tot Ion: 59 Resp: 521  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.5 12.7#



#16  
Acetone  
Concen: 4.662 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. -0.01 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

Tgt Ion: 43 Resp: 3510  
Ion Ratio Lower Upper  
43 100  
58 29.3 23.8 35.6

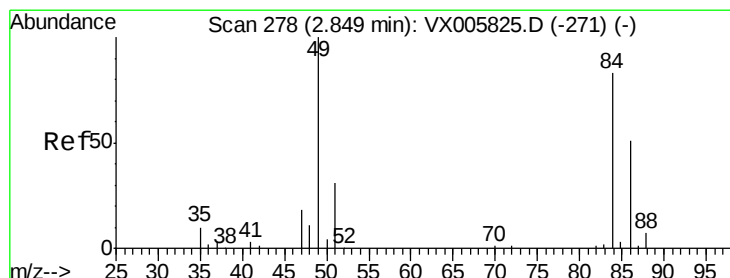
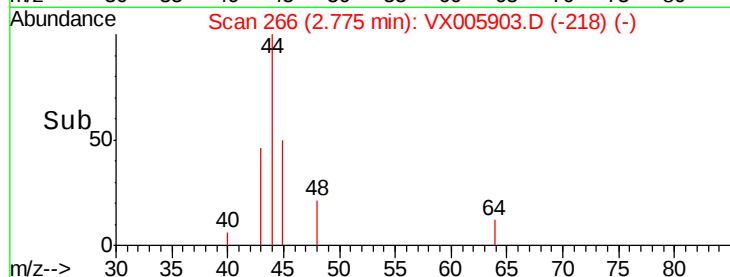
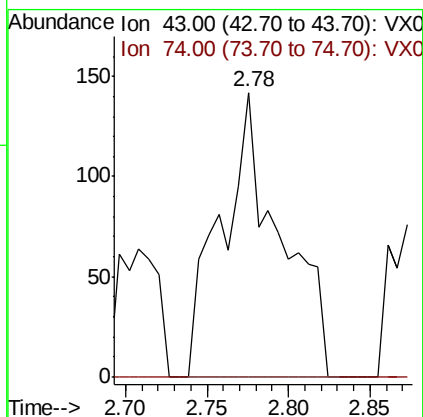
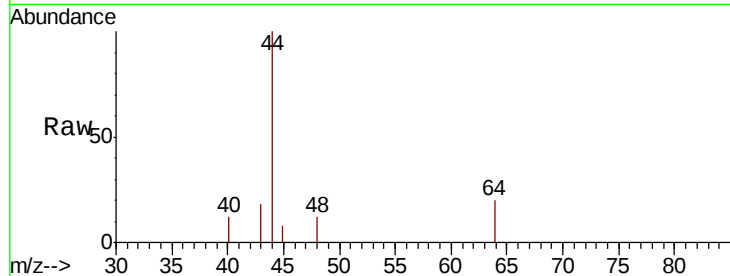




#18  
Methyl Acetate  
Concen: Below Cal  
RT: 2.78 min Scan# 266  
Delta R.T. -0.01 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

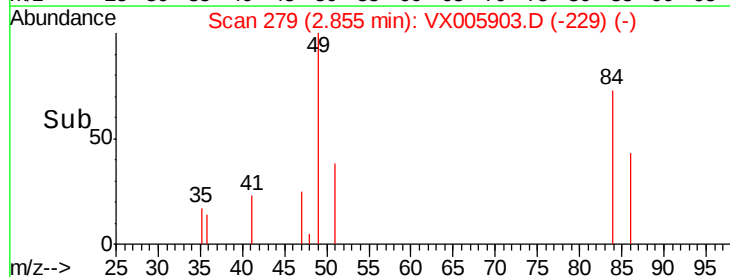
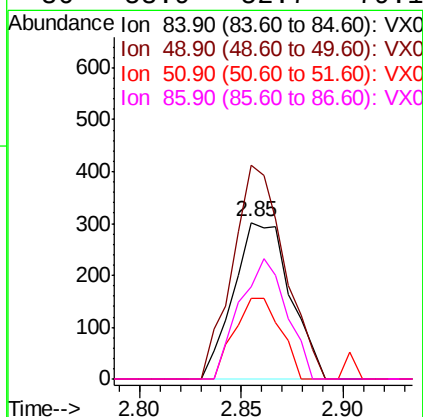
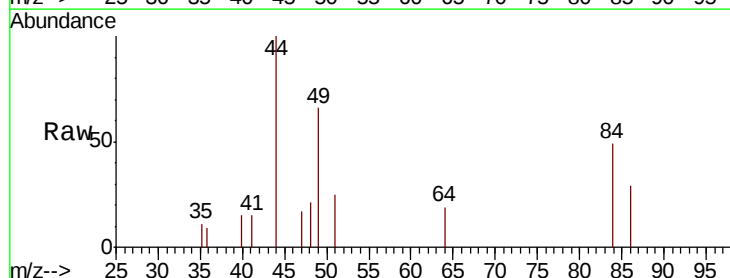
Instrument :  
MSVOA\_X  
ClientSampled :  
S36-TB-2018-3

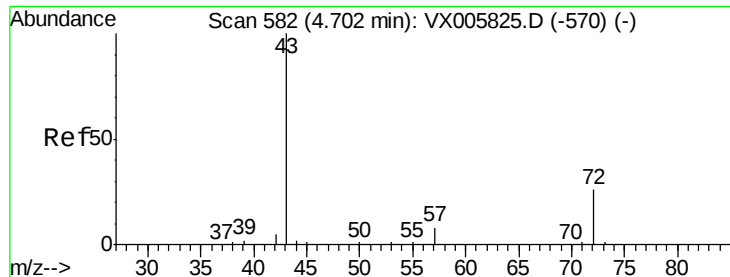
Tot Ion: 43 Resp: 356  
Ion Ratio Lower Upper  
43 100  
74 0.0 16.8 25.2#



#20  
Methylene Chloride  
Concen: 0.473 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. 0.01 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

Tgt Ion: 84 Resp: 585  
Ion Ratio Lower Upper  
84 100  
49 136.4 109.5 164.3  
51 51.7 33.3 49.9#  
86 58.9 52.7 79.1





#25

2-Butanone

Concen: 0.275 ug/l

RT: 4.71 min Scan# 584

Delta R.T. 0.01 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

Instrument :

MSVOA\_X

ClientSampleId :

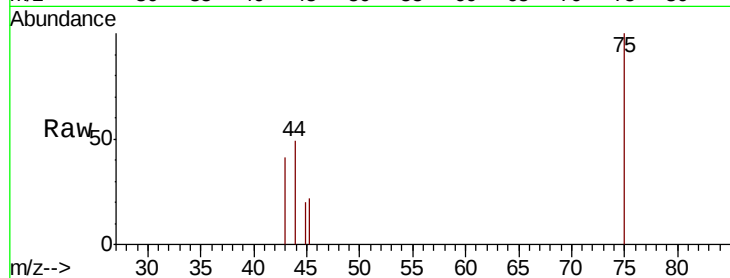
S36-TB-2018-3

Tot Ion: 43 Resp: 325

Ion Ratio Lower Upper

43 100

72 0.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

4.71

120

100

80

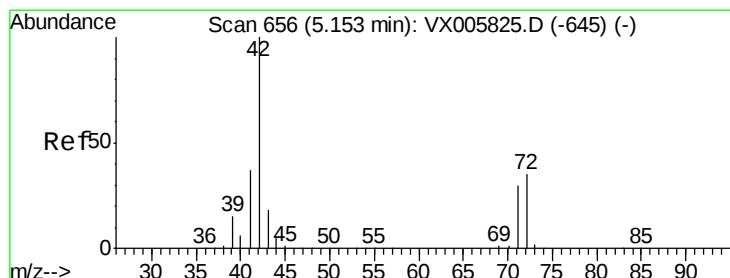
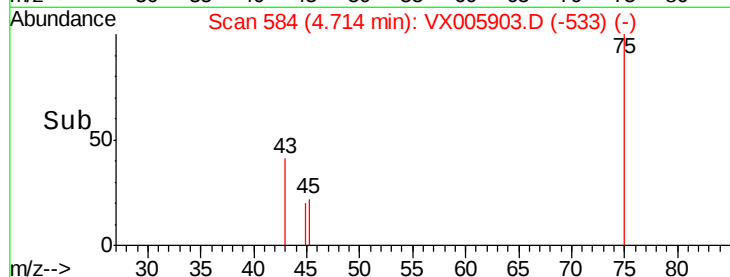
60

40

20

0

Time-->



#29

Tetrahydrofuran

Concen: 0.493 ug/l

RT: 5.16 min Scan# 657

Delta R.T. 0.01 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

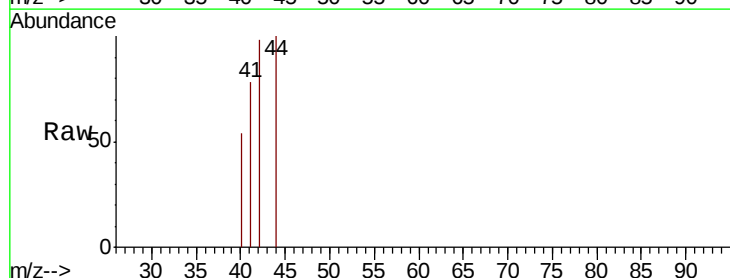
Tgt Ion: 42 Resp: 375

Ion Ratio Lower Upper

42 100

72 0.0 32.0 48.0#

71 0.0 29.8 44.8#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

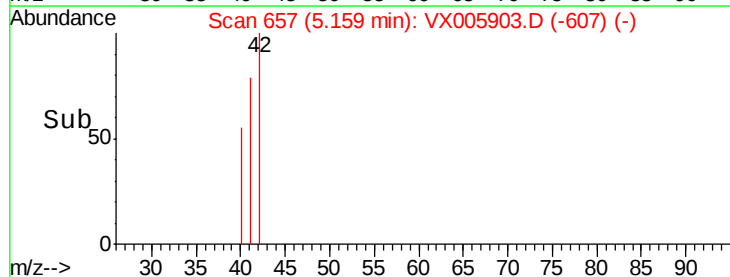
150

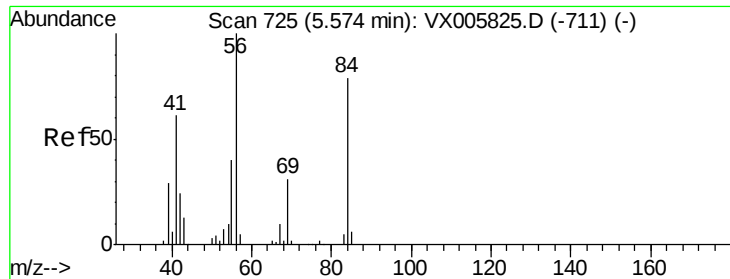
100

50

0

Time-->

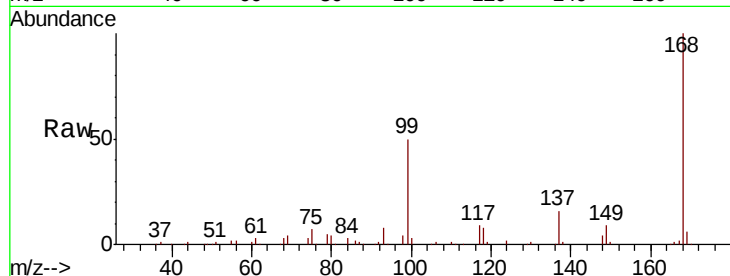




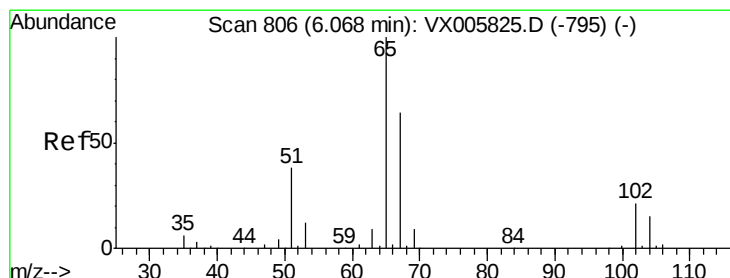
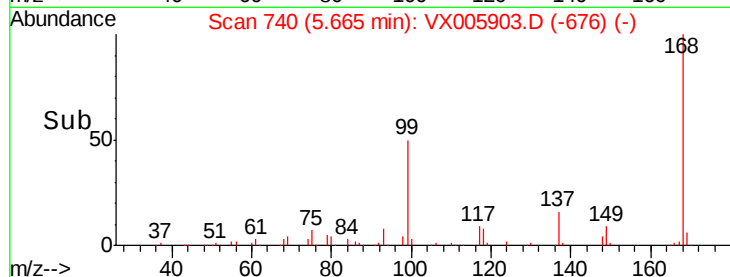
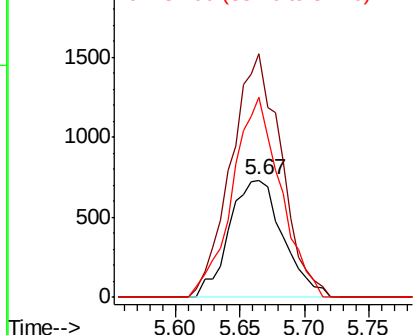
#31  
Cyclohexane  
Concen: 1.088 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.09 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

Instrument :  
MSVOA\_X  
ClientSampleId :  
S36-TB-2018-3

Tot Ion: 56 Resp: 2120  
Ion Ratio Lower Upper  
56 100  
69 207.6 22.6 34.0#  
84 171.1 62.7 94.1#

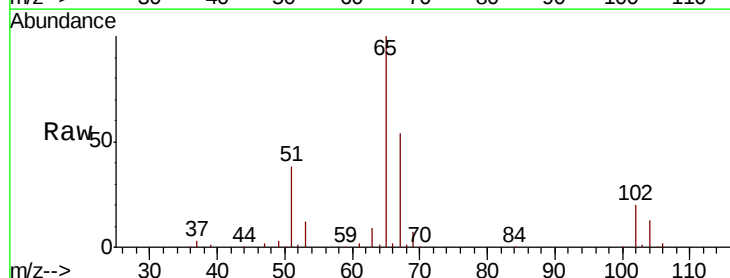


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

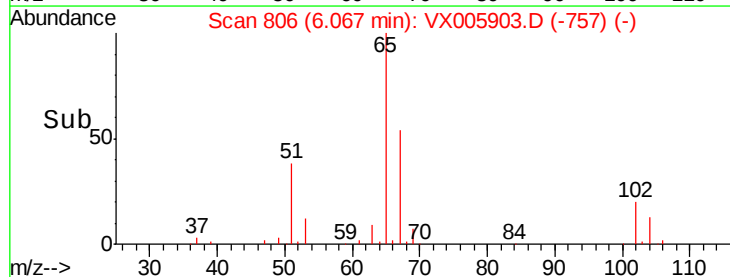
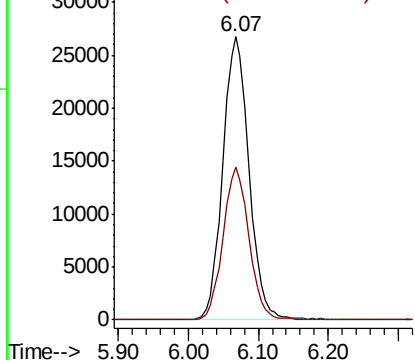


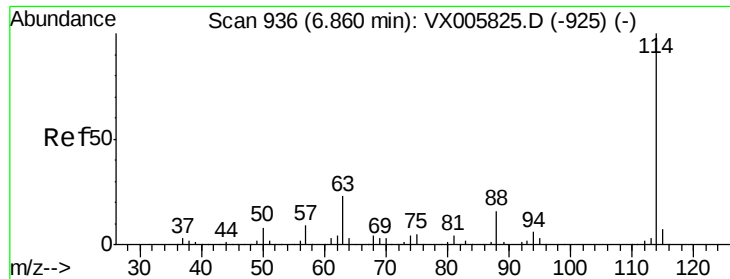
#33  
1,2-Dichloroethane-d4  
Concen: 49.804 ug/l  
RT: 6.07 min Scan# 806  
Delta R.T. -0.00 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

Tgt Ion: 65 Resp: 69636  
Ion Ratio Lower Upper  
65 100  
67 53.5 0.0 105.0



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0

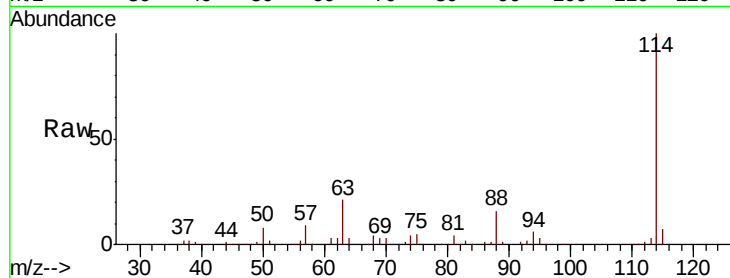




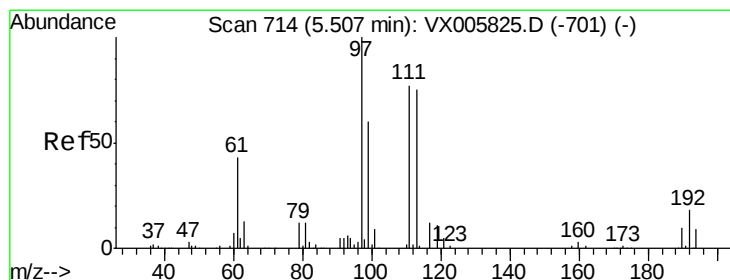
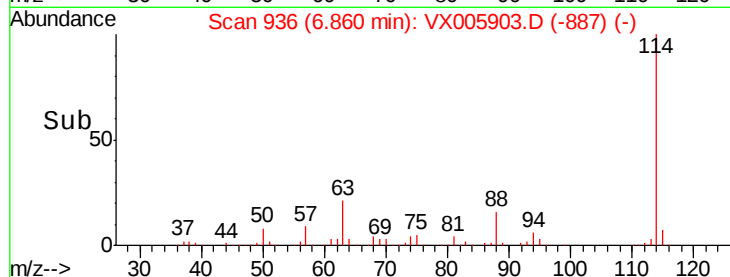
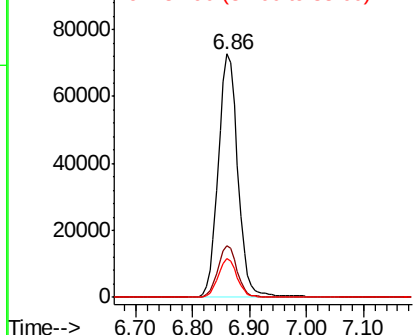
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.86 min Scan# 936  
Delta R.T. -0.00 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

Instrument :  
MSVOA\_X  
ClientSampleId :  
S36-TB-2018-3

Tot Ion:114 Resp: 174871  
Ion Ratio Lower Upper  
114 100  
63 21.0 0.0 42.8  
88 16.0 0.0 31.2

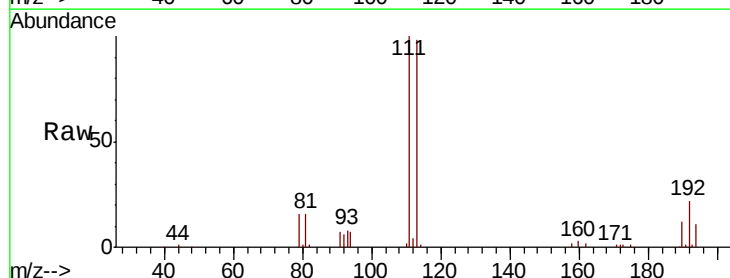


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VX0  
Ion 87.90 (87.60 to 88.60): VX0

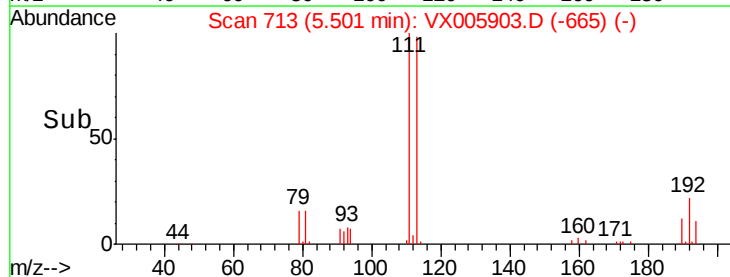
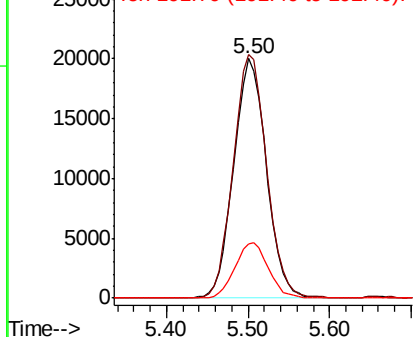


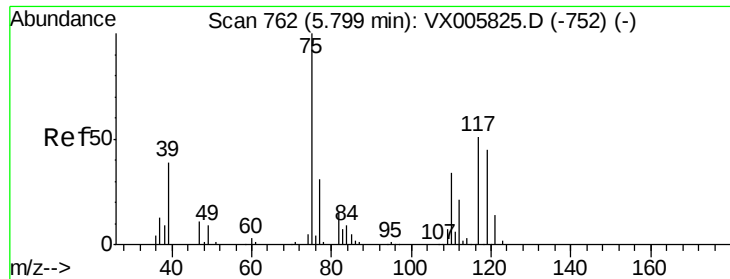
#35  
Dibromofluoromethane  
Concen: 46.806 ug/l  
RT: 5.50 min Scan# 713  
Delta R.T. -0.01 min  
Lab File: VX005903.D  
Acq: 12 Nov 2018 16:28

Tgt Ion:113 Resp: 55670  
Ion Ratio Lower Upper  
113 100  
111 103.5 82.3 123.5  
192 23.4 17.9 26.9



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

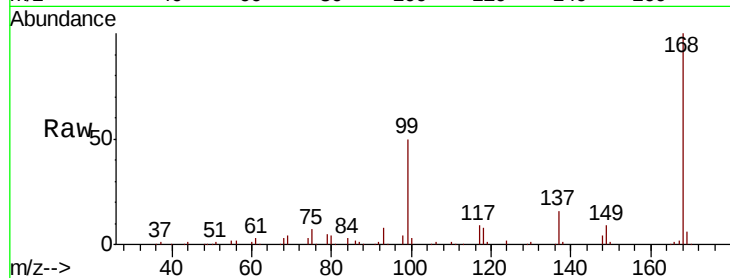




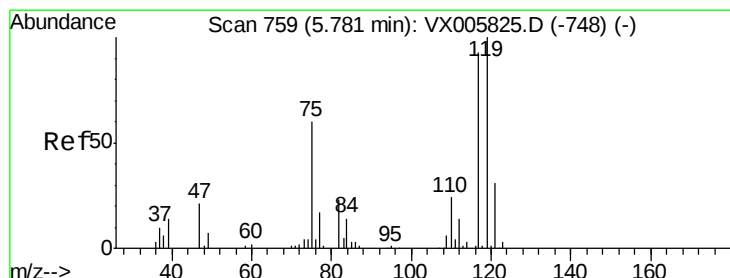
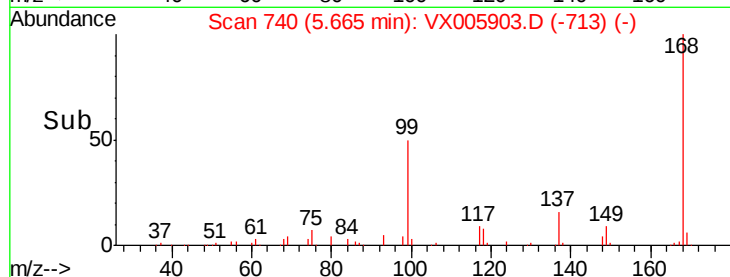
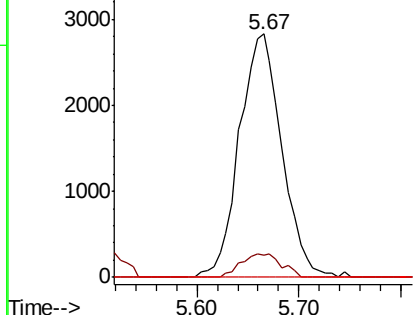
#36  
 1,1-Dichloropropene  
 Concen: 4.844 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.13 min  
 Lab File: VX005903.D  
 Acq: 12 Nov 2018 16:28

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S36-TB-2018-3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.1   | 17.4  | 52.2# |
| 77      | 0.0   | 25.8  | 38.6# |

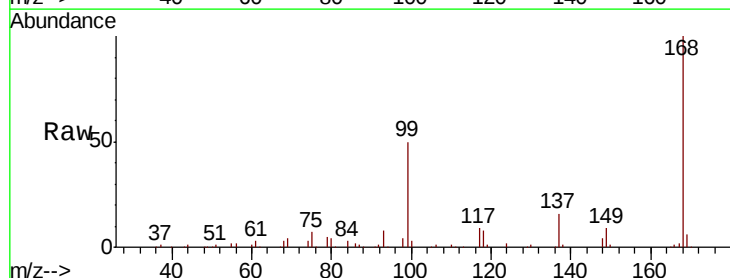


Abundance Ion 74.90 (74.60 to 75.60): VX0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VX0

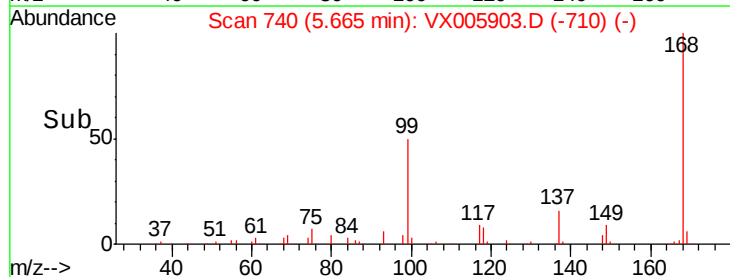
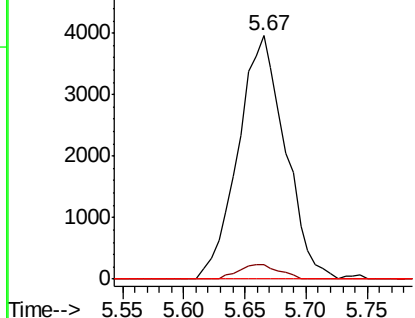


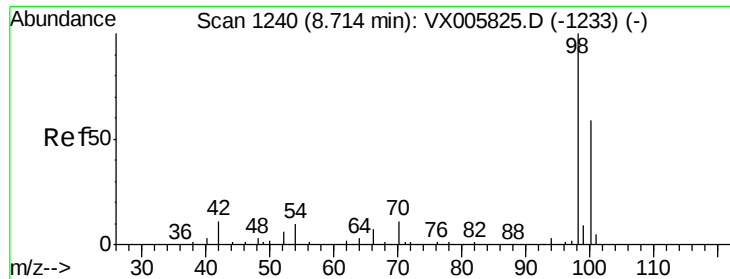
#38  
 Carbon Tetrachloride  
 Concen: 6.280 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.12 min  
 Lab File: VX005903.D  
 Acq: 12 Nov 2018 16:28

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.1   | 78.1  | 117.1# |
| 121     | 0.0   | 24.6  | 36.8#  |



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





#50

Toluene-d8

Concen: 53.209 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

Instrument :

MSVOA\_X

ClientSampleId :

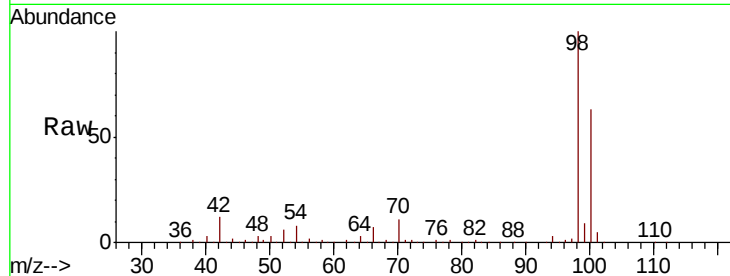
S36-TB-2018-3

Tot Ion: 98 Resp: 210399

Ion Ratio Lower Upper

98 100

100 62.9 51.3 76.9



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX

8.71

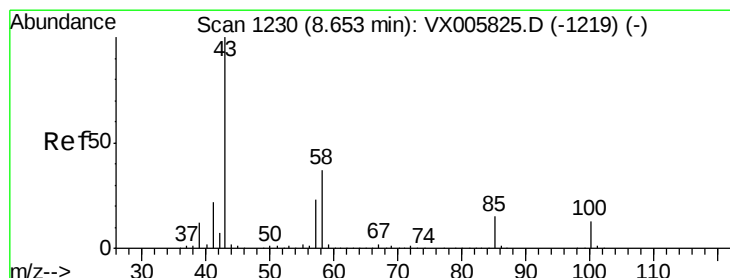
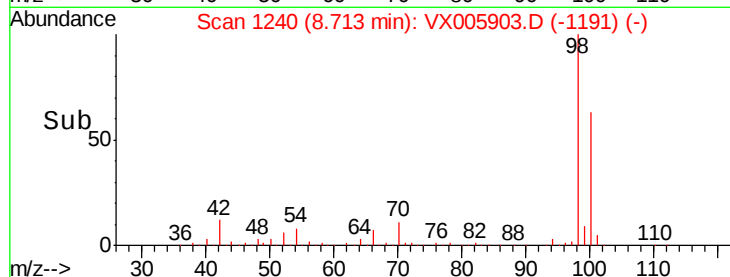
150000

100000

50000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.459 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.06 min

Lab File: VX005903.D

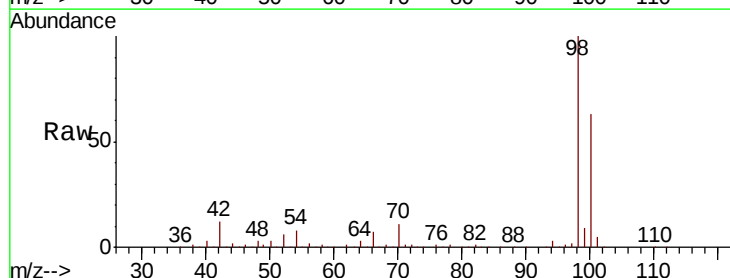
Acq: 12 Nov 2018 16:28

Tgt Ion: 43 Resp: 930

Ion Ratio Lower Upper

43 100

58 179.0 29.7 44.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

1200

1000

800

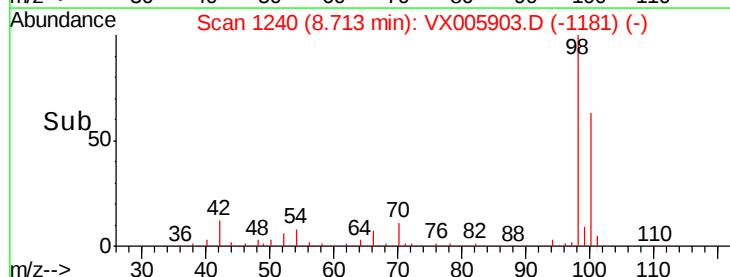
600

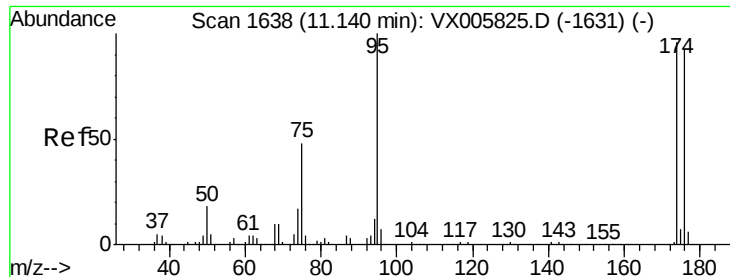
400

200

0

Time-->





#62

4-Bromofluorobenzene

Concen: 50.455 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.00 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

Instrument :

MSVOA\_X

ClientSampleId :

S36-TB-2018-3

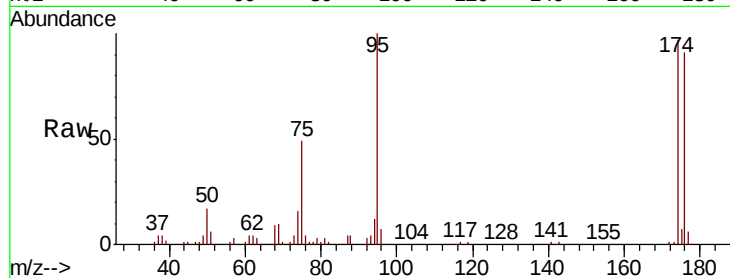
Tot Ion: 95 Resp: 71731

Ion Ratio Lower Upper

95 100

174 92.2 0.0 184.4

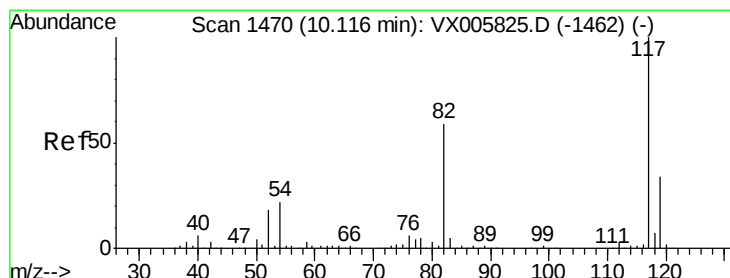
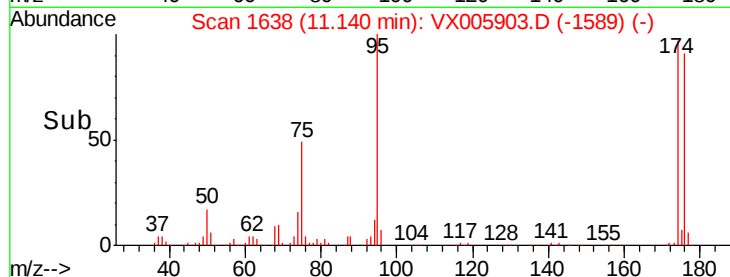
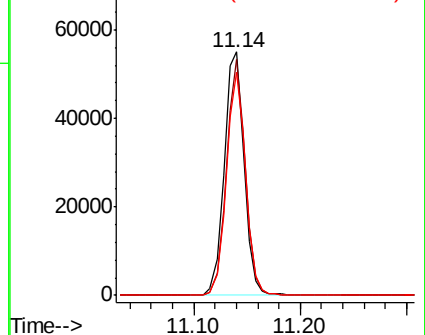
176 88.4 0.0 177.4



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.12 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

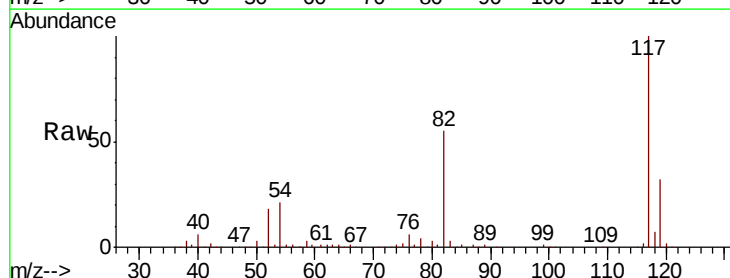
Tgt Ion: 117 Resp: 158438

Ion Ratio Lower Upper

117 100

82 54.8 44.1 66.1

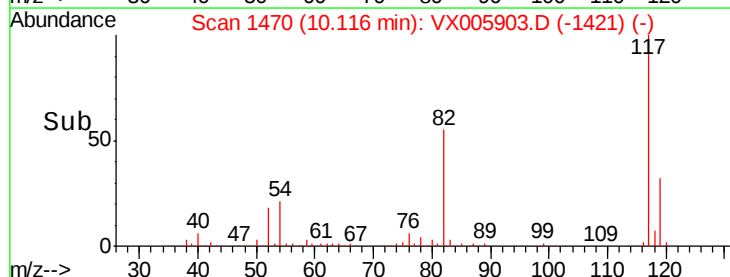
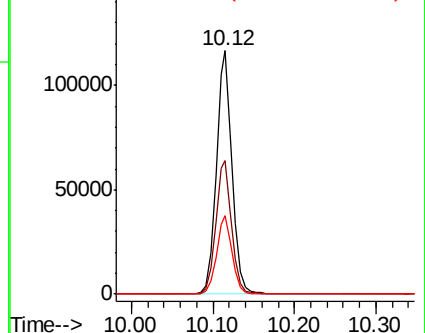
119 32.2 26.2 39.2

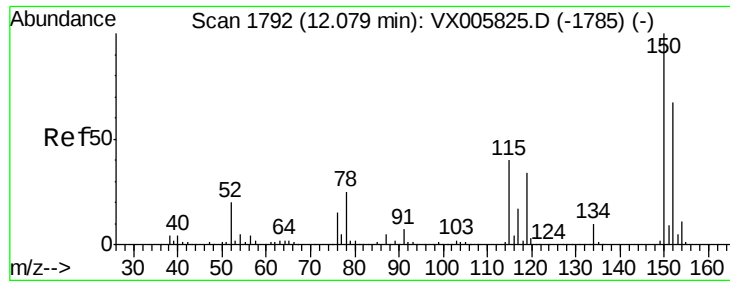


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

Instrument :

MSVOA\_X

ClientSampled :

S36-TB-2018-3

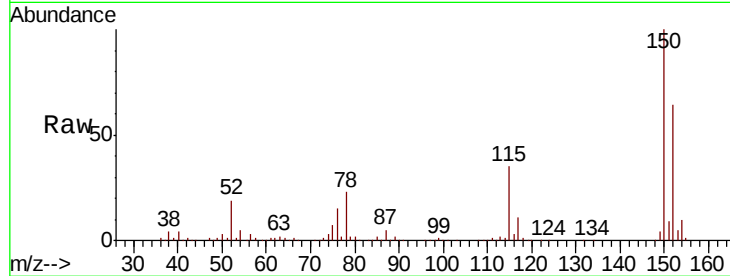
Tot Ion:152 Resp: 77512

Ion Ratio Lower Upper

152 100

115 55.4 39.4 118.1

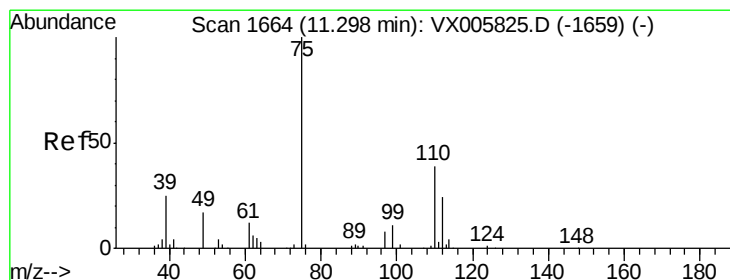
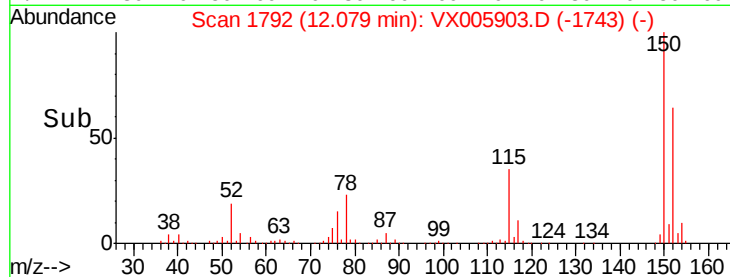
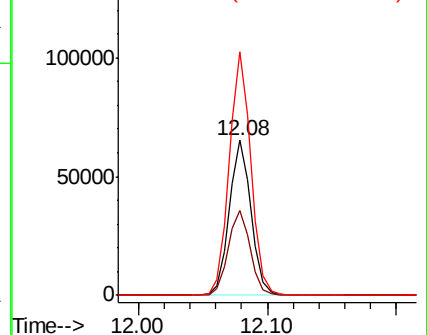
150 157.0 0.0 346.4



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: 22.496 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX005903.D

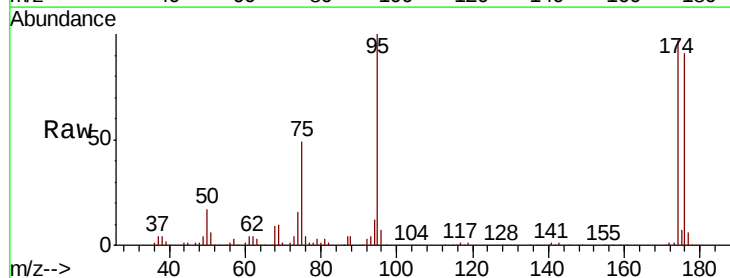
Acq: 12 Nov 2018 16:28

Tgt Ion: 75 Resp: 35506

Ion Ratio Lower Upper

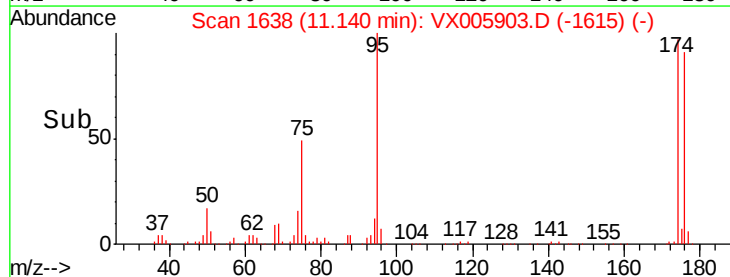
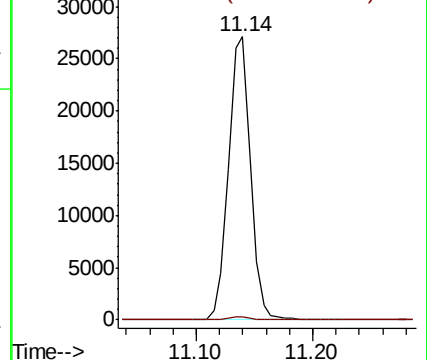
75 100

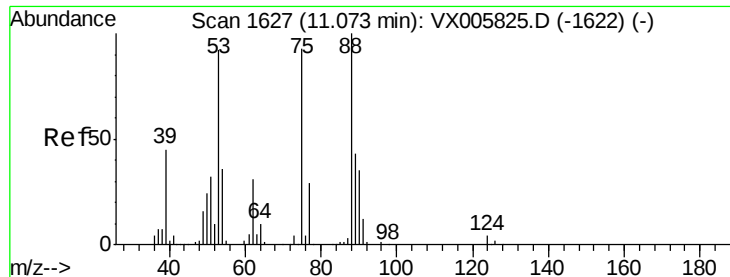
77 1.2 20.5 61.6#



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: 71.699 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.07 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

Instrument :

MSVOA\_X

ClientSampleId :

S36-TB-2018-3

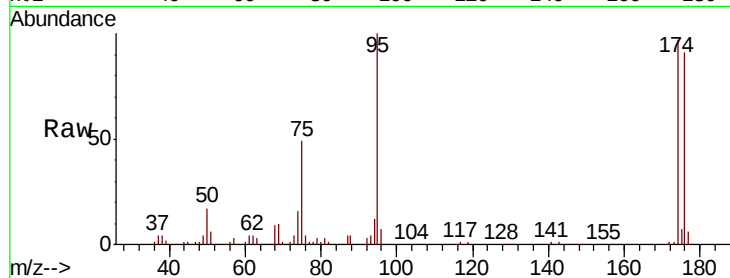
Tot Ion: 75 Resp: 35506

Ion Ratio Lower Upper

75 100

53 0.1 80.2 120.2#

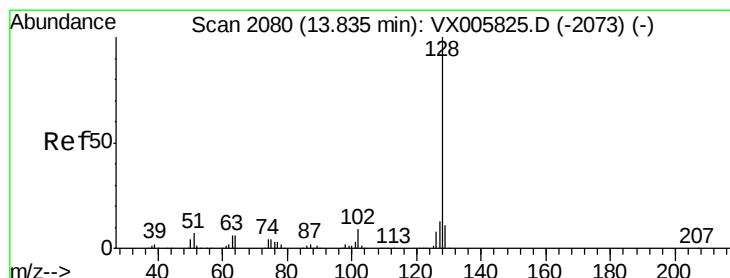
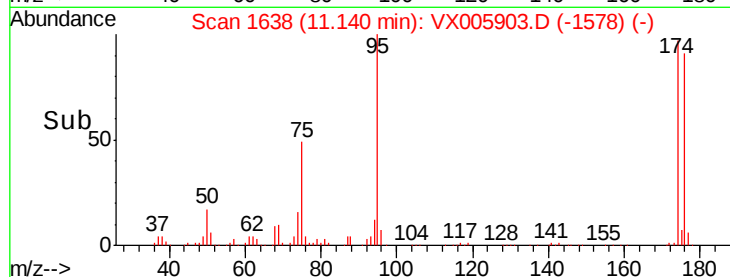
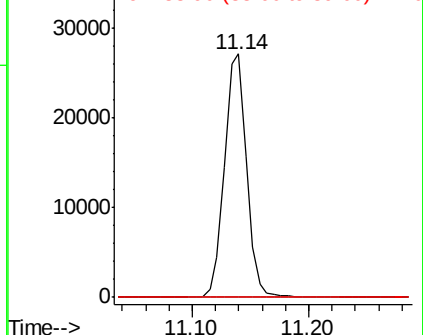
89 0.0 39.8 59.8#



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



#95

Naphthalene

Concen: 1.209 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. 0.00 min

Lab File: VX005903.D

Acq: 12 Nov 2018 16:28

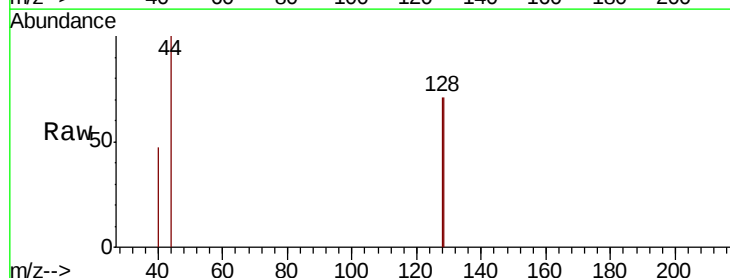
Tgt Ion: 128 Resp: 183

Ion Ratio Lower Upper

128 100

127 0.0 10.4 15.6#

129 0.0 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

