

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX120518\  
 Data File : VX006302.D  
 Acq On : 05 Dec 2018 15:58  
 Operator : JC/MD  
 Sample : J6233-04  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SB-2

Quant Time: Dec 06 00:17:21 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112918W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 30 03:55:33 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 807541   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 1228193  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 1121593  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 542507   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 408198   | 49.52 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.04% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 166270   | 20.91 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 41.82% |      |
| 50) Toluene-d8            | 8.71   | 98  | 1438975  | 49.75 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.50% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 535073   | 49.09 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.18% |      |

## Target Compounds

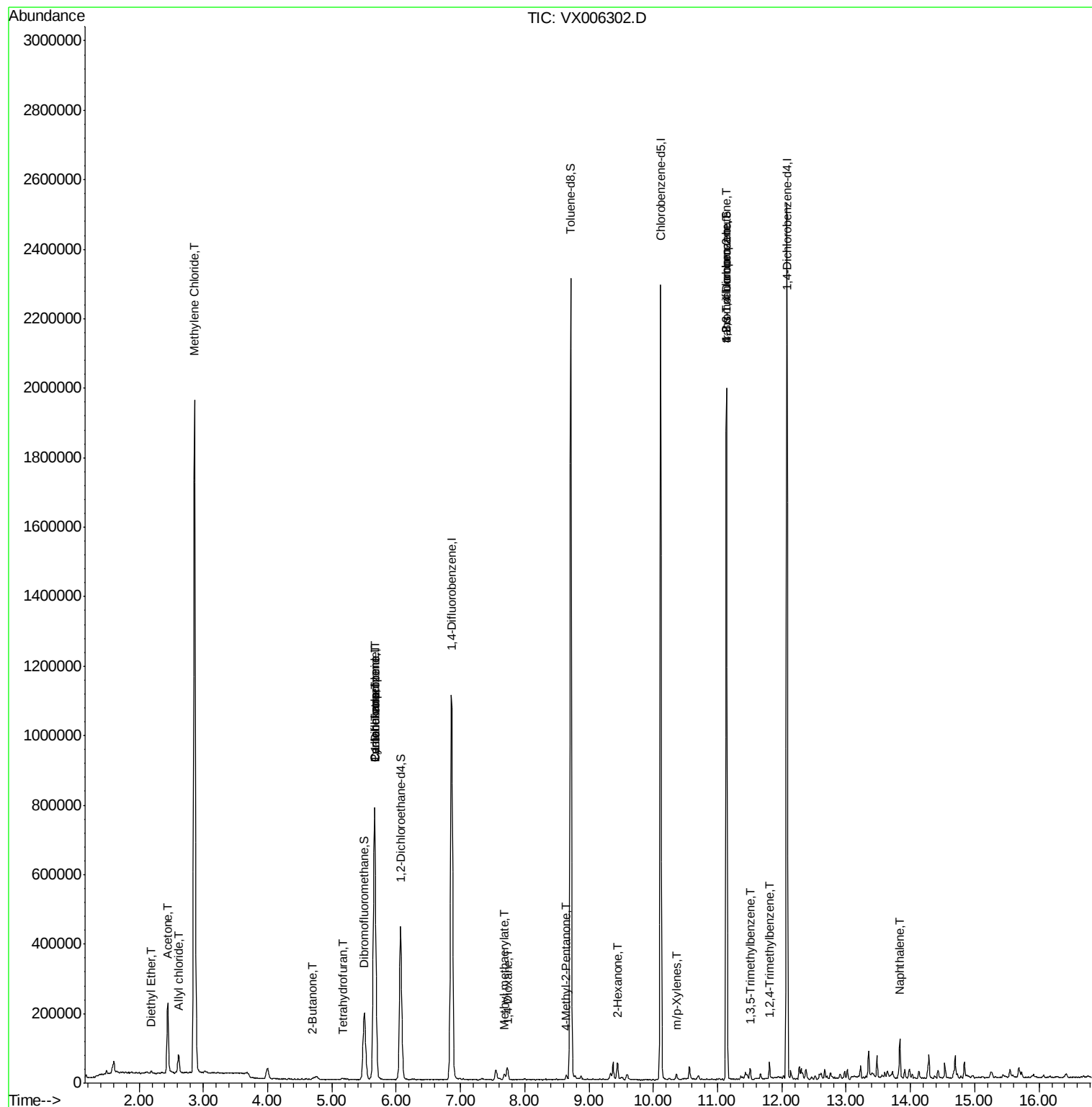
|                                |       |     |        |         |        | Qvalue |
|--------------------------------|-------|-----|--------|---------|--------|--------|
| 8) Diethyl Ether               | 2.19  | 74  | 2453   | 0.483   | ug/l   | 78     |
| 14) Allyl chloride             | 2.61  | 41  | 5248   | 0.364   | ug/l # | 59     |
| 16) Acetone                    | 2.45  | 43  | 221593 | 57.278  | ug/l   | 99     |
| 20) Methylene Chloride         | 2.86  | 84  | 895196 | 108.725 | ug/l   | 97     |
| 25) 2-Butanone                 | 4.70  | 43  | 5513   | 0.999   | ug/l   | 93     |
| 29) Tetrahydrofuran            | 5.16  | 42  | 2270   | 0.592   | ug/l # | 63     |
| 31) Cyclohexane                | 5.66  | 56  | 12618  | 1.060   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75  | 48708  | 4.709   | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.66  | 117 | 72892  | 5.991   | ug/l # | 17     |
| 48) Methyl methacrylate        | 7.68  | 41  | 21749  | 2.315   | ug/l # | 19     |
| 49) 1,4-Dioxane                | 7.74  | 88  | 216    | 0.933   | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43  | 7107   | 0.632   | ug/l   | 94     |
| 59) 2-Hexanone                 | 9.44  | 43  | 31046  | 3.615   | ug/l # | 26     |
| 68) m/p-Xylenes                | 10.36 | 106 | 3942   | 0.249   | ug/l   | 95     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75  | 242349 | 23.144  | ug/l # | 37     |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105 | 14527  | 0.466   | ug/l   | 99     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75  | 242349 | 54.313  | ug/l # | 15     |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105 | 21848  | 0.679   | ug/l   | 96     |
| 95) Naphthalene                | 13.83 | 128 | 73808  | 1.771   | ug/l   | 97     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX120518\  
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Sample : J6233-04  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampled :  
SB-2

Quant Time: Dec 06 00:17:21 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X112918W.M  
Quant Title : SW846 8260  
QLast Update : Fri Nov 30 03:55:33 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 740

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

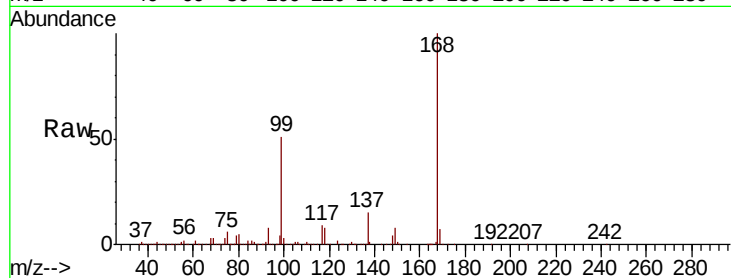
SB-2

Tot Ion:168 Resp: 807541

Ion Ratio Lower Upper

168 100

99 51.3 37.8 56.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

300000

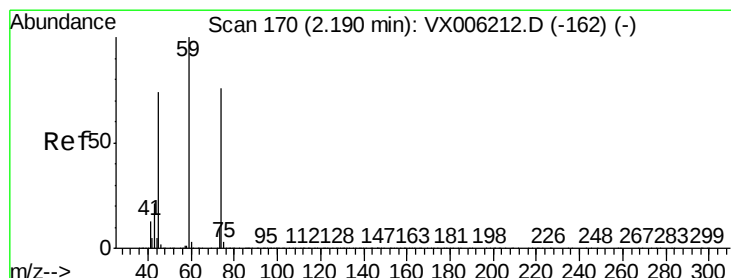
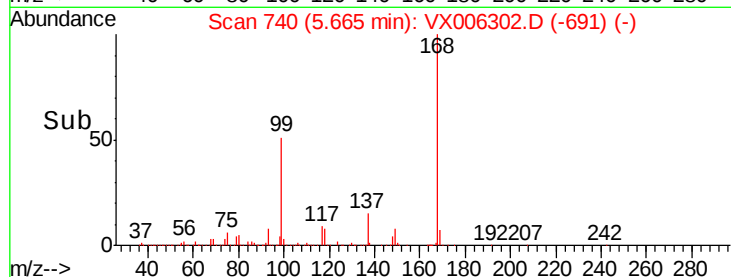
200000

100000

0

5.50 5.60 5.70 5.80

Time-->



#8

Diethyl Ether

Concen: 0.483 ug/l

RT: 2.19 min Scan# 170

Delta R.T. -0.00 min

Lab File: VX006302.D

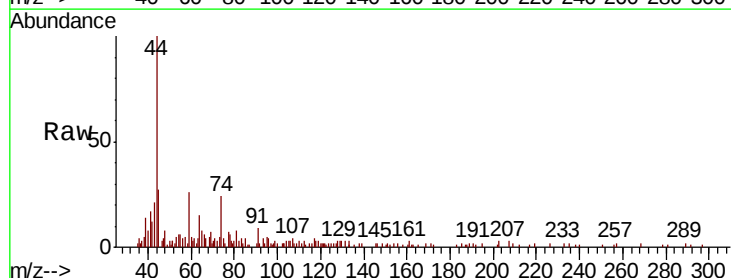
Acq: 05 Dec 2018 15:58

Tgt Ion: 74 Resp: 2453

Ion Ratio Lower Upper

74 100

45 77.6 49.5 148.7



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

1500

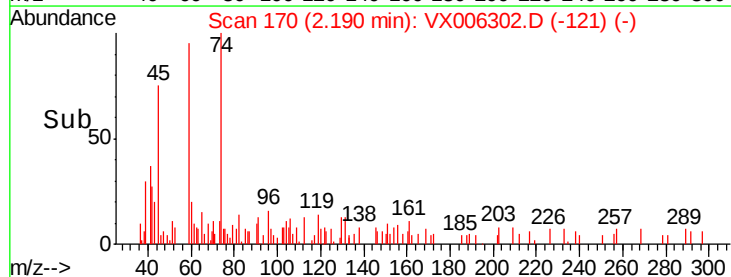
1000

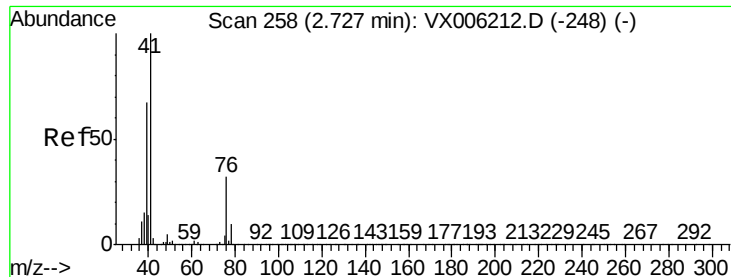
500

0

2.15 2.20 2.25

Time-->

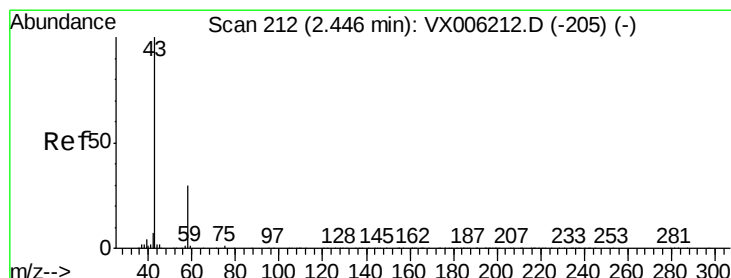
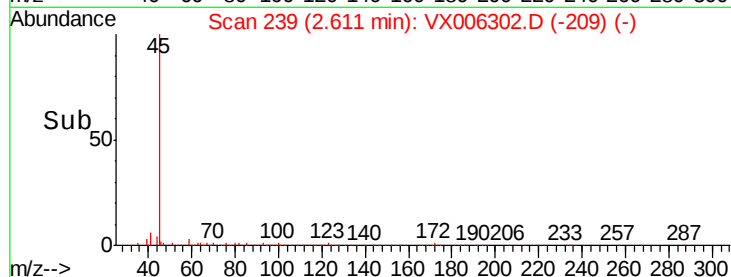
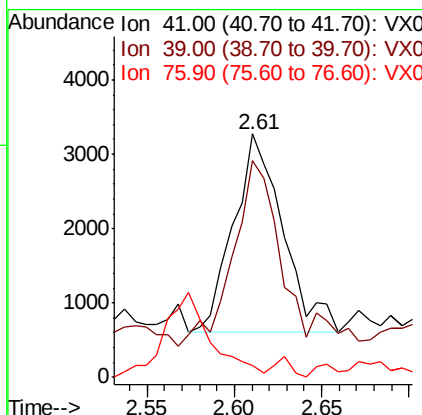
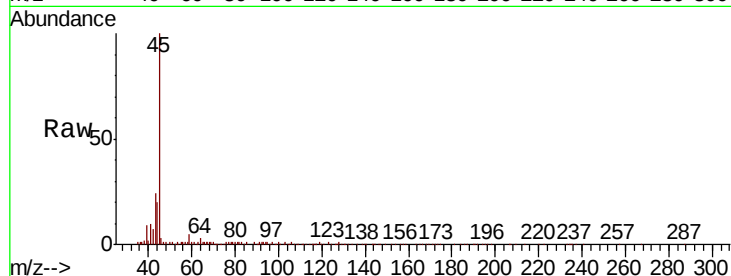




#14  
Allvl chloride  
Concen: 0.364 ug/l  
RT: 2.61 min Scan# 239  
Delta R.T. -0.12 min  
Lab File: VX006302.D  
Acq: 05 Dec 2018 15:58

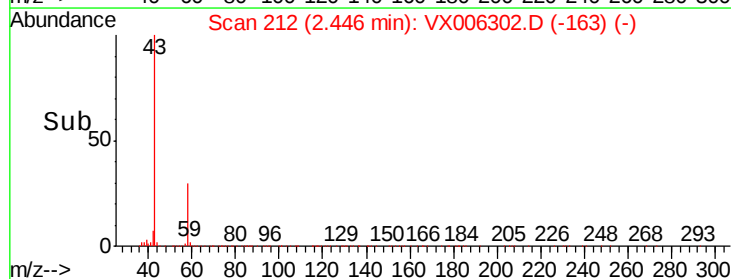
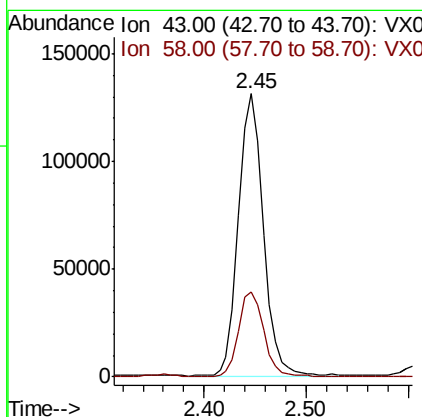
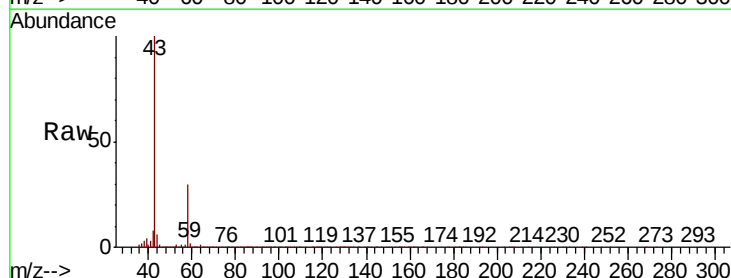
Instrument :  
MSVOA\_X  
ClientSampleId :  
SB-2

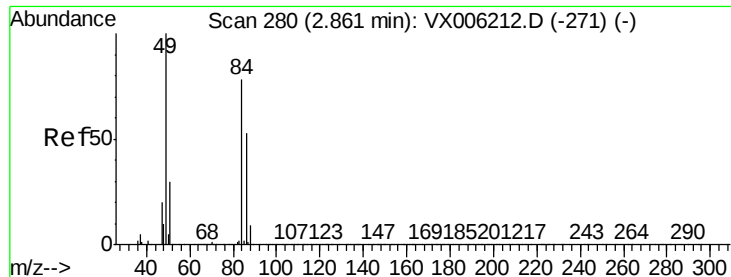
Tot Ion: 41 Resp: 5248  
Ion Ratio Lower Upper  
41 100  
39 94.7 52.4 78.6#  
76 3.4 25.4 38.0#



#16  
Acetone  
Concen: 57.278 ug/l  
RT: 2.45 min Scan# 212  
Delta R.T. -0.00 min  
Lab File: VX006302.D  
Acq: 05 Dec 2018 15:58

Tgt Ion: 43 Resp: 221593  
Ion Ratio Lower Upper  
43 100  
58 29.6 24.0 36.0





#20

Methylene Chloride

Concen: 108.725 ug/l

RT: 2.86 min Scan# 280

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

SB-2

Tot Ion: 84 Resp: 895196

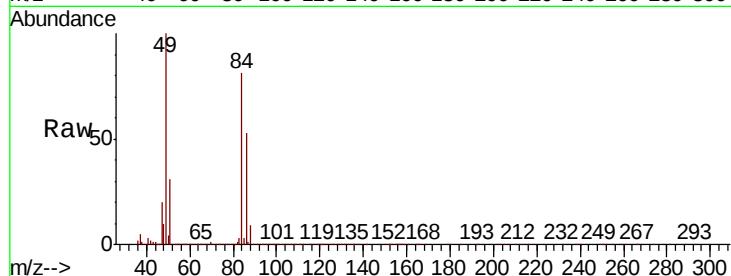
Ion Ratio Lower Upper

84 100

49 123.2 102.2 153.4

51 37.9 31.1 46.7

86 65.0 53.7 80.5

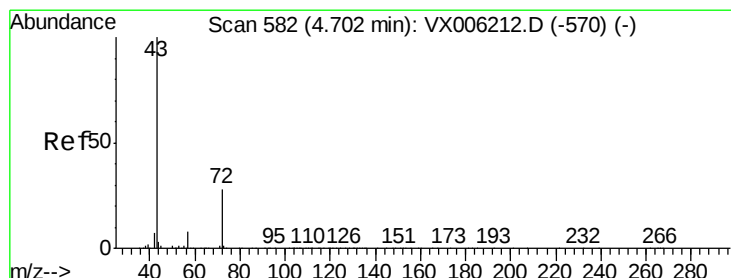
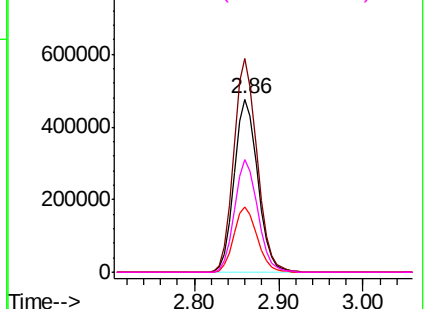
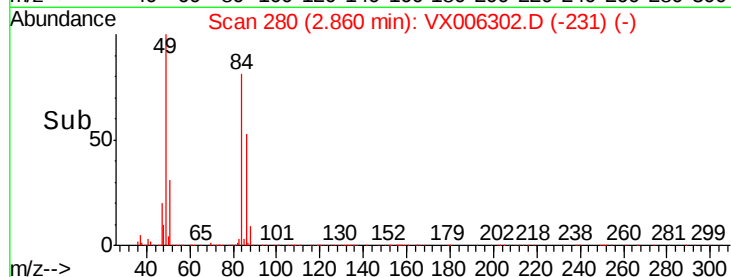


Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0



#25

2-Butanone

Concen: 0.999 ug/l

RT: 4.70 min Scan# 581

Delta R.T. -0.01 min

Lab File: VX006302.D

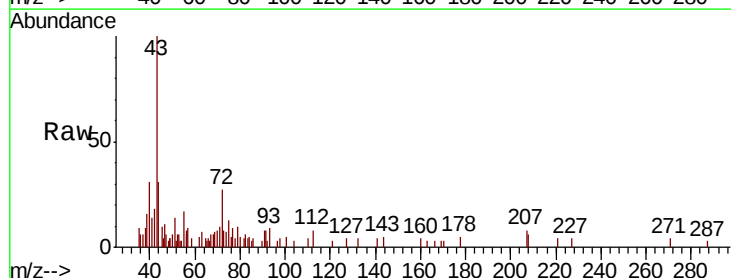
Acq: 05 Dec 2018 15:58

Tgt Ion: 43 Resp: 5513

Ion Ratio Lower Upper

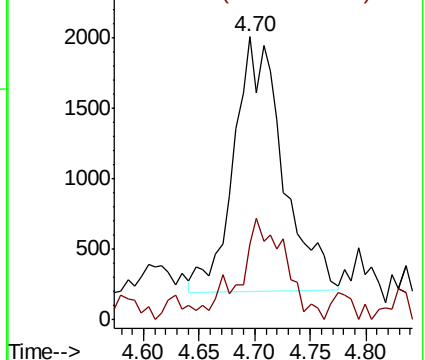
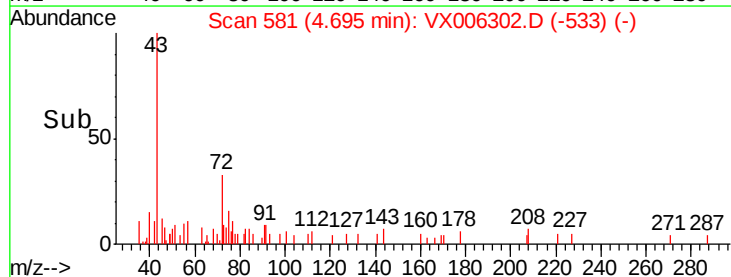
43 100

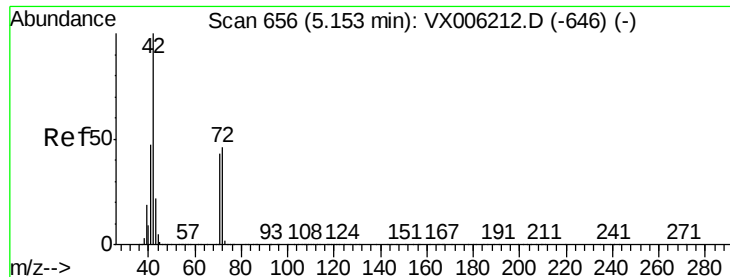
72 24.4 22.6 33.8



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0





#29

Tetrahydrofuran

Concen: 0.592 ug/l

RT: 5.16 min Scan# 658

Delta R.T. 0.01 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

SB-2

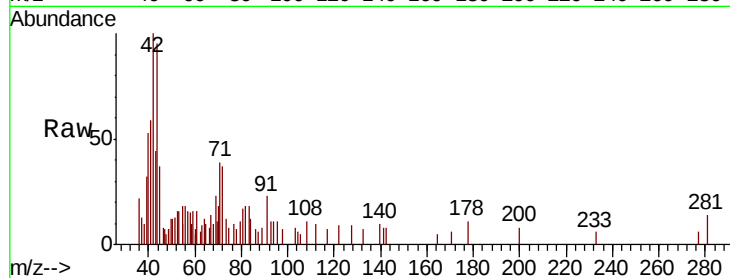
Tot Ion: 42 Resp: 2270

Ion Ratio Lower Upper

42 100

72 63.7 37.8 56.8#

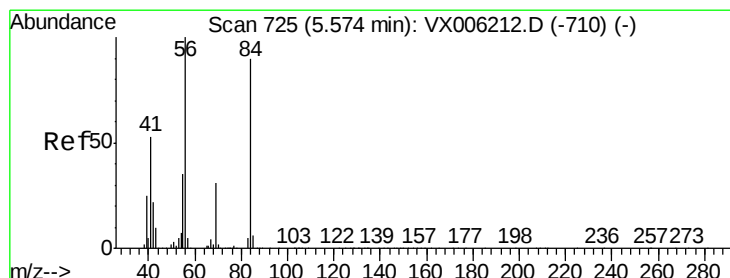
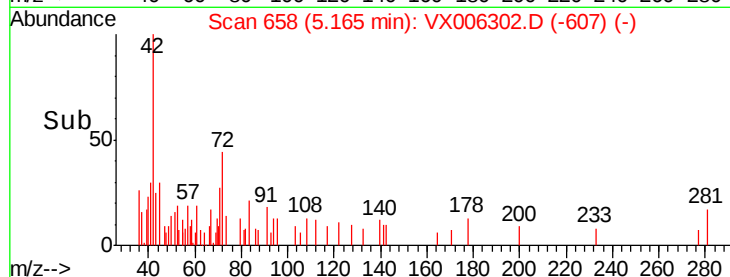
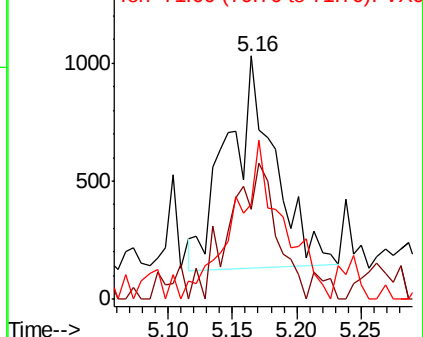
71 76.7 35.2 52.8#



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



#31

Cyclohexane

Concen: 1.060 ug/l

RT: 5.66 min Scan# 740

Delta R.T. 0.09 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

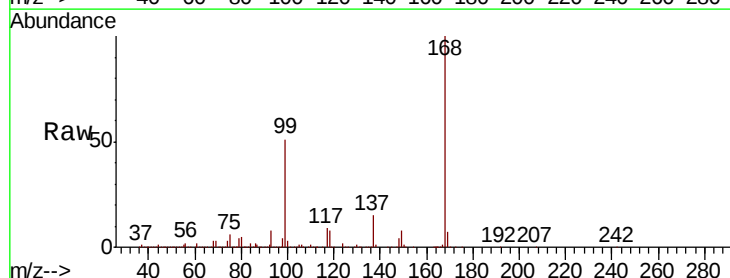
Tgt Ion: 56 Resp: 12618

Ion Ratio Lower Upper

56 100

69 189.0 24.5 36.7#

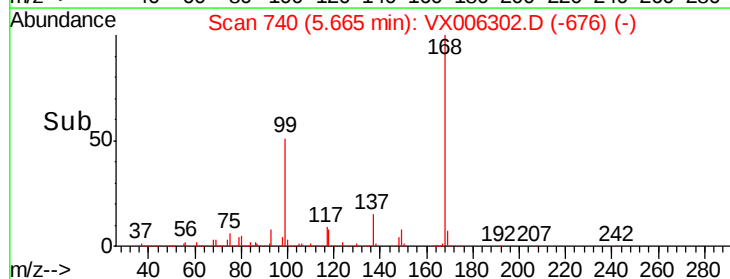
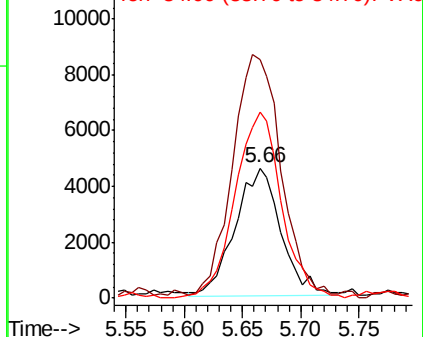
84 147.7 71.8 107.6#

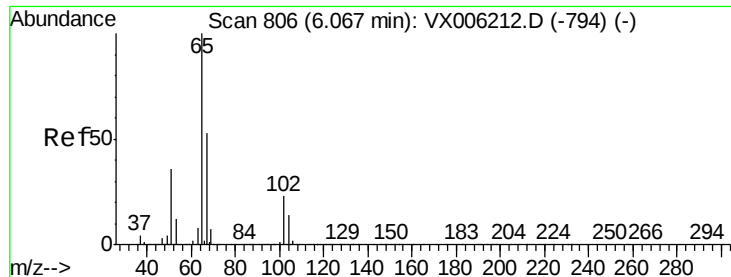


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0





#33

1,2-Dichloroethane-d4

Concen: 49.516 ug/l

RT: 6.07 min Scan# 806

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampled :

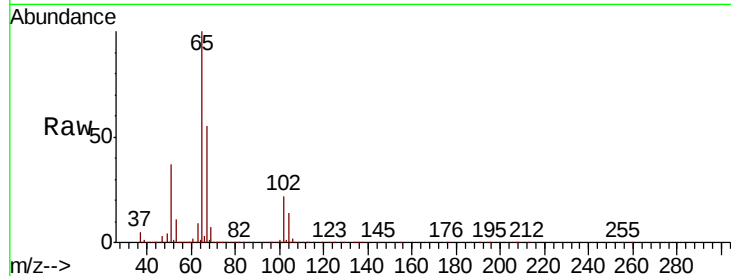
SB-2

Tot Ion: 65 Resp: 408198

Ion Ratio Lower Upper

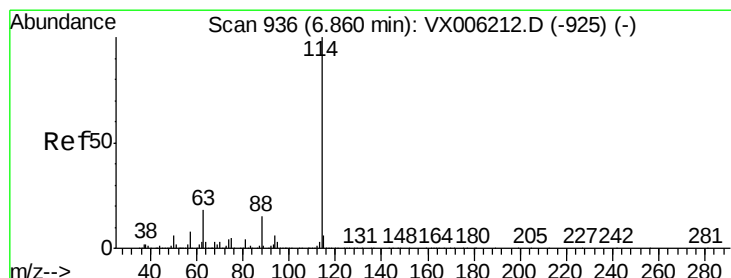
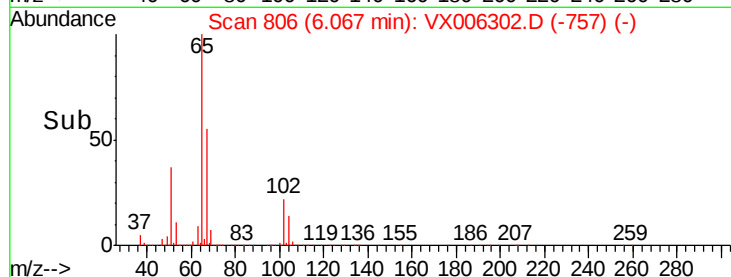
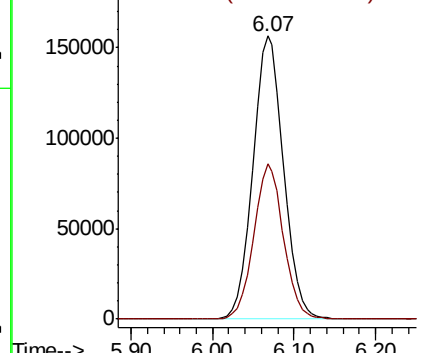
65 100

67 53.1 0.0 107.2



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: VX006302.D

Acq: 05 Dec 2018 15:58

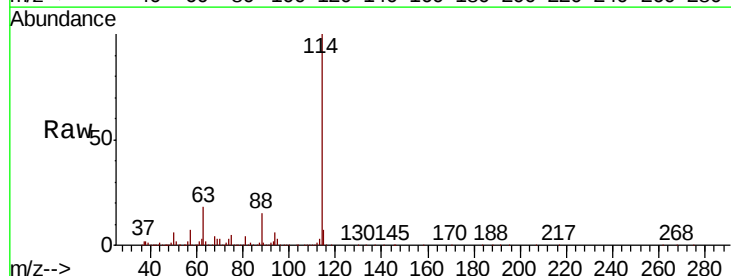
Tgt Ion: 114 Resp: 1228193

Ion Ratio Lower Upper

114 100

63 17.7 0.0 36.6

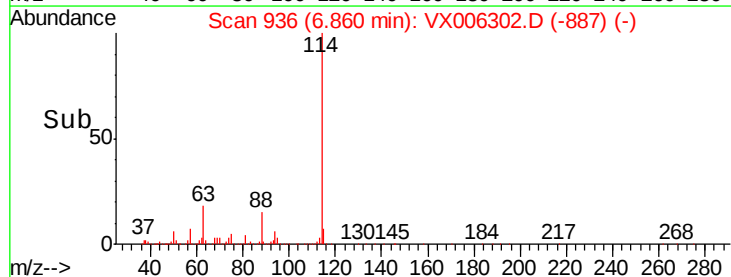
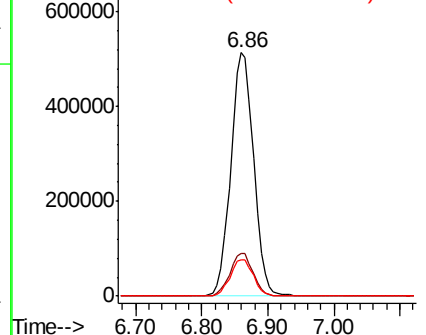
88 14.9 0.0 29.0

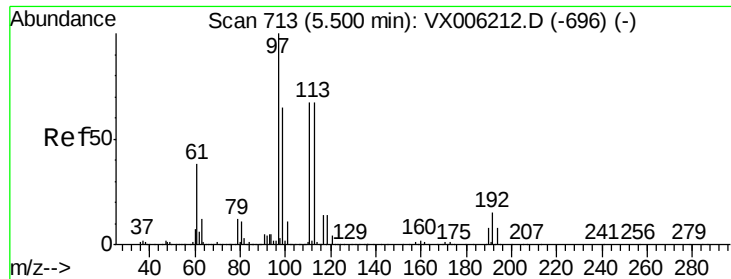


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

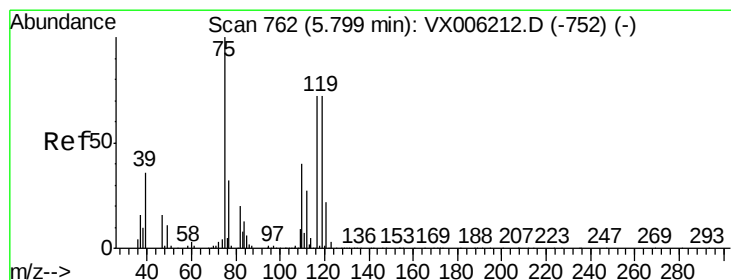
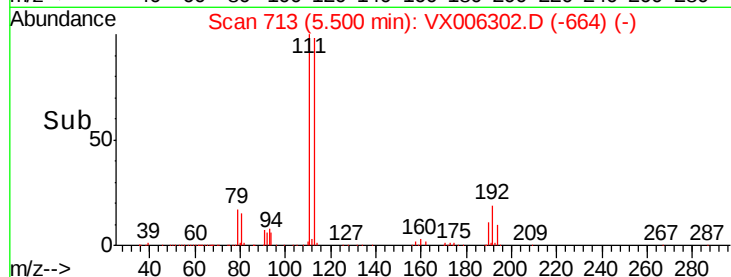
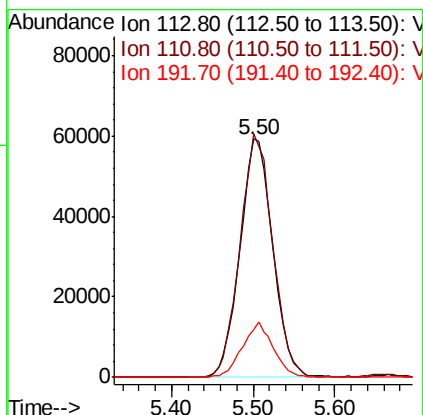
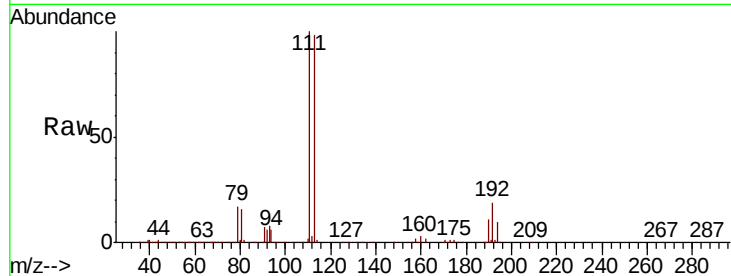




#35  
 Dibromofluoromethane  
 Concen: 20.909 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. -0.00 min  
 Lab File: VX006302.D  
 Acq: 05 Dec 2018 15:58

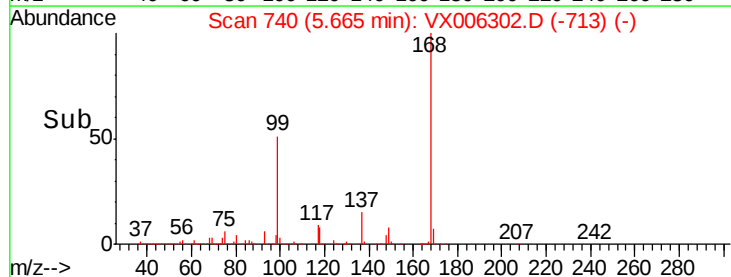
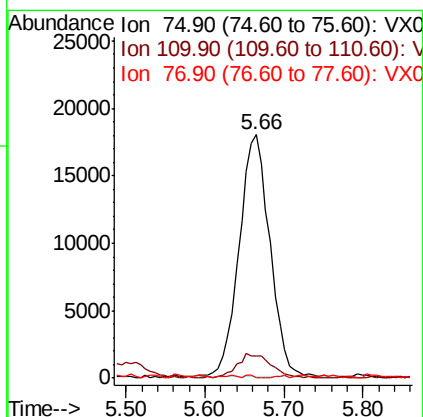
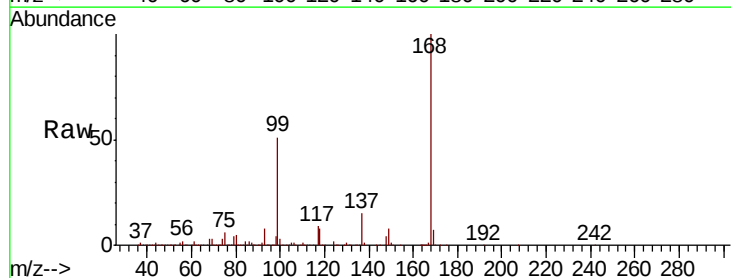
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SB-2

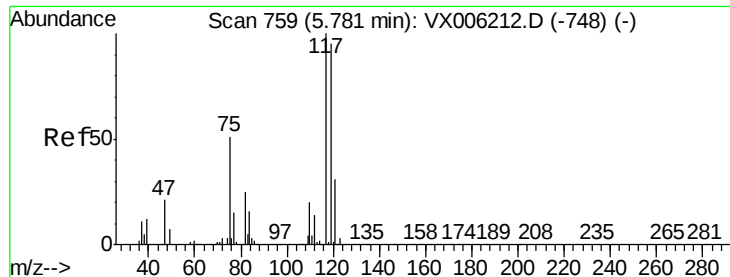
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.3 | 81.1  | 121.7 |
| 192     | 21.7  | 18.2  | 27.2  |



#36  
 1,1-Dichloropropene  
 Concen: 4.709 ug/l  
 RT: 5.66 min Scan# 740  
 Delta R.T. -0.13 min  
 Lab File: VX006302.D  
 Acq: 05 Dec 2018 15:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 11.2  | 20.4  | 61.3# |
| 77      | 0.4   | 24.9  | 37.3# |





#38

Carbon Tetrachloride

Concen: 5.991 ug/l

RT: 5.66 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

SB-2

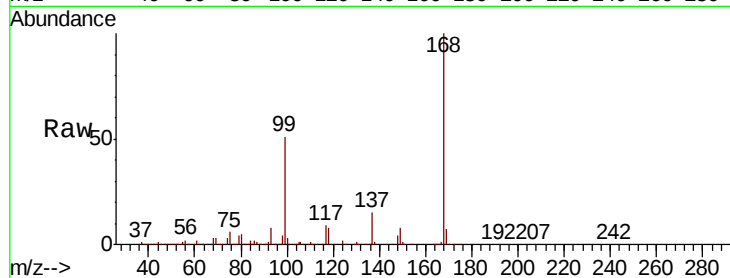
Tot Ion:117 Resp: 72892

Ion Ratio Lower Upper

117 100

119 5.5 75.8 113.8#

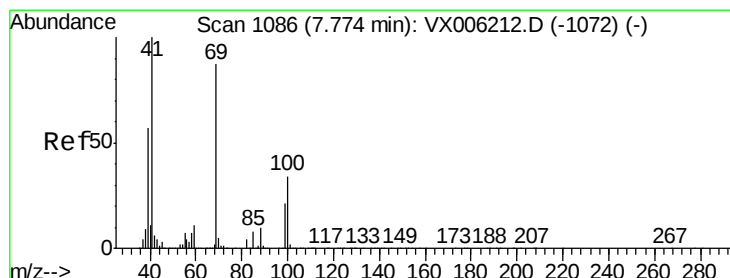
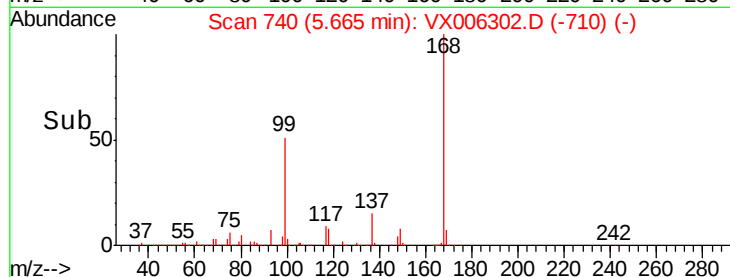
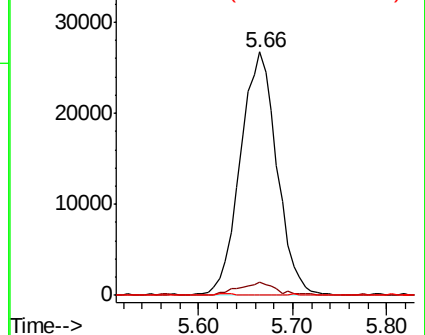
121 0.0 24.6 37.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#48

Methyl methacrylate

Concen: 2.315 ug/l

RT: 7.68 min Scan# 1071

Delta R.T. -0.09 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

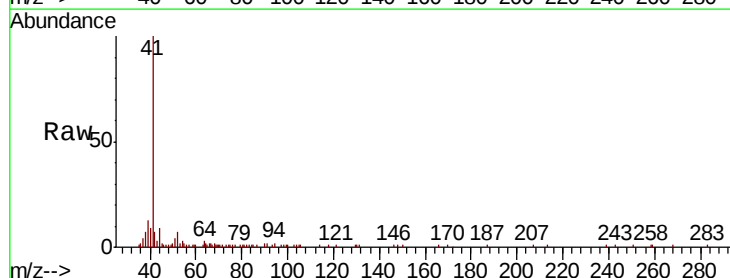
Tgt Ion: 41 Resp: 21749

Ion Ratio Lower Upper

41 100

69 0.5 70.3 105.5#

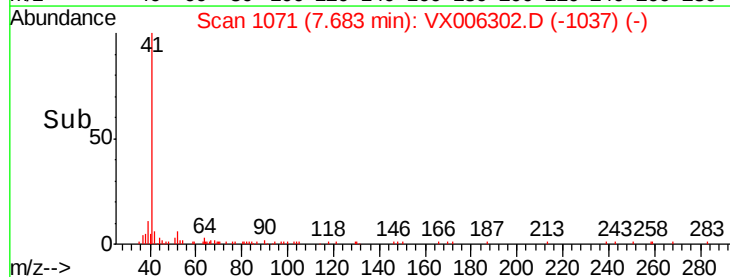
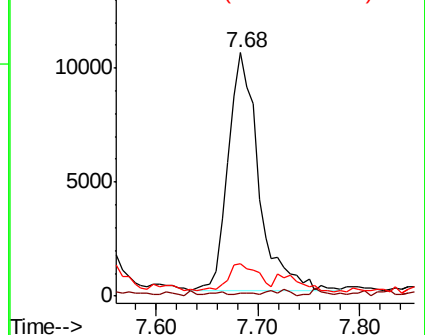
39 12.3 45.3 67.9#

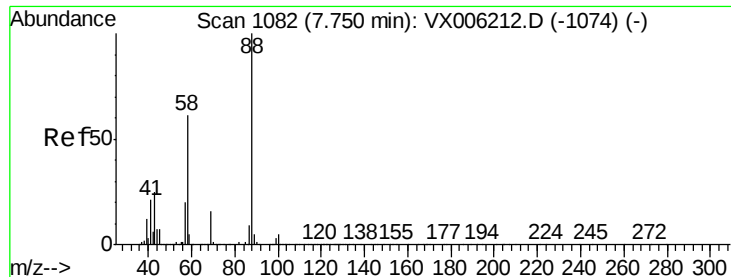


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0





#49

1,4-Dioxane

Concen: 0.933 ug/l

RT: 7.74 min Scan# 1080

Delta R.T. -0.01 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampled :

SB-2

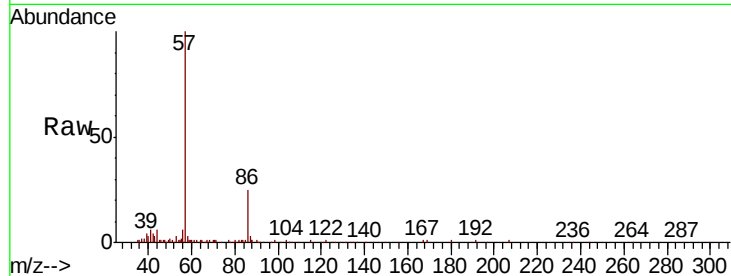
Tot Ion: 88 Resp: 216

Ion Ratio Lower Upper

88 100

43 594.4 23.2 34.8#

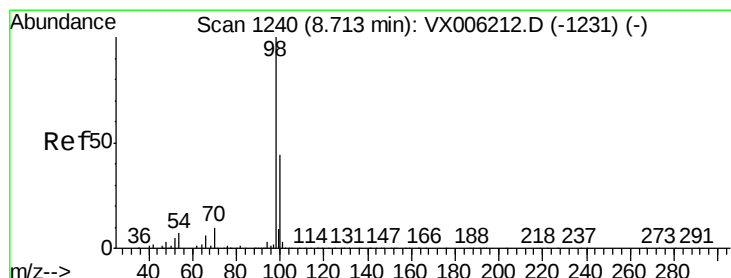
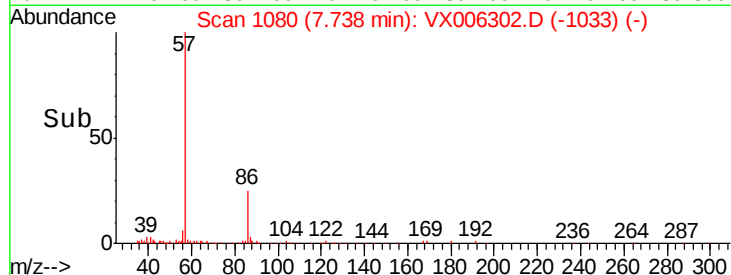
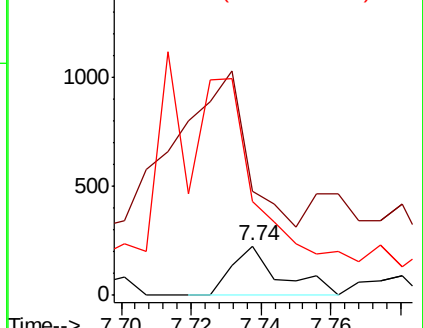
58 0.0 51.4 77.0#



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: 49.748 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX006302.D

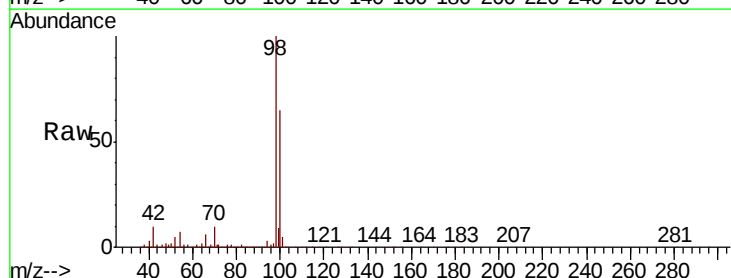
Acq: 05 Dec 2018 15:58

Tgt Ion: 98 Resp: 1438975

Ion Ratio Lower Upper

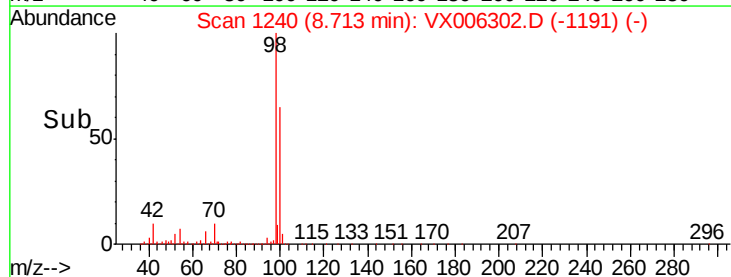
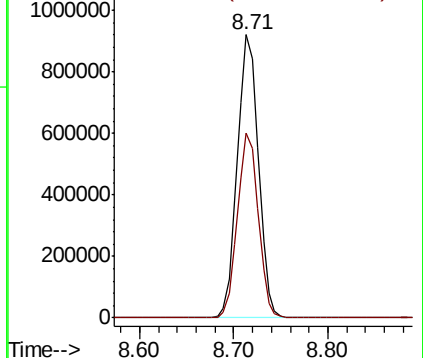
98 100

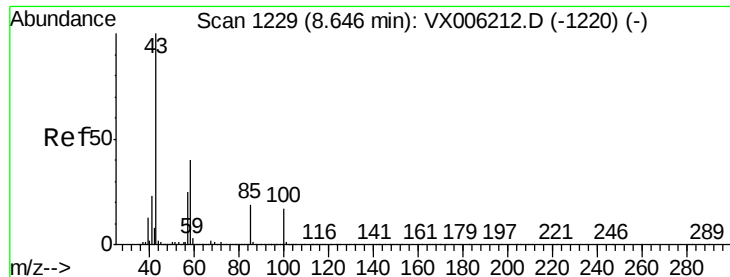
100 64.5 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

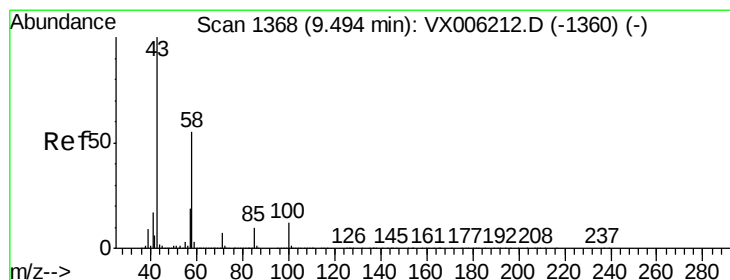
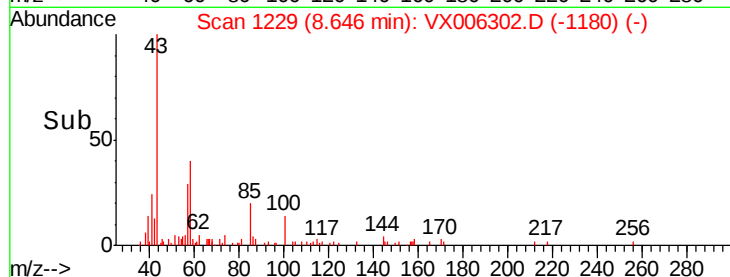
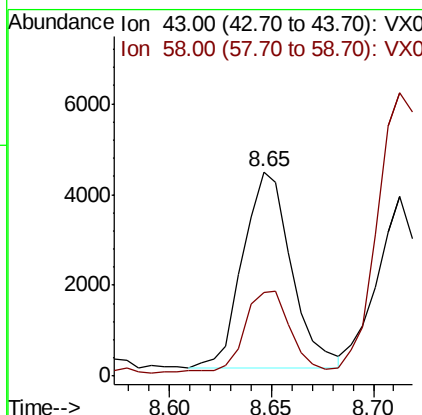
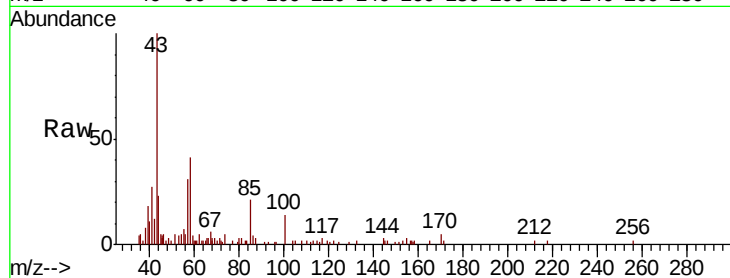




#51  
 4-Methyl-2-Pentanone  
 Concen: 0.632 ug/l  
 RT: 8.65 min Scan# 1229  
 Delta R.T. -0.00 min  
 Lab File: VX006302.D  
 Acq: 05 Dec 2018 15:58

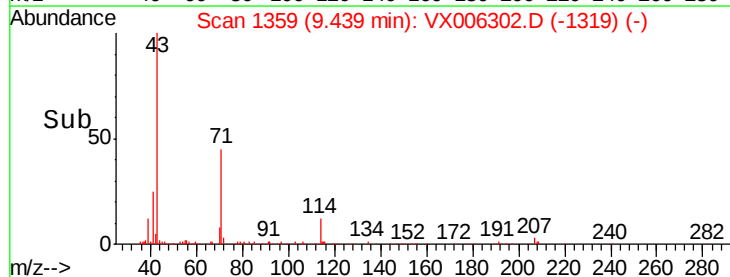
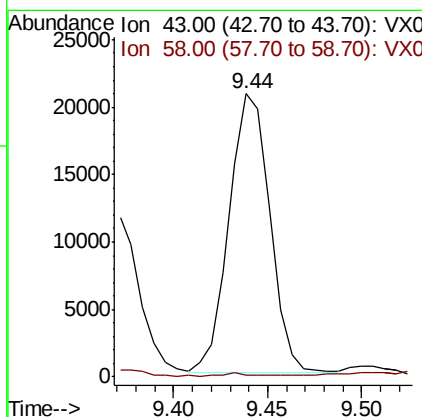
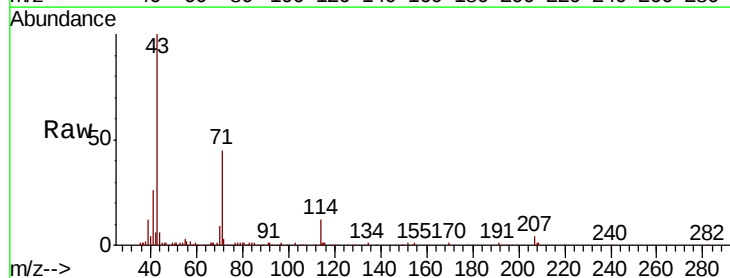
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SB-2

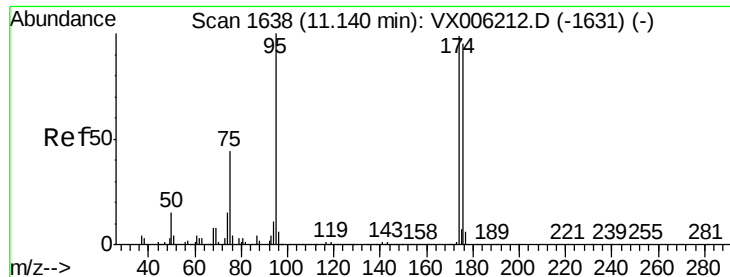
Tot Ion: 43 Resp: 7107  
 Ion Ratio Lower Upper  
 43 100  
 58 42.6 31.3 46.9



#59  
 2-Hexanone  
 Concen: 3.615 ug/l  
 RT: 9.44 min Scan# 1359  
 Delta R.T. -0.06 min  
 Lab File: VX006302.D  
 Acq: 05 Dec 2018 15:58

Tgt Ion: 43 Resp: 31046  
 Ion Ratio Lower Upper  
 43 100  
 58 1.4 27.7 83.1#





#62

4-Bromofluorobenzene

Concen: 49.090 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampled :

SB-2

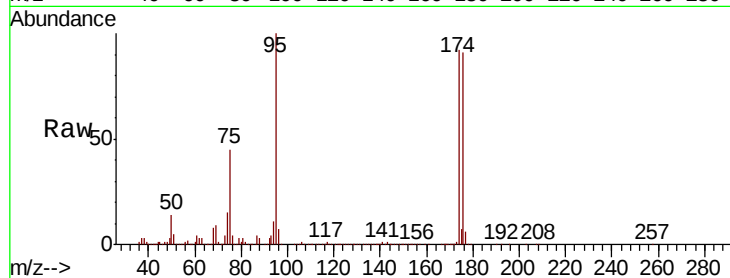
Tot Ion: 95 Resp: 535073

Ion Ratio Lower Upper

95 100

174 88.1 0.0 187.0

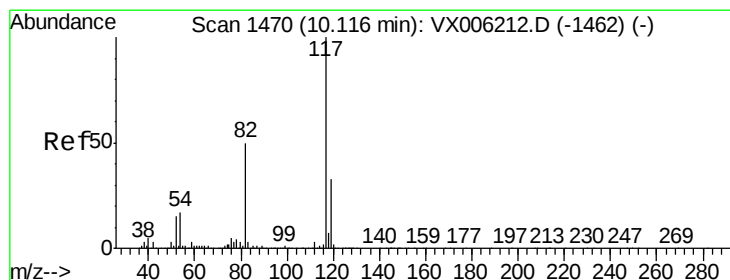
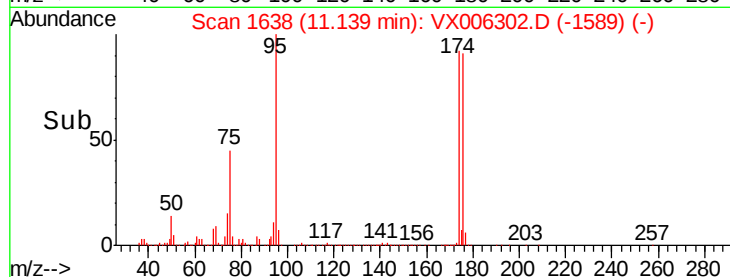
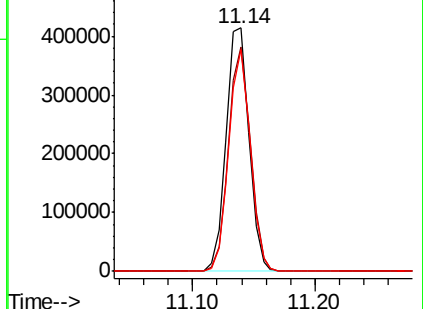
176 86.0 0.0 181.8



Abundance Ion 94.90 (94.60 to 95.60): VX006302.D (-1589) (-)

Ion 173.80 (173.50 to 174.50): VX006302.D (-1589) (-)

Ion 175.80 (175.50 to 176.50): VX006302.D (-1589) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.12 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

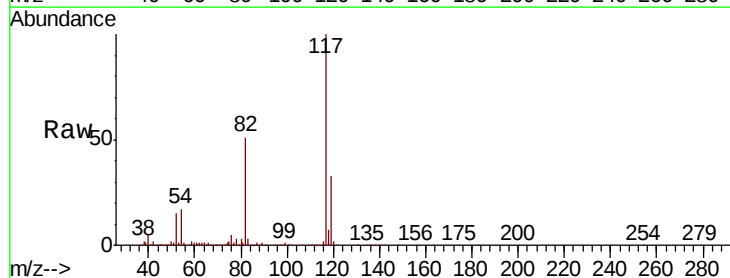
Tgt Ion: 117 Resp: 1121593

Ion Ratio Lower Upper

117 100

82 50.5 39.6 59.4

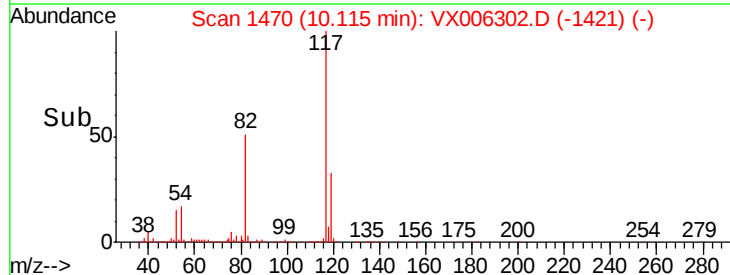
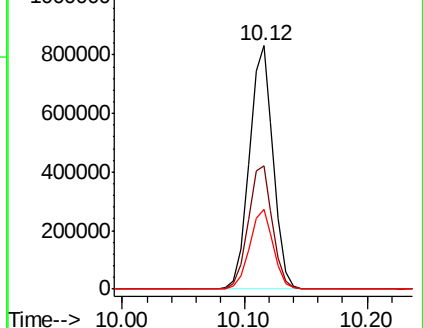
119 32.6 26.3 39.5

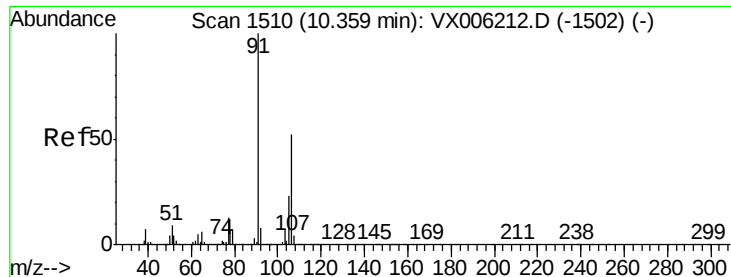


Abundance Ion 116.90 (116.60 to 117.60): VX006302.D (-1421) (-)

Ion 82.00 (81.70 to 82.70): VX006302.D (-1421) (-)

Ion 118.90 (118.60 to 119.60): VX006302.D (-1421) (-)





#68

m/p-Xvlenes

Concen: 0.249 ug/l

RT: 10.36 min Scan# 1510

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

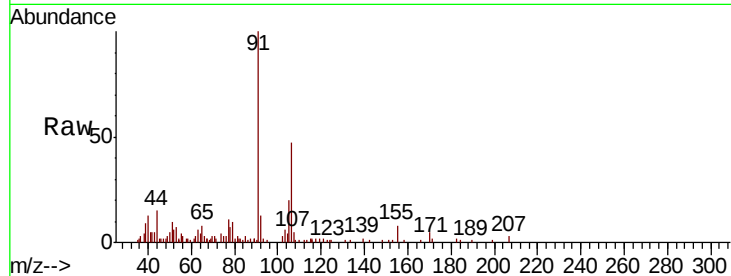
SB-2

Tot Ion:106 Resp: 3942

Ion Ratio Lower Upper

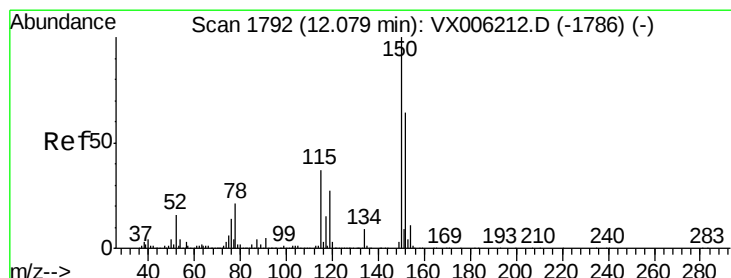
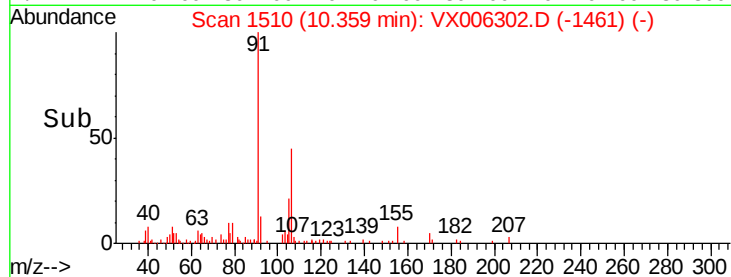
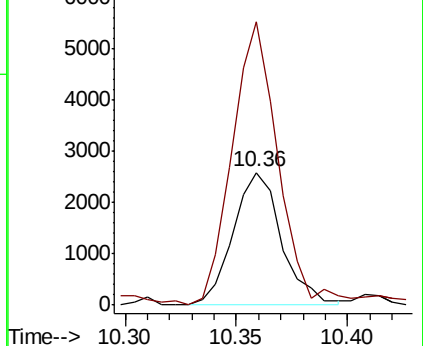
106 100

91 201.7 155.2 232.8



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: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

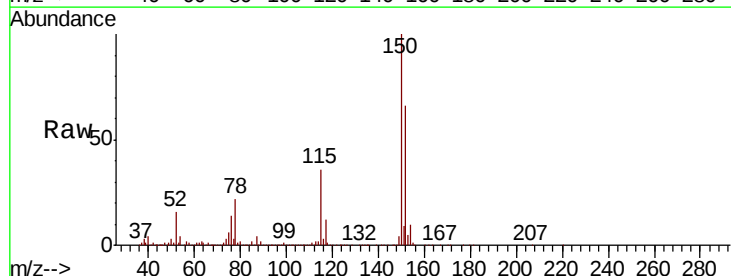
Tgt Ion:152 Resp: 542507

Ion Ratio Lower Upper

152 100

115 55.6 39.0 116.9

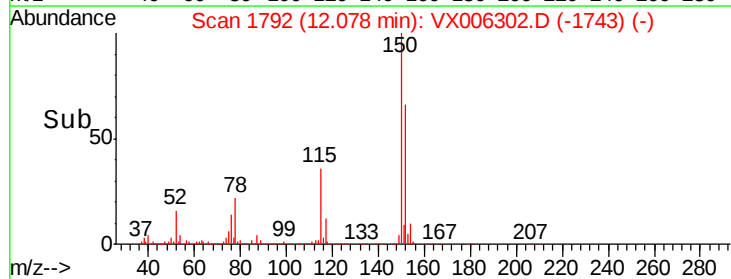
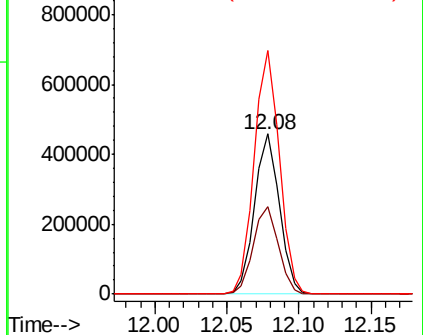
150 154.4 0.0 345.8

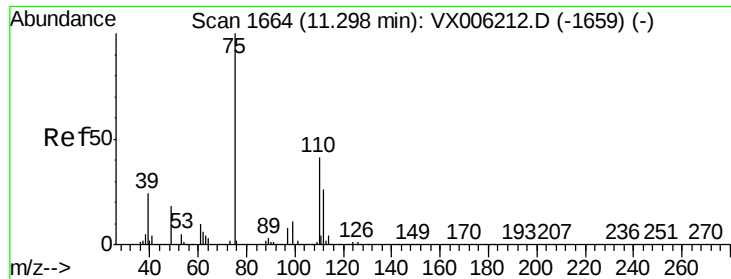


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

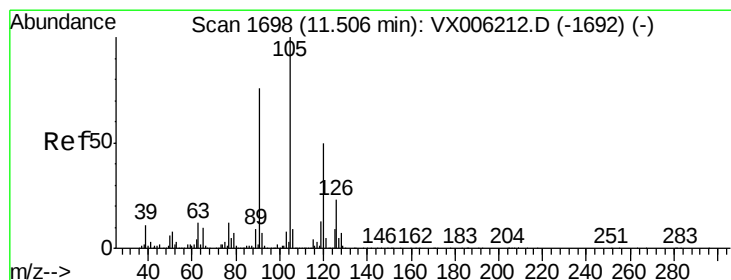
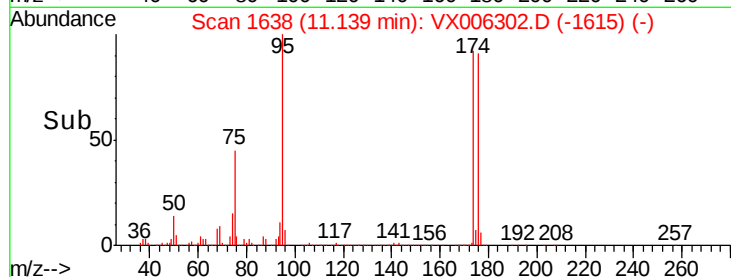
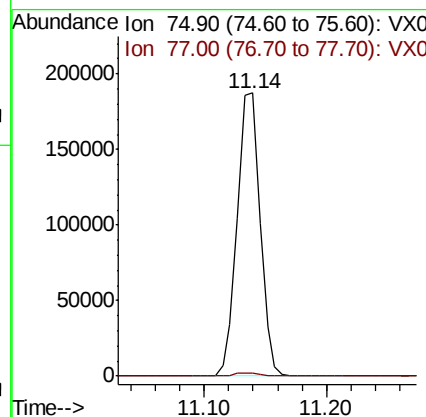
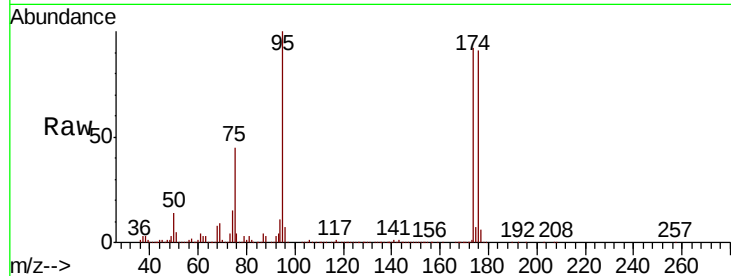




#76  
 1,2,3-Trichloropropane  
 Concen: 23.144 ug/l  
 RT: 11.14 min Scan# 1638  
 Delta R.T. -0.16 min  
 Lab File: VX006302.D  
 Acq: 05 Dec 2018 15:58

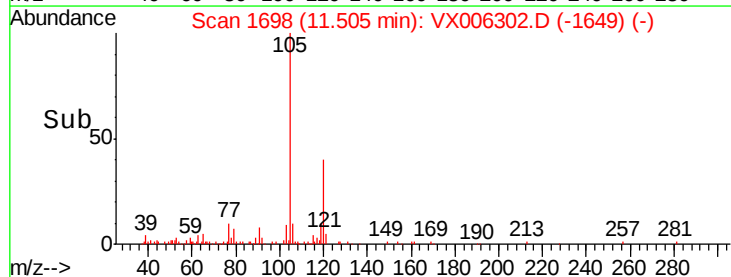
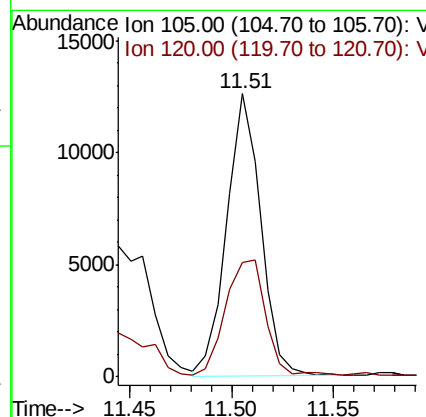
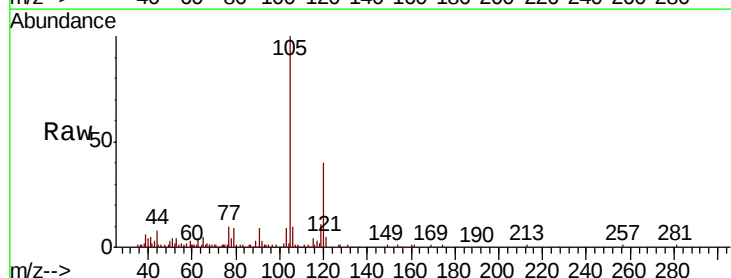
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SB-2

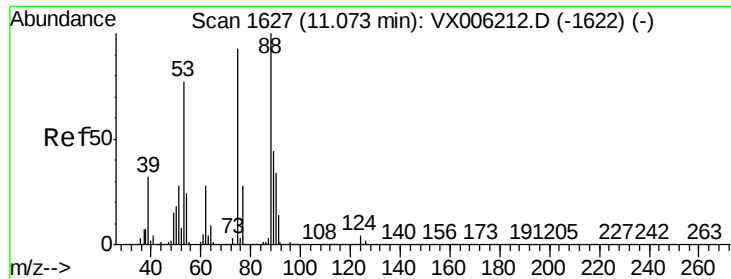
Tot Ion: 75 Resp: 242349  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 19.9 59.7#



#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.466 ug/l  
 RT: 11.51 min Scan# 1698  
 Delta R.T. -0.00 min  
 Lab File: VX006302.D  
 Acq: 05 Dec 2018 15:58

Tgt Ion: 105 Resp: 14527  
 Ion Ratio Lower Upper  
 105 100  
 120 49.9 25.4 76.0





#81

trans-1,4-Dichloro-2-butene

Concen: 54.313 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.07 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

SB-2

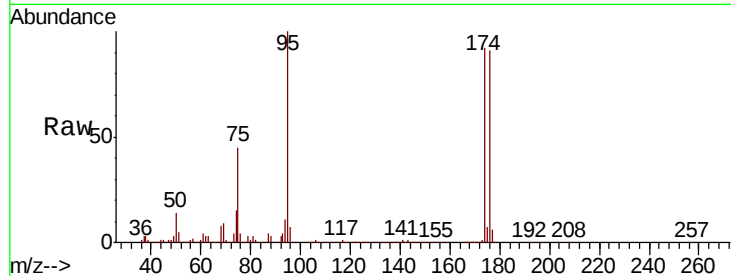
Tot Ion: 75 Resp: 242349

Ion Ratio Lower Upper

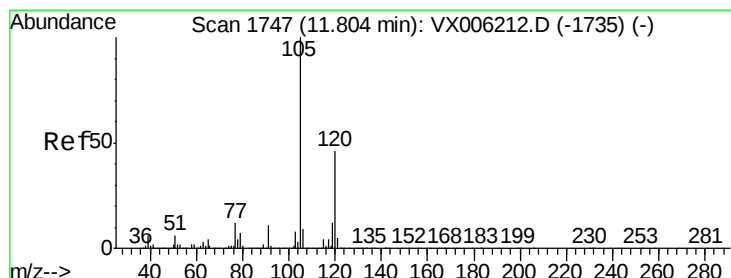
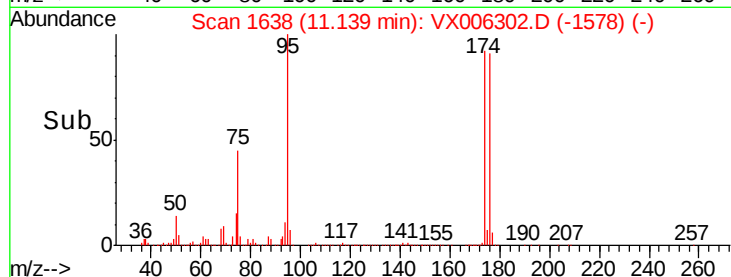
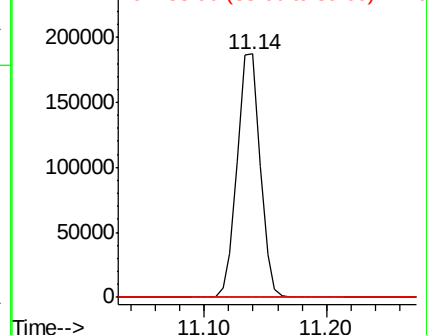
75 100

53 0.0 64.4 96.6#

89 0.1 44.2 66.4#



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: 0.679 ug/l

RT: 11.81 min Scan# 1748

Delta R.T. 0.01 min

Lab File: VX006302.D

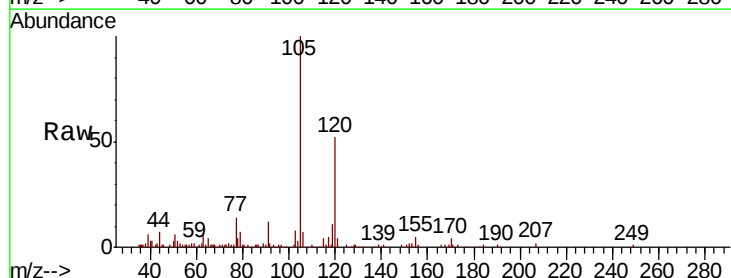
Acq: 05 Dec 2018 15:58

Tgt Ion: 105 Resp: 21848

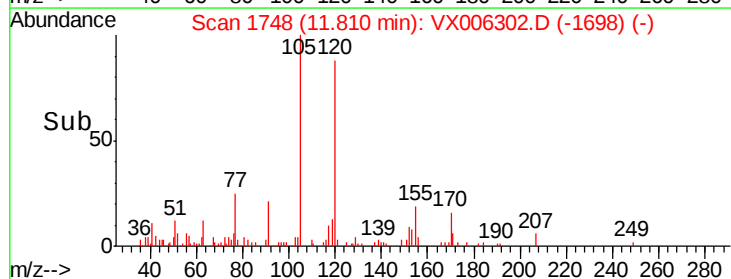
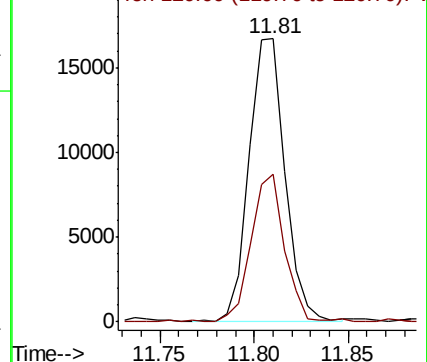
Ion Ratio Lower Upper

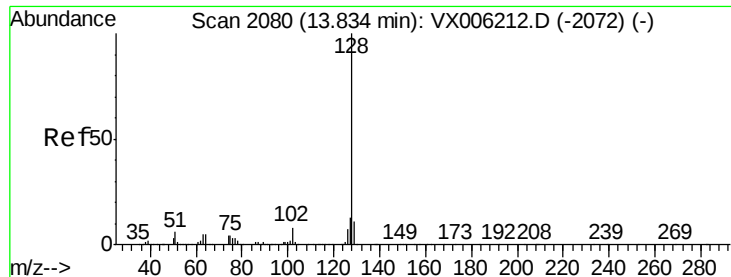
105 100

120 49.4 23.4 70.0



Abundance Ion 105.00 (104.70 to 105.70): V  
Ion 120.00 (119.70 to 120.70): V





#95

Naphthalene

Concen: 1.771 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. -0.00 min

Lab File: VX006302.D

Acq: 05 Dec 2018 15:58

Instrument :

MSVOA\_X

ClientSampleId :

SB-2

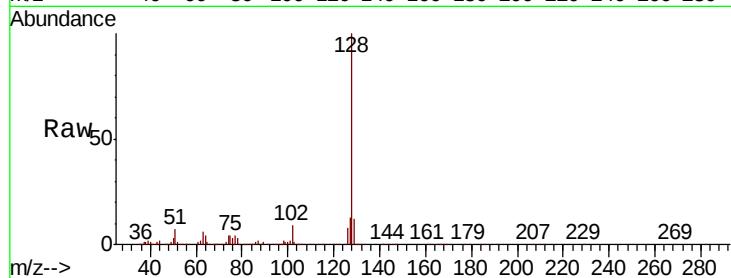
Tot Ion:128 Resp: 73808

Ion Ratio Lower Upper

128 100

127 13.6 10.2 15.4

129 12.4 8.9 13.3



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

