

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX072318\  
 Data File : VX003601.D  
 Acq On : 23 Jul 2018 13:49  
 Operator : JC/SP  
 Sample : J4048-11  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 EB-2018.07.17

Quant Time: Jul 24 01:41:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071918W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 19 17:09:44 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 253082   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 376298   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 358669   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 191757   | 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   | 161949   | 54.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.12% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 145050   | 50.61 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.22% |          |
| 50) Toluene-d8              | 8.72  | 98   | 539527   | 50.08 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.16% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 182997   | 46.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.10%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.20  | 85   | 24       | Below Cal | #      | 43     |
| 3) Chloromethane               | 1.32  | 50   | 592      | Below Cal |        | 99     |
| 5) Bromomethane                | 1.65  | 94   | 1636     | Below Cal | #      | 78     |
| 10) Methyl Iodide              | 2.51  | 142  | 1072     | 0.318     | ug/l # | 96     |
| 16) Acetone                    | 2.45  | 43   | 5414     | 4.784     | ug/l # | 81     |
| 20) Methylene Chloride         | 2.86  | 84   | 8636     | 2.295     | ug/l   | 85     |
| 25) 2-Butanone                 | 4.70  | 43   | 1089     | 0.574     | ug/l # | 85     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 651      | 0.519     | ug/l # | 75     |
| 31) Cyclohexane                | 5.67  | 56   | 4138     | 0.917     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 16362    | 4.027     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 21637    | 5.429     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 85227    | 24.740    | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 85227    | 69.306    | ug/l # | 7      |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 833

Delta R.T. 0.00 min

Lab File: VX003601.D

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Instrument :

MSVOA\_X

ClientSampleId :

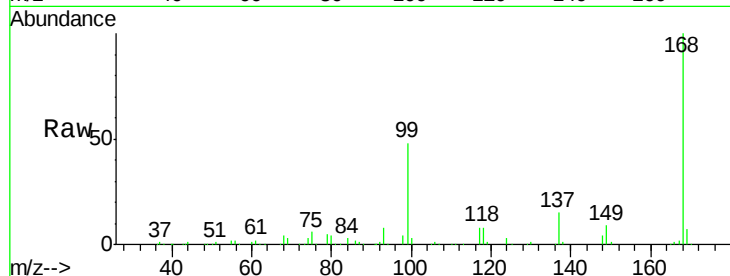
EB-2018.07.17

Tgt Ion:168 Resp: 253082

Ion Ratio Lower Upper

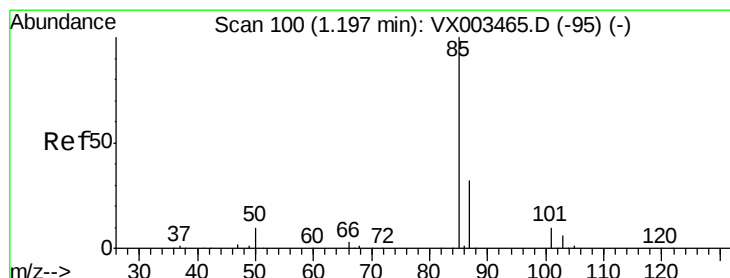
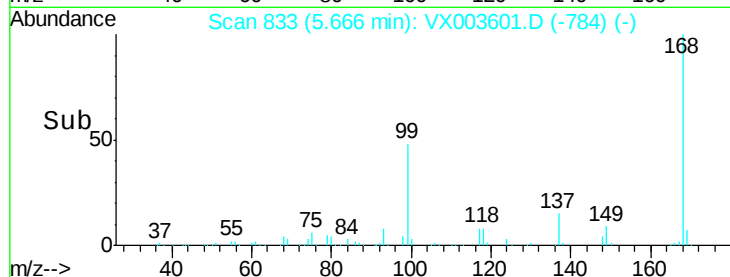
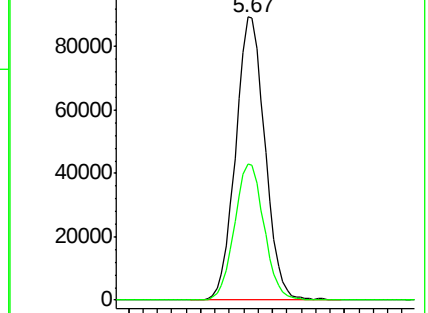
168 100

99 48.3 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.20 min Scan# 100

Delta R.T. 0.00 min

Lab File: VX003601.D

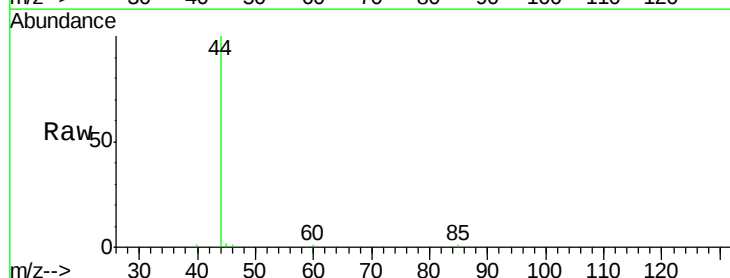
Acq: 23 Jul 2018 13:49

Tgt Ion: 85 Resp: 24

Ion Ratio Lower Upper

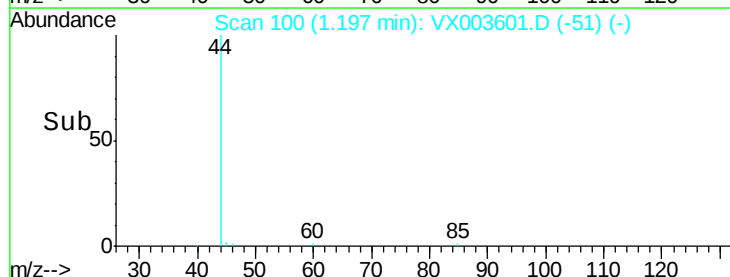
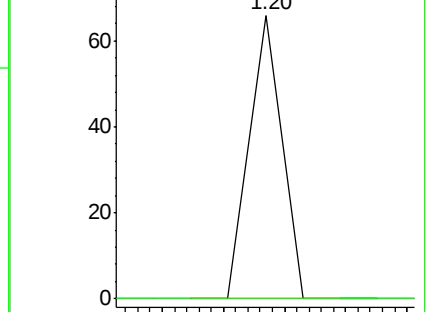
85 100

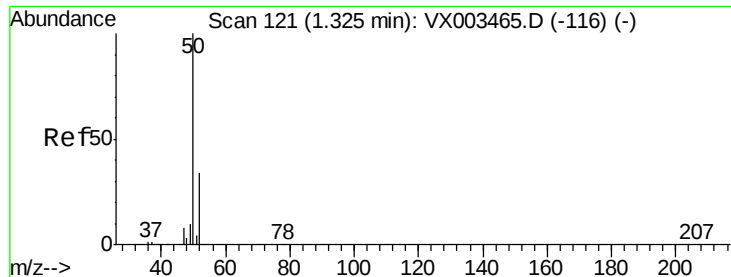
87 0.0 16.0 47.9#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0





#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

Instrument :

MSVOA\_X

ClientSampled :

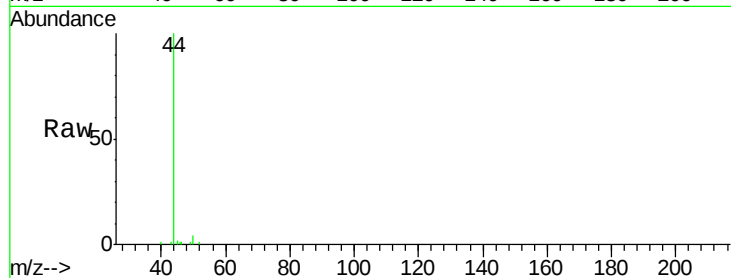
EB-2018.07.17

Tgt Ion: 50 Resp: 592

Ion Ratio Lower Upper

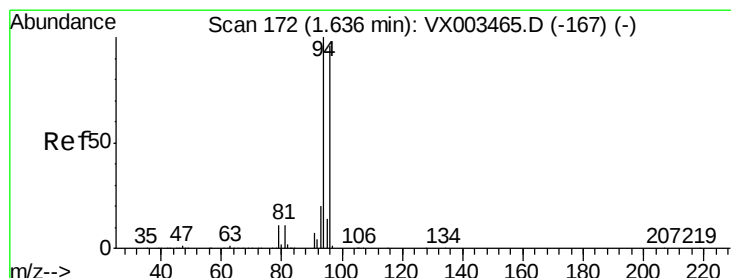
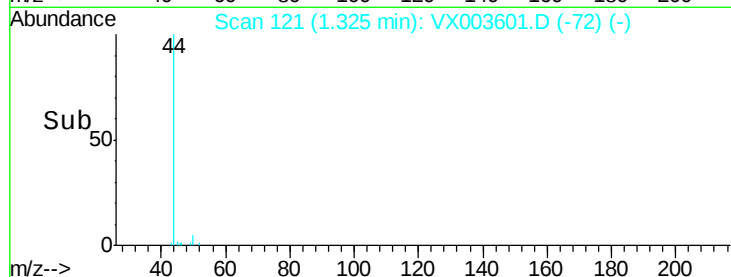
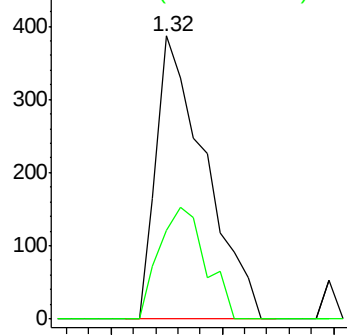
50 100

52 31.3 25.7 38.5



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 174

Delta R.T. 0.01 min

Lab File: VX003601.D

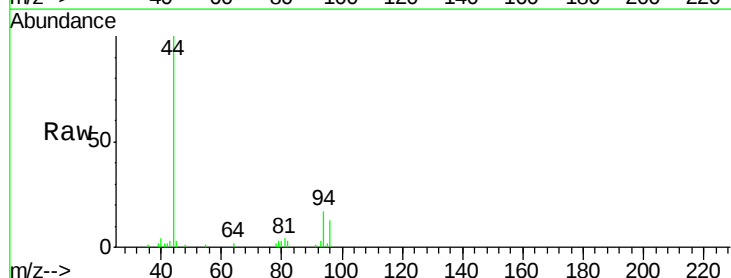
Acq: 23 Jul 2018 13:49

Tgt Ion: 94 Resp: 1636

Ion Ratio Lower Upper

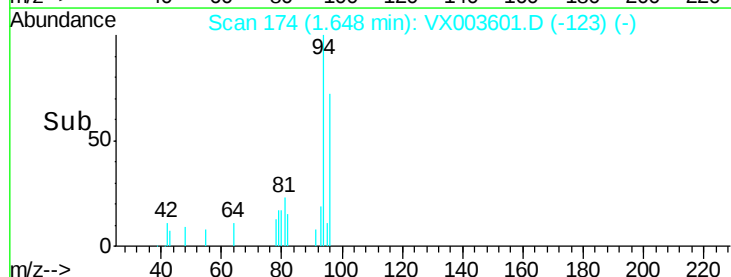
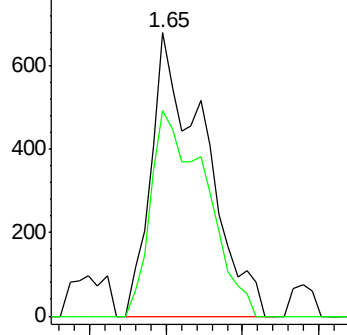
94 100

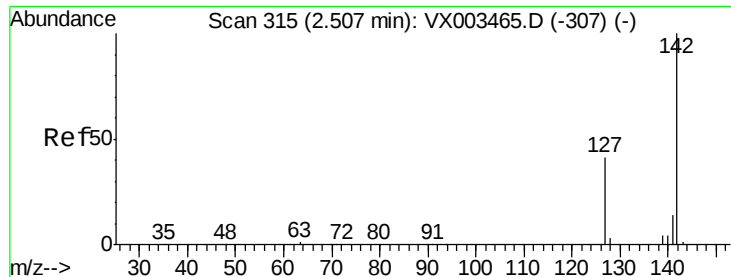
96 72.5 74.9 112.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

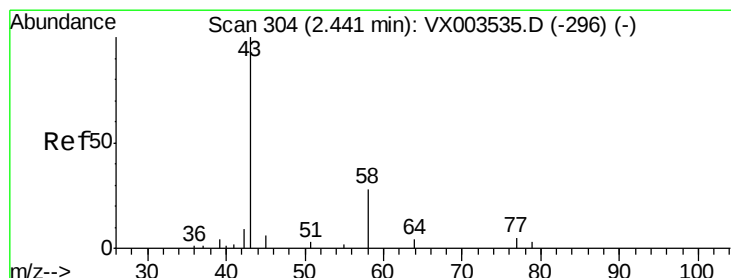
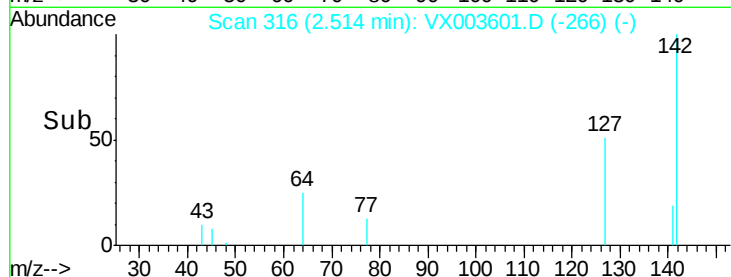
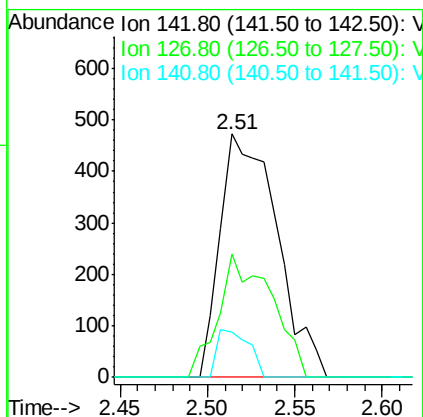
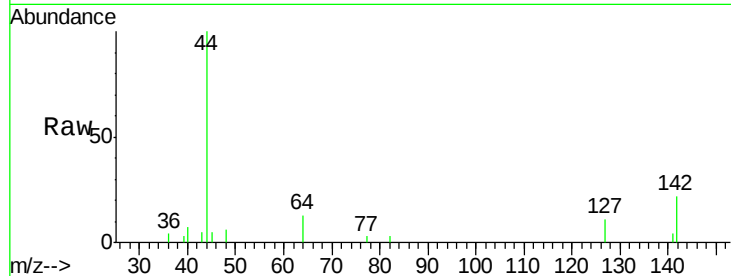




#10  
Methyl Iodide  
Concen: 0.318 ug/l  
RT: 2.51 min Scan# 316  
Delta R.T. 0.01 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

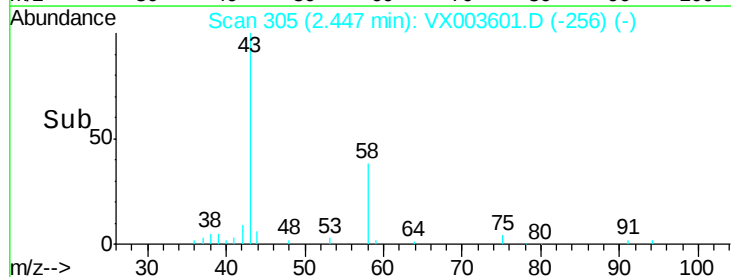
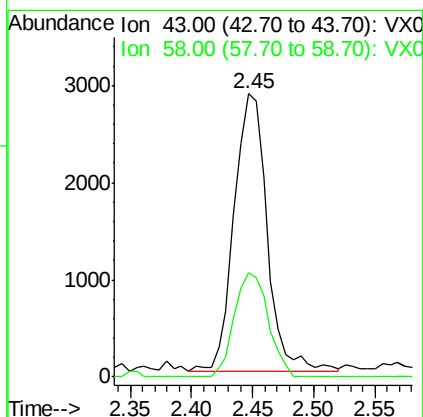
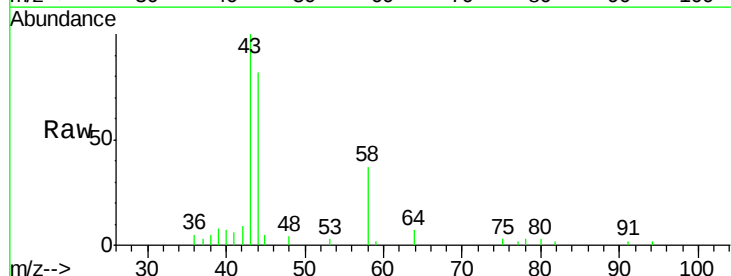
Instrument :  
MSVOA\_X  
ClientSampleId :  
EB-2018.07.17

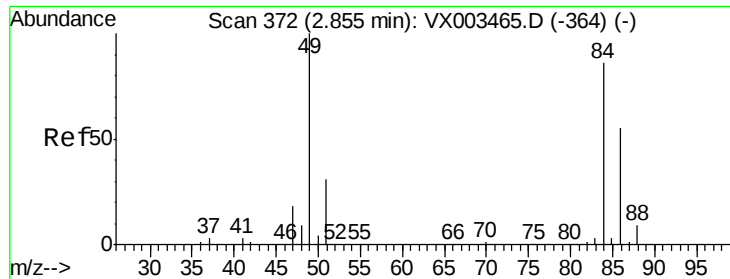
Tgt Ion:142 Resp: 1072  
Ion Ratio Lower Upper  
142 100  
127 47.3 36.6 55.0  
141 10.7 11.3 16.9#



#16  
Acetone  
Concen: 4.784 ug/l  
RT: 2.45 min Scan# 305  
Delta R.T. 0.00 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

Tgt Ion: 43 Resp: 5414  
Ion Ratio Lower Upper  
43 100  
58 37.4 22.1 33.1#

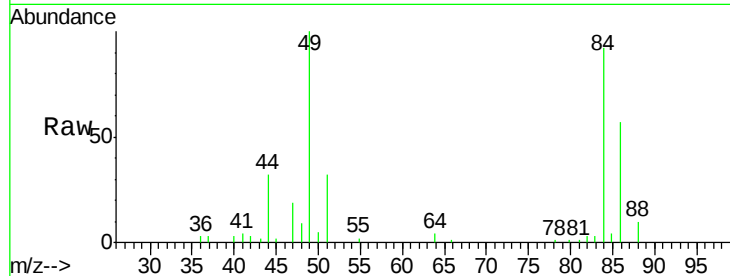




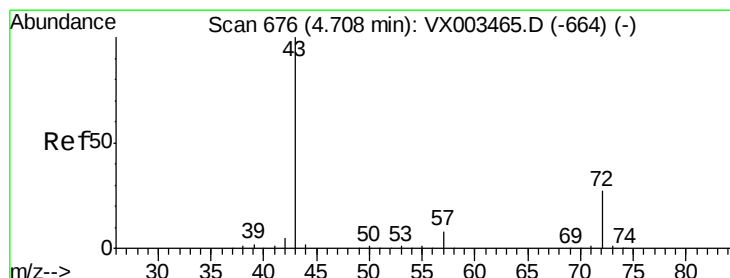
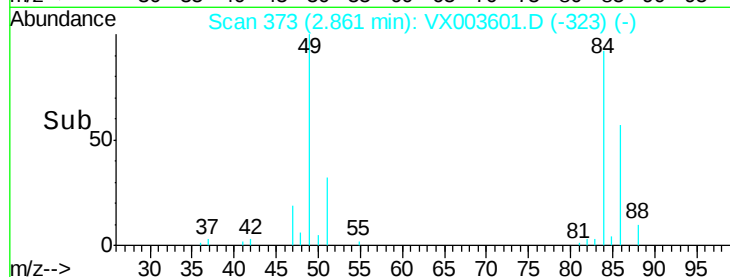
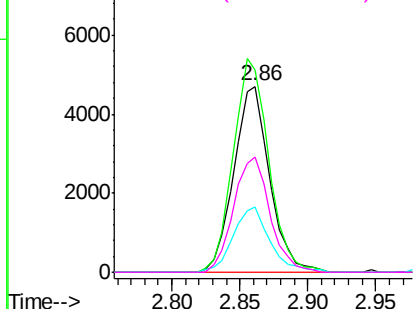
#20  
Methylene Chloride  
Concen: 2.295 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. 0.01 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

Instrument :  
MSVOA\_X  
ClientSampleId :  
EB-2018.07.17

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 8636  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 108.9 | 107.8 | 161.6 |
| 51       | 34.9  | 32.8  | 49.2  |
| 86       | 62.1  | 52.5  | 78.7  |

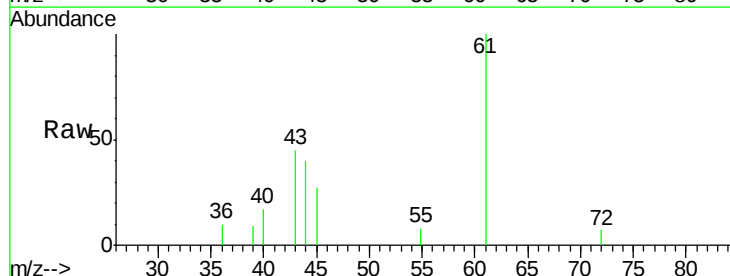


Abundance Ion 83.90 (83.60 to 84.60): VX0  
Ion 48.90 (48.60 to 49.60): VX0  
Ion 50.90 (50.60 to 51.60): VX0  
Ion 85.90 (85.60 to 86.60): VX0

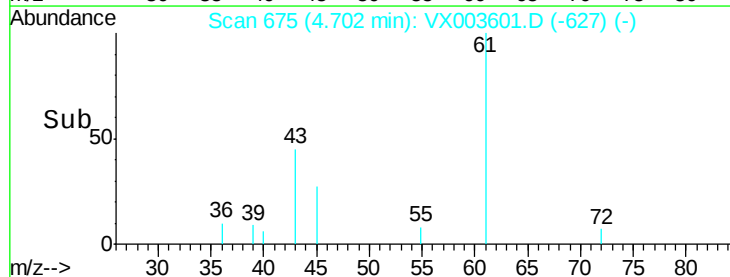
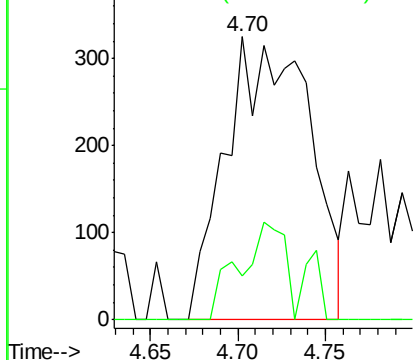


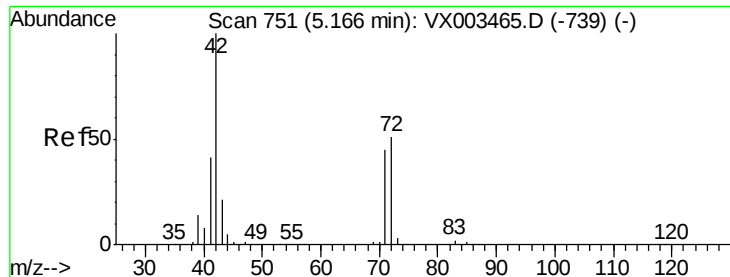
#25  
2-Butanone  
Concen: 0.574 ug/l  
RT: 4.70 min Scan# 675  
Delta R.T. -0.01 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 1089  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 15.7  | 18.5  | 27.7# |



Abundance Ion 43.00 (42.70 to 43.70): VX0  
Ion 72.00 (71.70 to 72.70): VX0

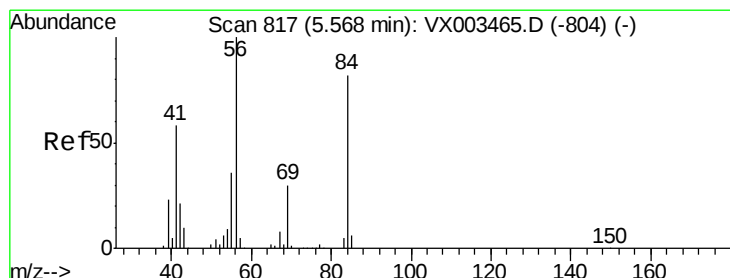
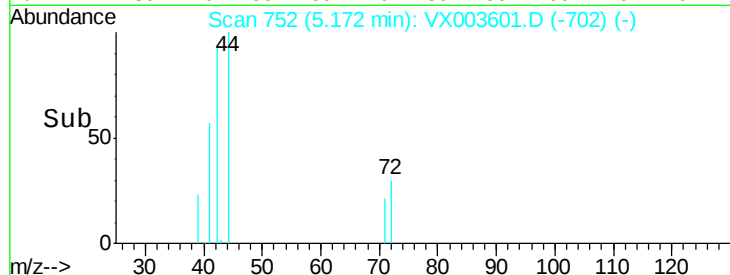
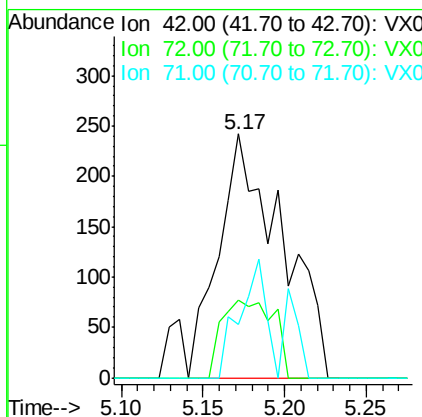
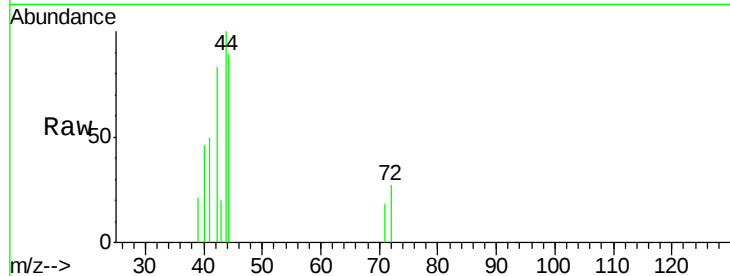




#29  
Tetrahydrofuran  
Concen: 0.519 ug/l  
RT: 5.17 min Scan# 752  
Delta R.T. 0.01 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

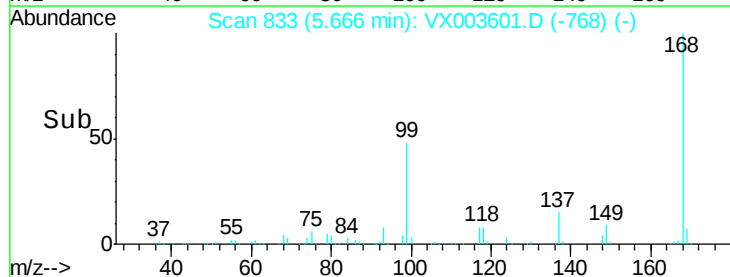
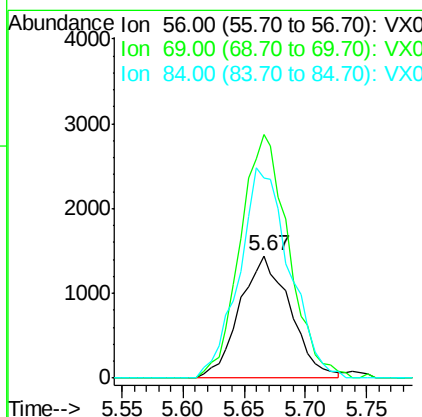
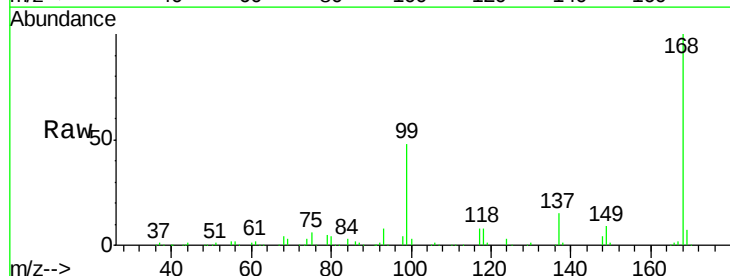
Instrument :  
MSVOA\_X  
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EB-2018.07.17

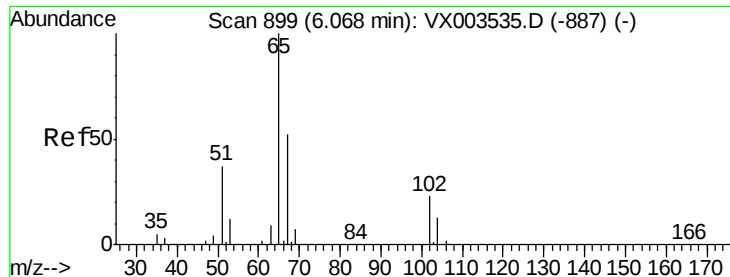
Tgt Ion: 42 Resp: 651  
Ion Ratio Lower Upper  
42 100  
72 26.3 32.0 48.0#  
71 20.7 30.1 45.1#



#31  
Cyclohexane  
Concen: 0.917 ug/l  
RT: 5.67 min Scan# 833  
Delta R.T. 0.10 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

Tgt Ion: 56 Resp: 4138  
Ion Ratio Lower Upper  
56 100  
69 199.5 23.7 35.5#  
84 163.8 64.1 96.1#





#33

1,2-Dichloroethane-d4

Concen: 54.059 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.01 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

Instrument :

MSVOA\_X

ClientSampleId :

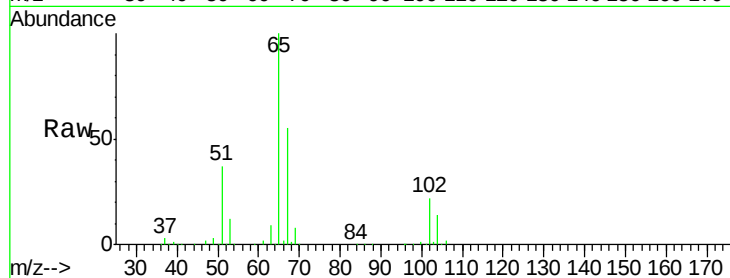
EB-2018.07.17

Tgt Ion: 65 Resp: 161949

Ion Ratio Lower Upper

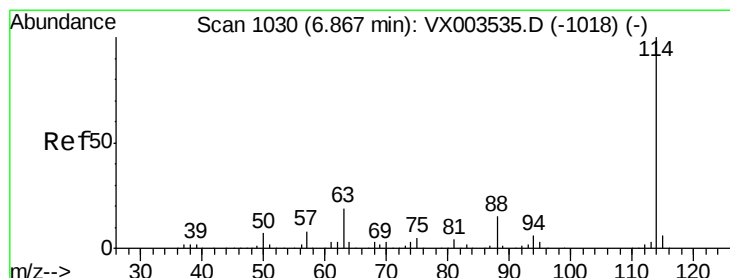
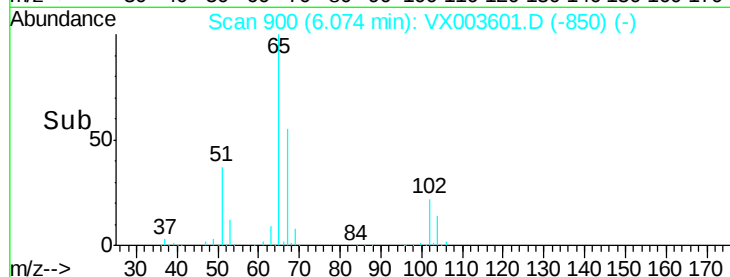
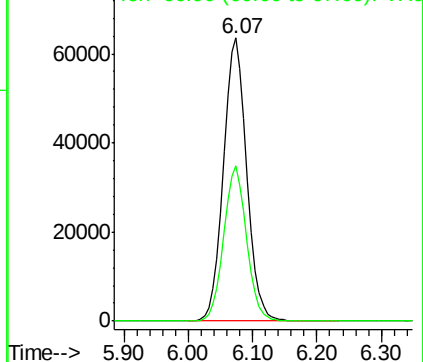
65 100

67 54.2 0.0 102.6



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: 6.87 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

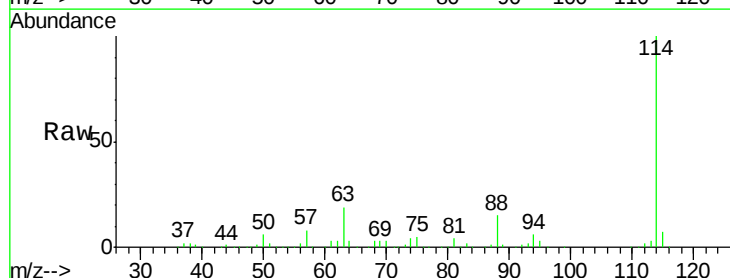
Tgt Ion: 114 Resp: 376298

Ion Ratio Lower Upper

114 100

63 19.3 0.0 41.4

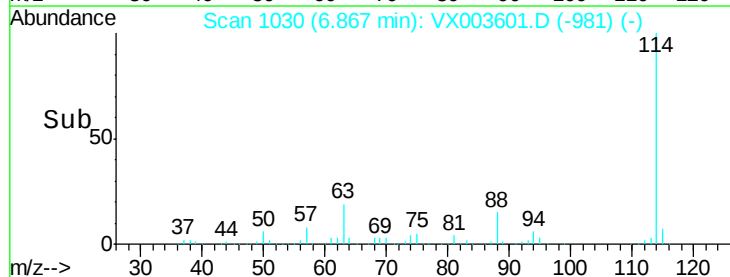
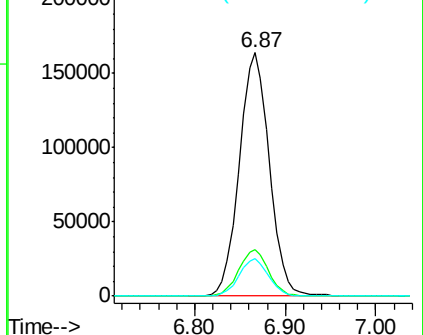
88 15.3 0.0 30.0

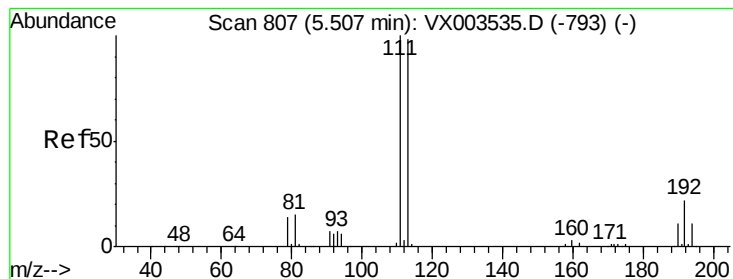


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 50.608 ug/l

RT: 5.51 min Scan# 807

Delta R.T. 0.00 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

Instrument :

MSVOA\_X

ClientSampleId :

EB-2018.07.17

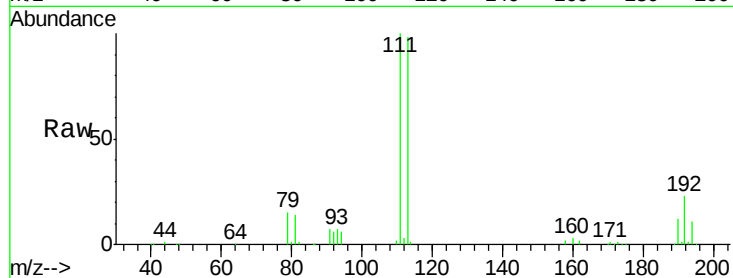
Tgt Ion:113 Resp: 145050

Ion Ratio Lower Upper

113 100

111 101.5 81.4 122.0

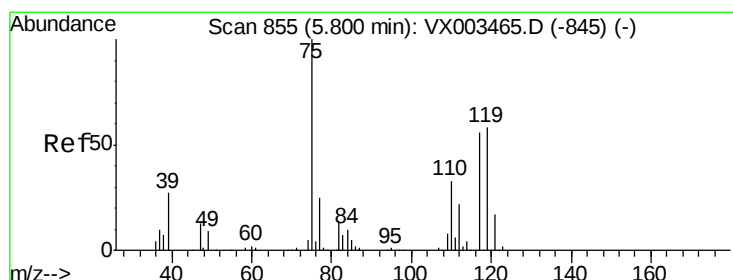
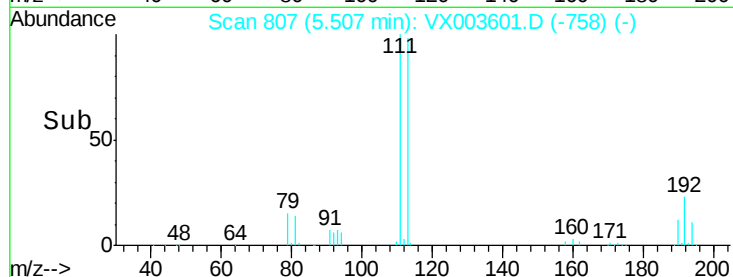
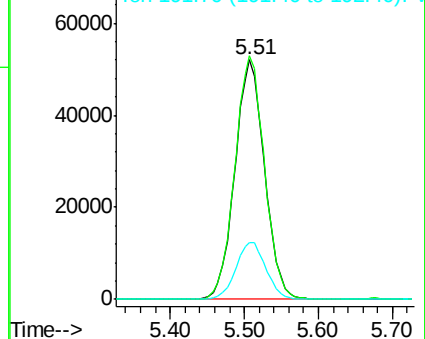
192 24.0 19.1 28.7



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: 4.027 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.13 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

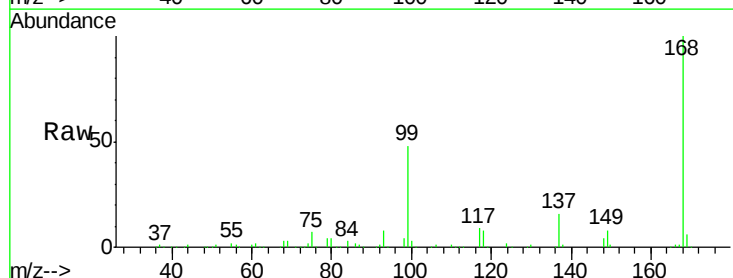
Tgt Ion: 75 Resp: 16362

Ion Ratio Lower Upper

75 100

110 8.5 18.1 54.4#

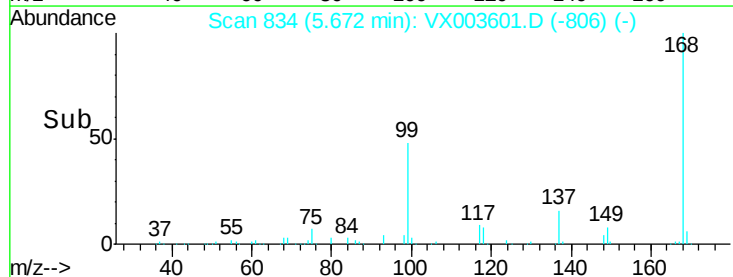
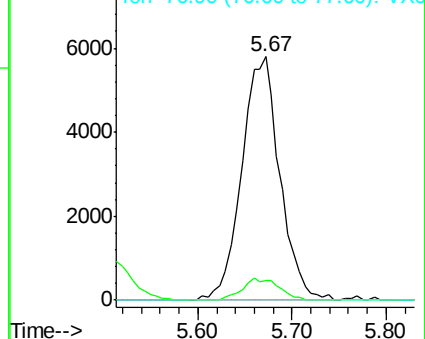
77 0.0 24.3 36.5#

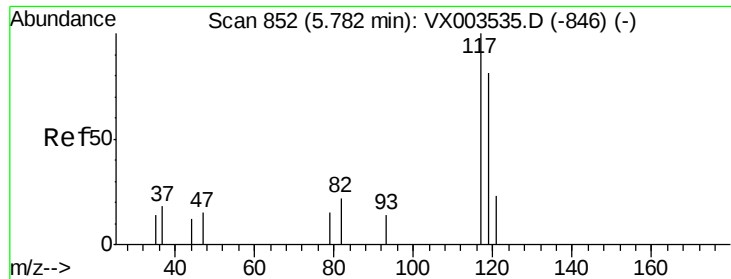


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 5.429 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.11 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

Instrument :

MSVOA\_X

ClientSampled :

EB-2018.07.17

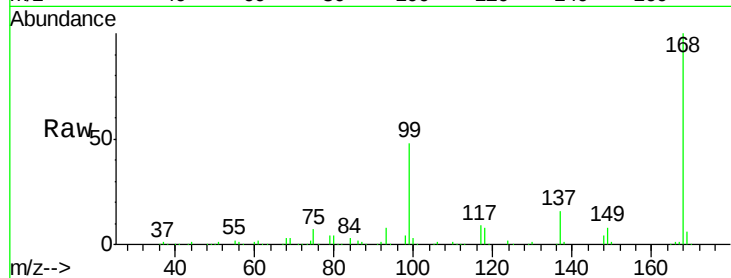
Tgt Ion:117 Resp: 21637

Ion Ratio Lower Upper

117 100

119 5.1 77.4 116.0#

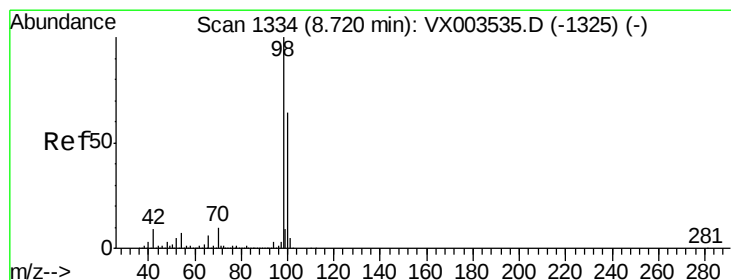
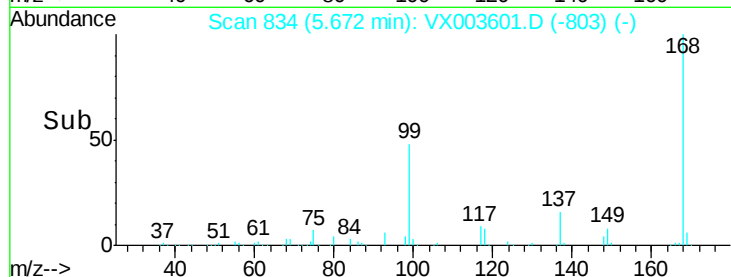
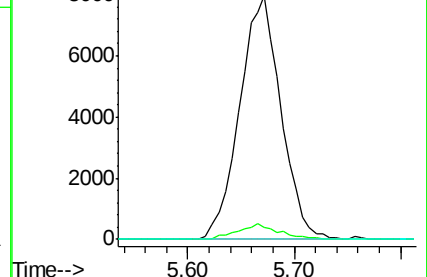
121 0.0 24.4 36.6#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#50

Toluene-d8

Concen: 50.082 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX003601.D

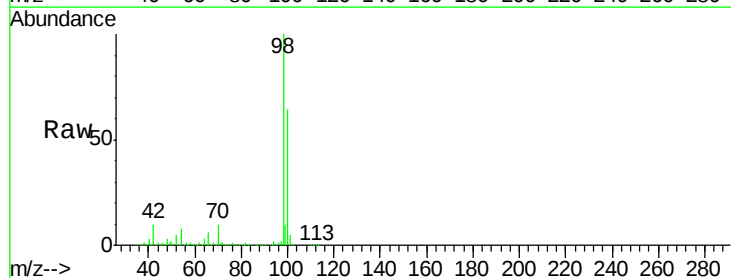
Acq: 23 Jul 2018 13:49

Tgt Ion: 98 Resp: 539527

Ion Ratio Lower Upper

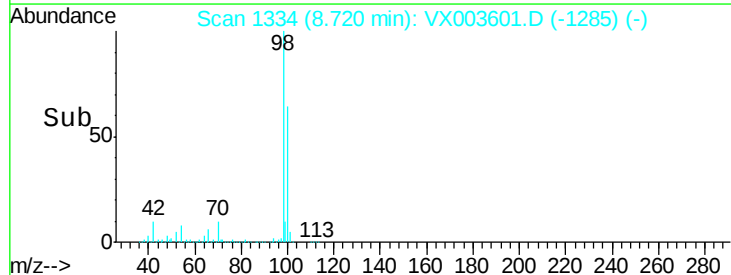
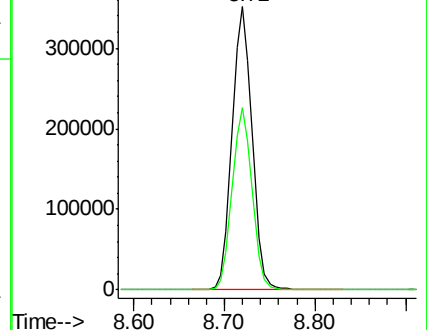
98 100

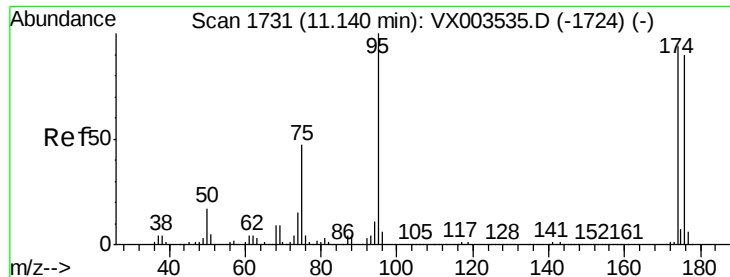
100 63.9 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

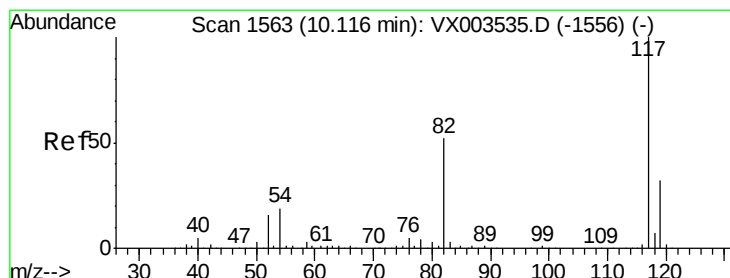
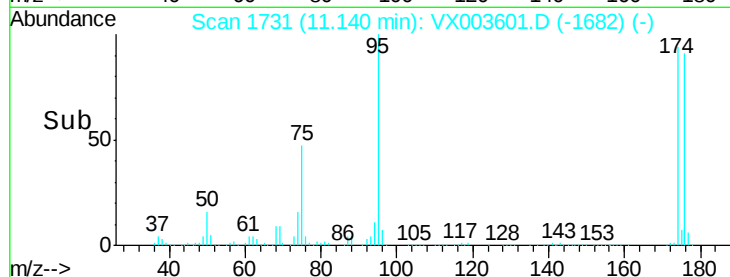
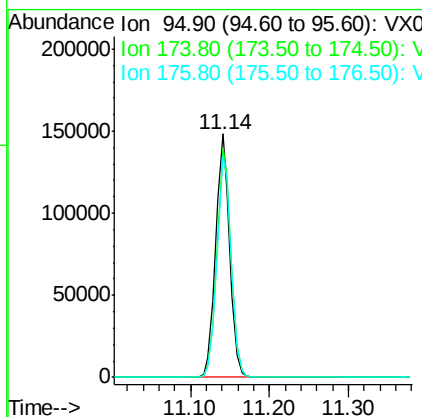
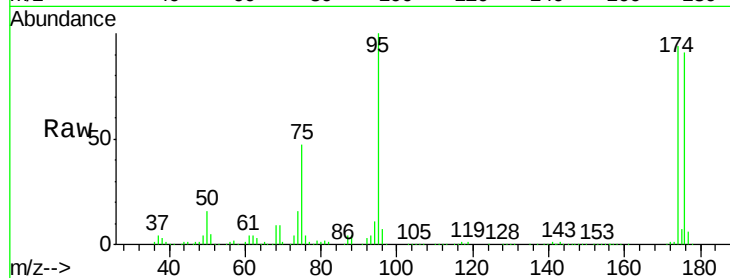




#62  
4-Bromofluorobenzene  
Concen: 46.547 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

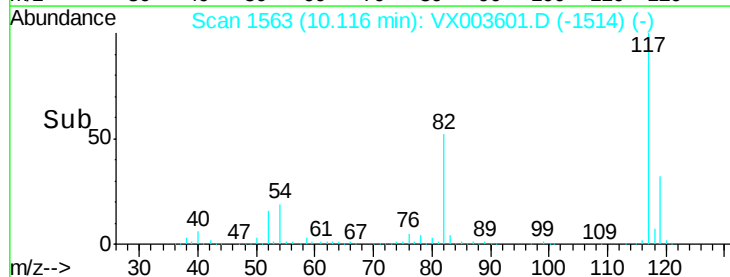
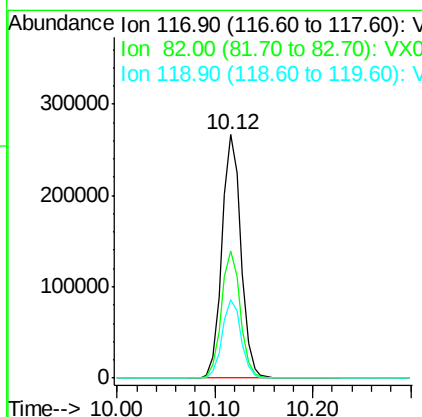
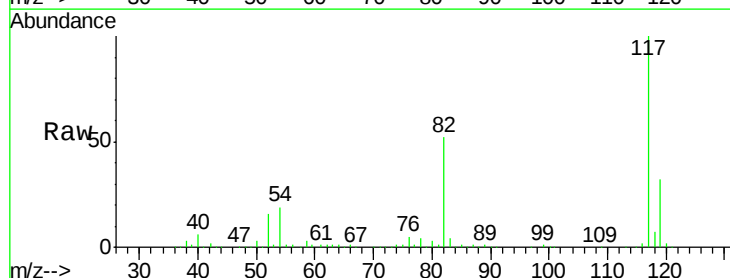
Instrument :  
MSVOA\_X  
ClientSampleId :  
EB-2018.07.17

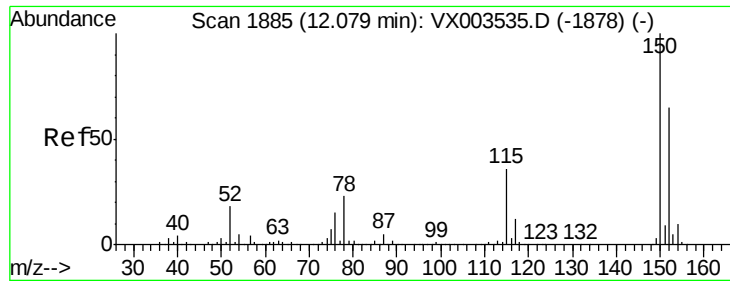
Tgt Ion: 95 Resp: 182997  
Ion Ratio Lower Upper  
95 100  
174 96.3 0.0 187.4  
176 92.6 0.0 181.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX003601.D  
Acq: 23 Jul 2018 13:49

Tgt Ion: 117 Resp: 358669  
Ion Ratio Lower Upper  
117 100  
82 52.4 45.0 67.4  
119 32.3 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1885

Delta R.T. 0.00 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

Instrument :

MSVOA\_X

ClientSampleId :

EB-2018.07.17

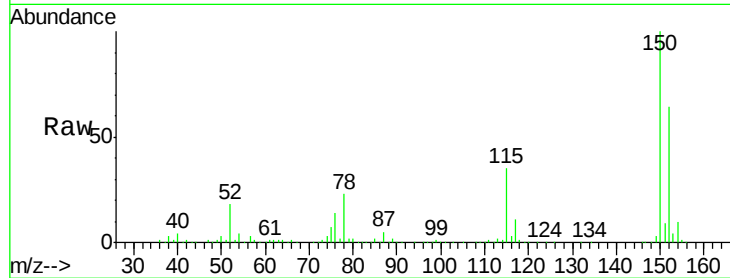
Tgt Ion:152 Resp: 191757

Ion Ratio Lower Upper

152 100

115 54.7 40.1 120.2

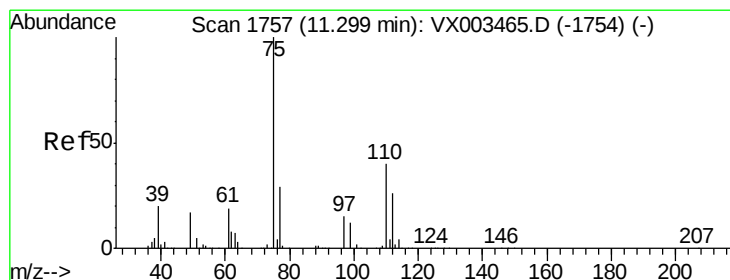
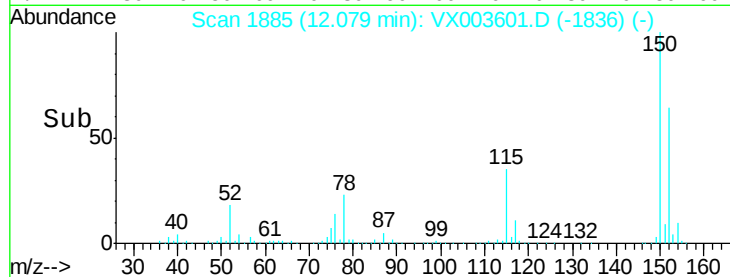
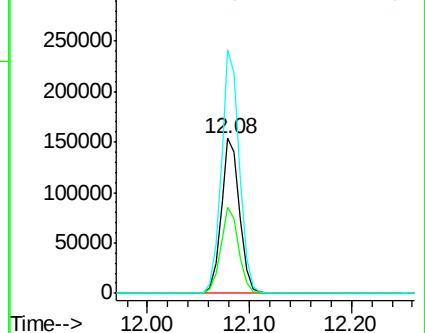
150 156.3 0.0 347.2



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: 24.740 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX003601.D

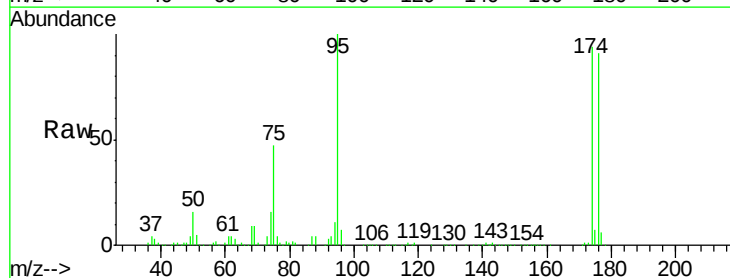
Acq: 23 Jul 2018 13:49

Tgt Ion: 75 Resp: 85227

Ion Ratio Lower Upper

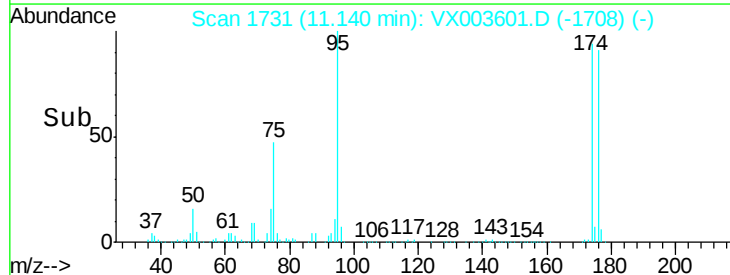
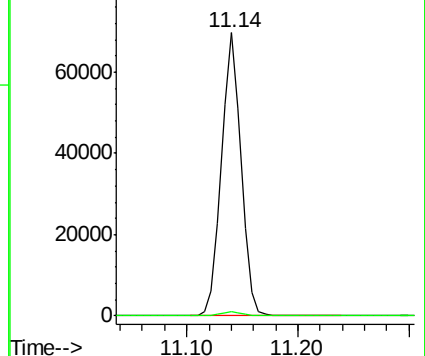
75 100

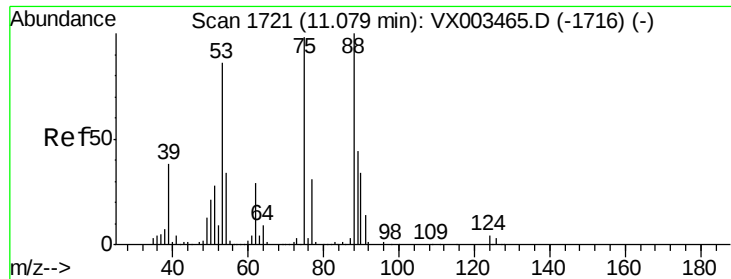
77 1.4 22.8 68.3#



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: 69.306 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX003601.D

Acq: 23 Jul 2018 13:49

Instrument :

MSVOA\_X

ClientSampleId :

EB-2018.07.17

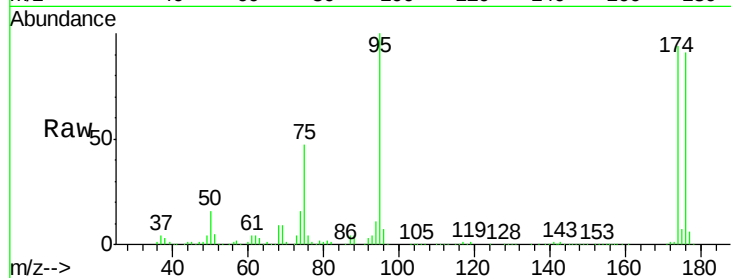
Tgt Ion: 75 Resp: 85227

Ion Ratio Lower Upper

75 100

53 0.1 86.8 130.2#

89 0.0 38.2 57.2#



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

