

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121718\  
 Data File : VX006574.D  
 Acq On : 17 Dec 2018 15:52  
 Operator : JC/MD  
 Sample : J6405-11  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP03-20181210

Quant Time: Dec 18 01:21:19 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      | 5.67  | 168  | 663644   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 1072450  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 982194   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 464896   | 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   | 370214   | 54.65 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.30% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 321810   | 46.35 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.70%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 1266657  | 50.15 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.30% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 469531   | 49.33 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.66%  |          |

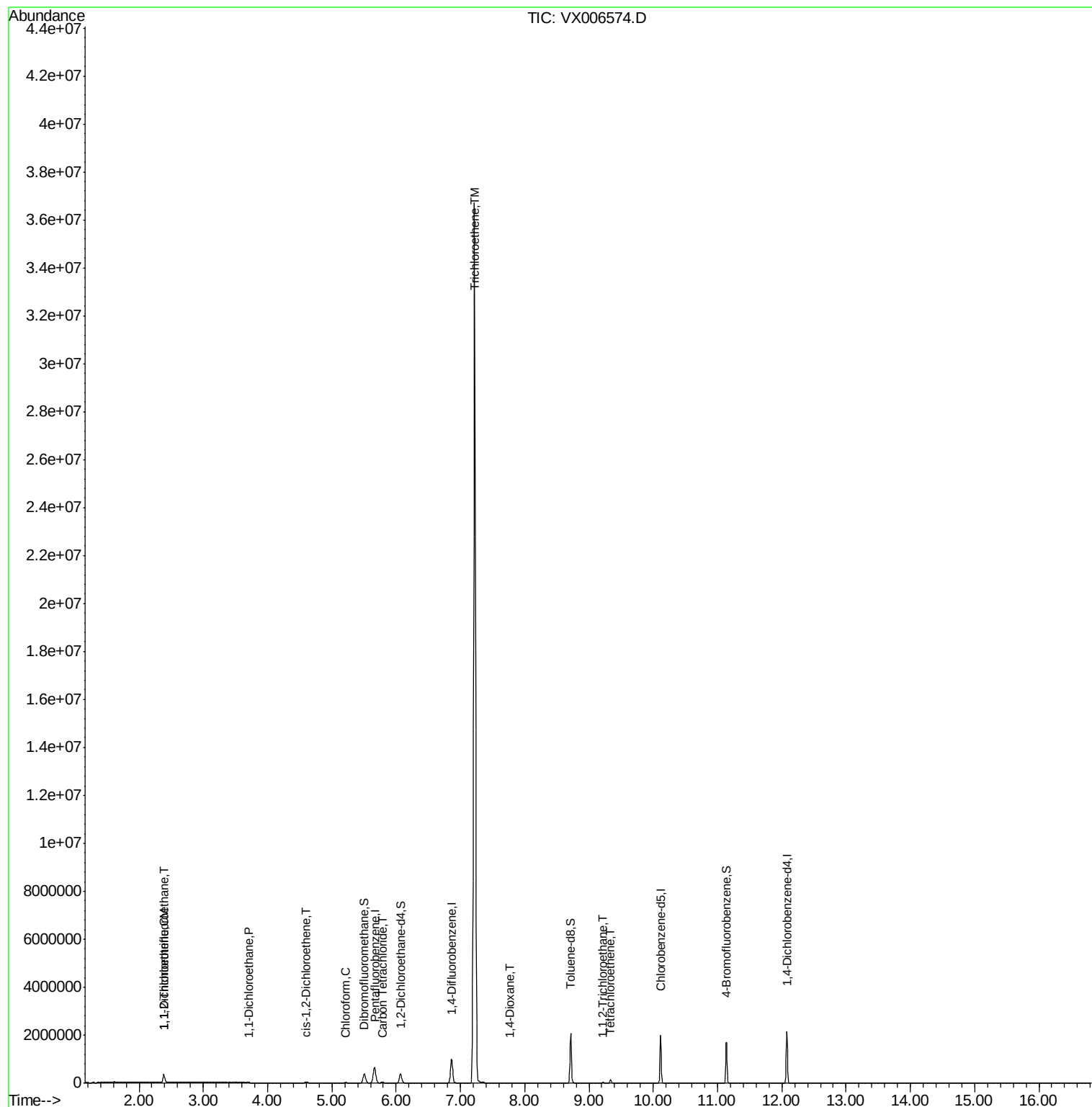
| Target Compounds              | R.T. | QIon | Response | Conc     | Units  | Qvalue |
|-------------------------------|------|------|----------|----------|--------|--------|
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101  | 104604   | 16.675   | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 2.38 | 96   | 45432    | 7.566    | ug/l   | 88     |
| 24) 1,1-Dichloroethane        | 3.70 | 63   | 14431    | 1.363    | ug/l # | 92     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96   | 25409    | 3.560    | ug/l   | 90     |
| 30) Chloroform                | 5.22 | 83   | 14822    | 1.332    | ug/l   | 90     |
| 38) Carbon Tetrachloride      | 5.79 | 117  | 15453    | 1.454    | ug/l # | 87     |
| 44) Trichloroethene           | 7.22 | 130  | 13915689 | 1698.212 | ug/l   | 93     |
| 49) 1,4-Dioxane               | 7.76 | 88   | 3624     | 17.924   | ug/l # | 69     |
| 55) 1,1,2-Trichloroethane     | 9.22 | 97   | 7407     | 1.025    | ug/l   | 93     |
| 64) Tetrachloroethene         | 9.34 | 164  | 24421    | 3.302    | ug/l   | 95     |

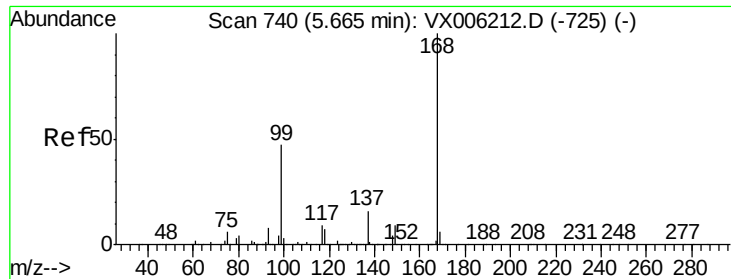
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
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DUP03-20181210

Quant Time: Dec 18 01:21:19 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: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX006574.D

Acq: 17 Dec 2018 15:52

Instrument :

MSVOA\_X

ClientSampleId :

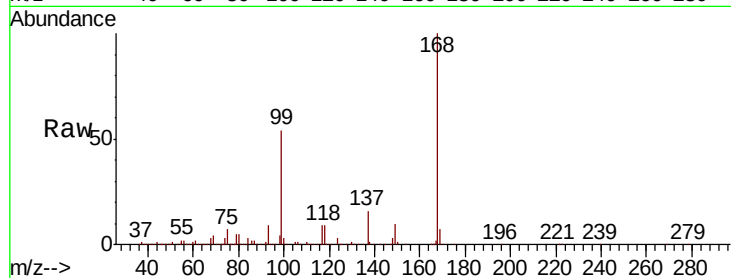
DUP03-20181210

Tot Ion:168 Resp: 663644

Ion Ratio Lower Upper

168 100

99 54.3 37.8 56.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

250000

200000

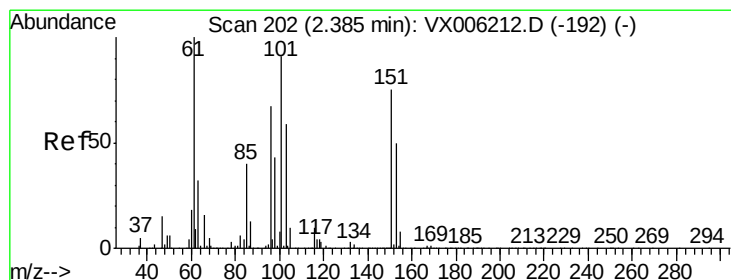
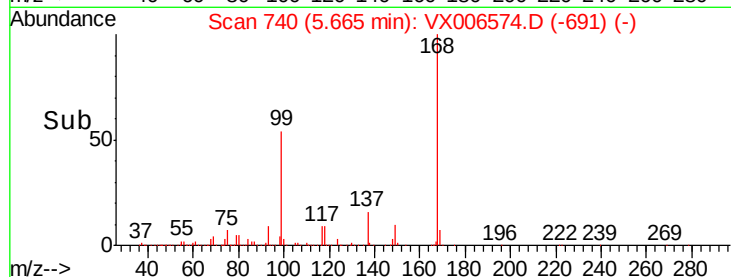
150000

100000

50000

0

Time--> 5.50 5.60 5.70 5.80



#9

1,1,2-Trichlorotrifluoroethane

Concen: 16.675 ug/l

RT: 2.39 min Scan# 203

Delta R.T. 0.01 min

Lab File: VX006574.D

Acq: 17 Dec 2018 15:52

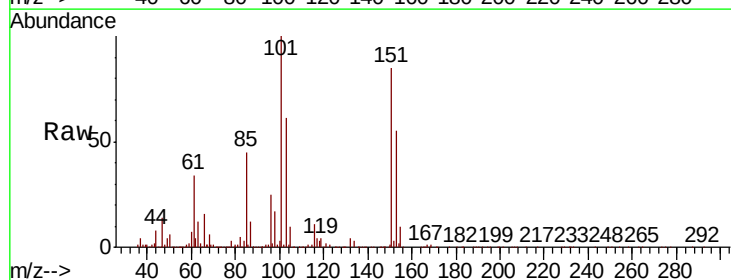
Tgt Ion:101 Resp: 104604

Ion Ratio Lower Upper

101 100

85 43.7 35.5 53.3

151 86.4 68.6 103.0



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V

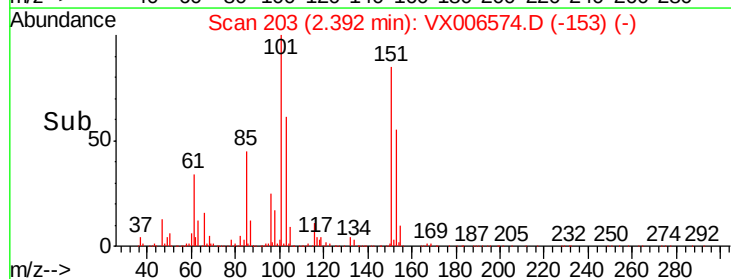
60000

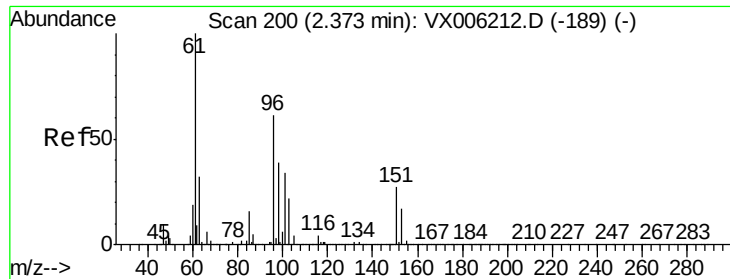
40000

20000

0

Time--> 2.30 2.35 2.40 2.45 2.50

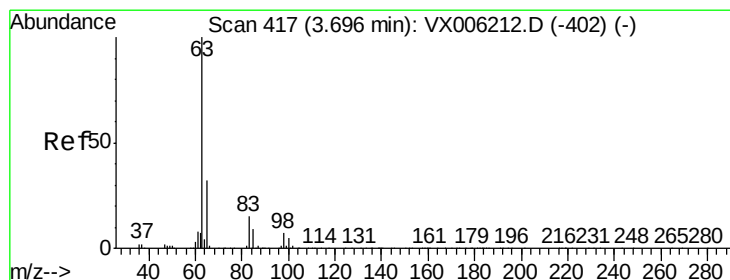
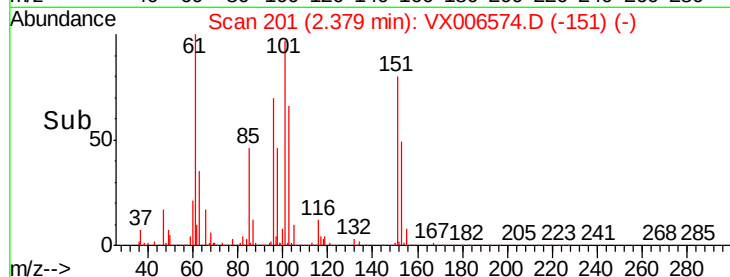
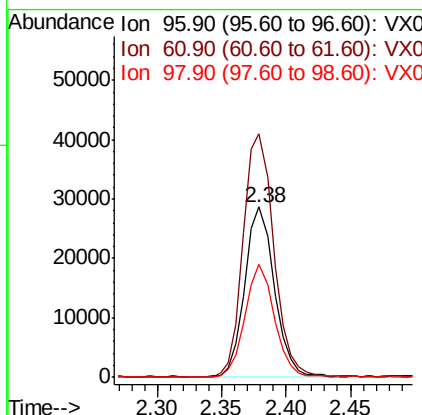
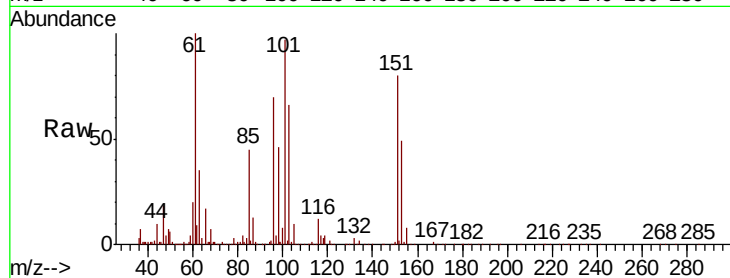




#12  
 1,1-Dichloroethene  
 Concen: 7.566 ug/l  
 RT: 2.38 min Scan# 201  
 Delta R.T. 0.01 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

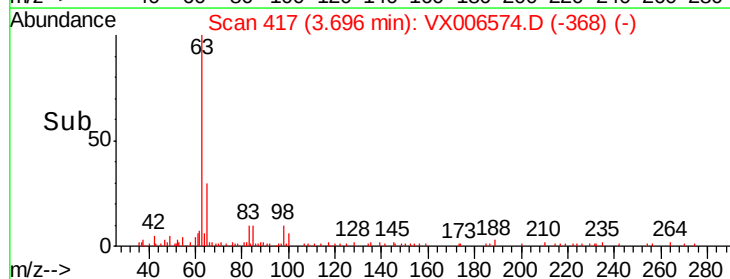
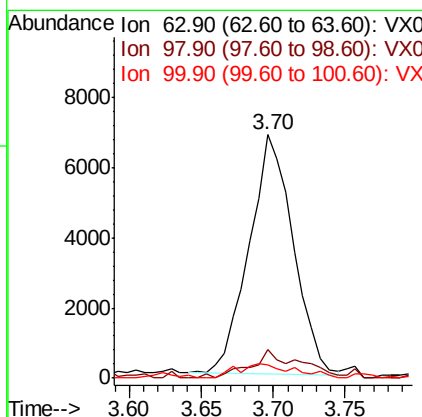
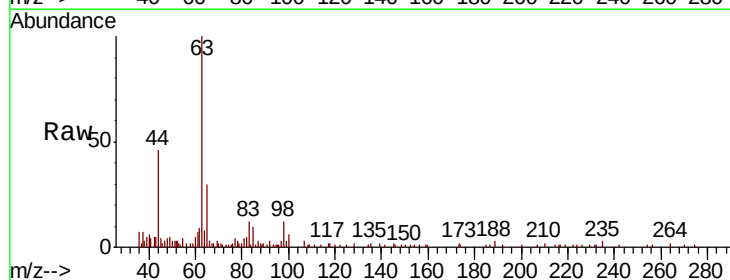
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP03-20181210

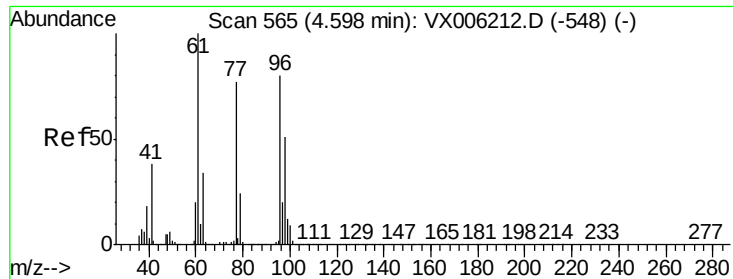
Tot Ion: 96 Resp: 45432  
 Ion Ratio Lower Upper  
 96 100  
 61 143.2 131.7 197.5  
 98 66.2 51.8 77.6



#24  
 1,1-Dichloroethane  
 Concen: 1.363 ug/l  
 RT: 3.70 min Scan# 417  
 Delta R.T. 0.00 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

Tgt Ion: 63 Resp: 14431  
 Ion Ratio Lower Upper  
 63 100  
 98 12.0 3.8 11.4#  
 100 5.7 2.5 7.4



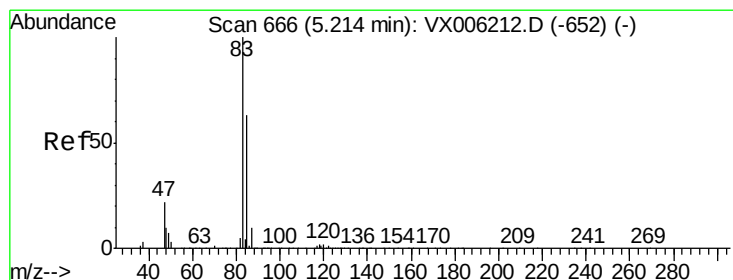
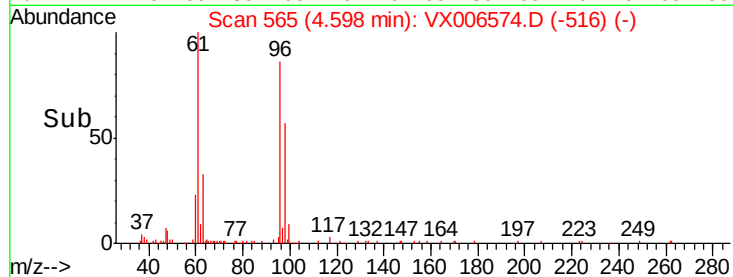
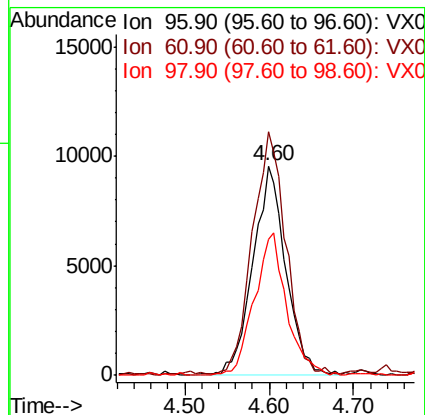
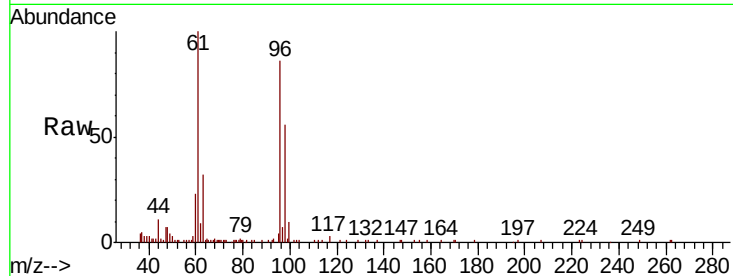


#27

cis-1,2-Dichloroethene  
 Concen: 3.560 ug/l  
 RT: 4.60 min Scan# 565  
 Delta R.T. 0.00 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP03-20181210

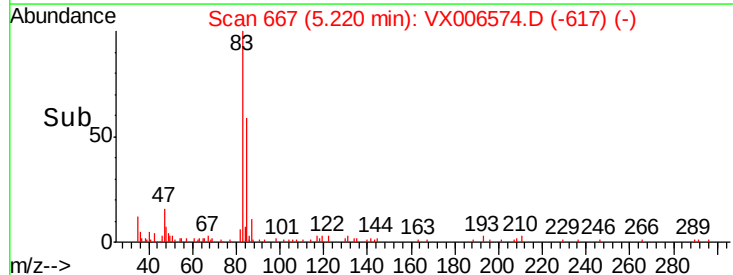
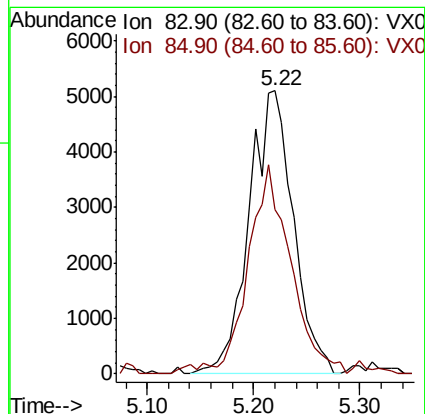
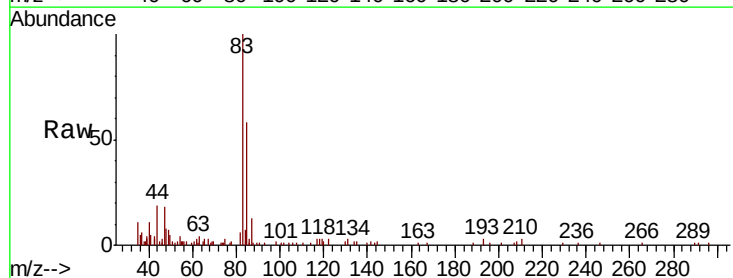
| Tot Ion | 96    | Resp  | 25409 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 96      | 100   |       |       |
| 61      | 116.3 | 0.0   | 265.0 |
| 98      | 66.7  | 0.0   | 130.2 |

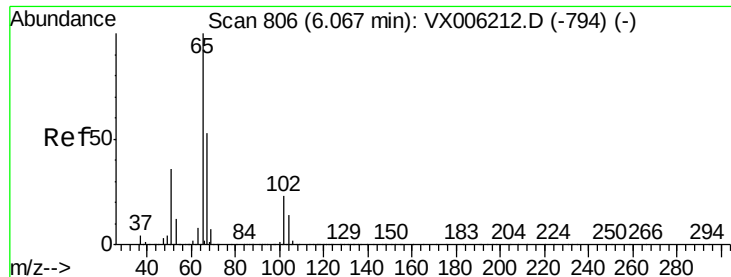


#30

Chloroform  
 Concen: 1.332 ug/l  
 RT: 5.22 min Scan# 667  
 Delta R.T. 0.01 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

| Tgt Ion | 83    | Resp  | 14822 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 83      | 100   |       |       |
| 85      | 54.9  | 50.3  | 75.5  |

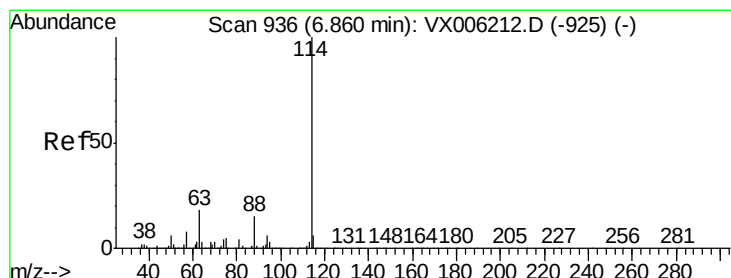
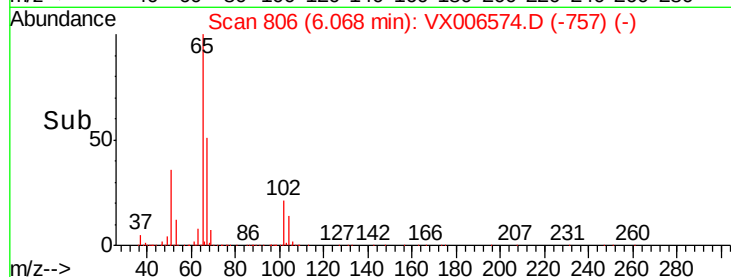
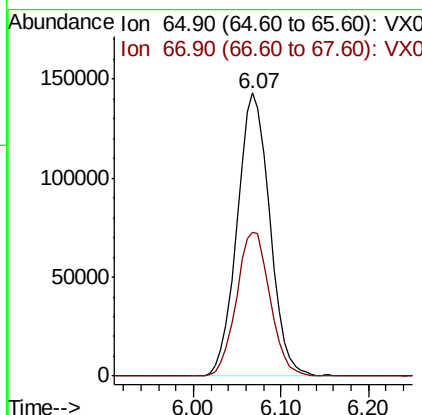
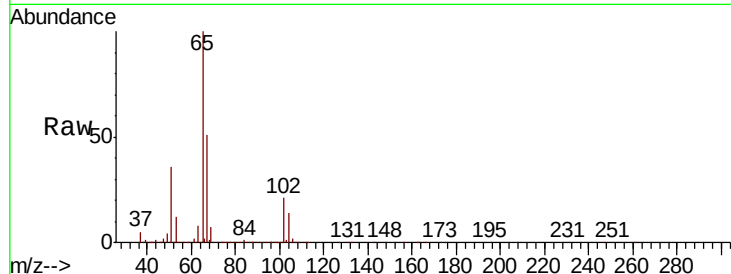




#33  
 1,2-Dichloroethane-d4  
 Concen: 54.646 ug/l  
 RT: 6.07 min Scan# 806  
 Delta R.T. 0.00 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

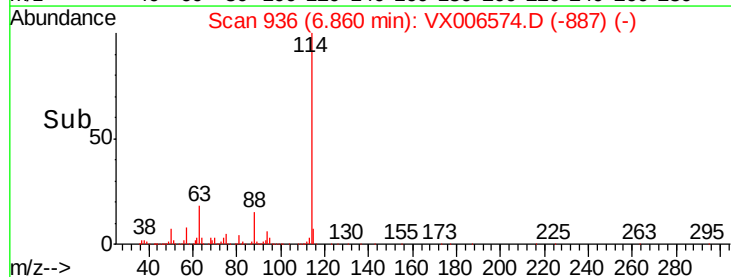
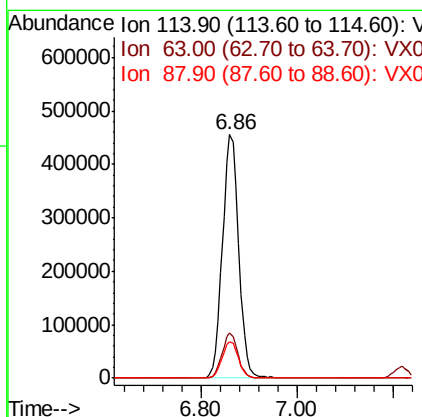
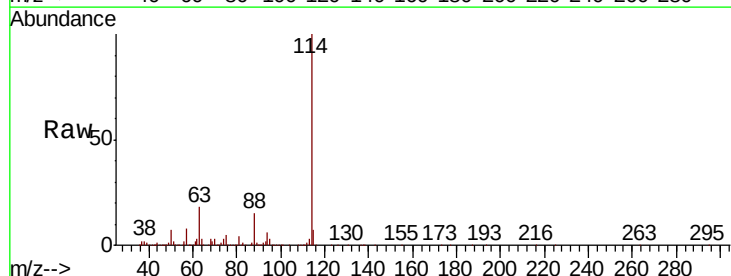
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP03-20181210

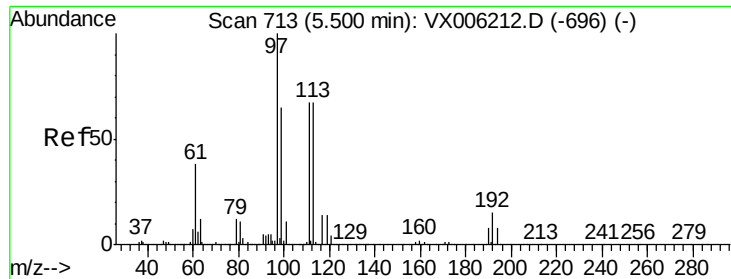
Tot Ion: 65 Resp: 370214  
 Ion Ratio Lower Upper  
 65 100  
 67 52.3 0.0 107.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

Tgt Ion: 114 Resp: 1072450  
 Ion Ratio Lower Upper  
 114 100  
 63 18.4 0.0 36.6  
 88 15.1 0.0 29.0

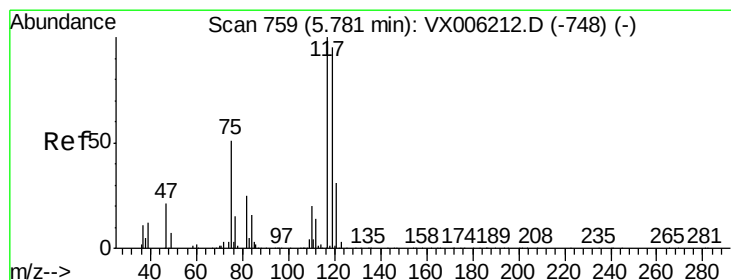
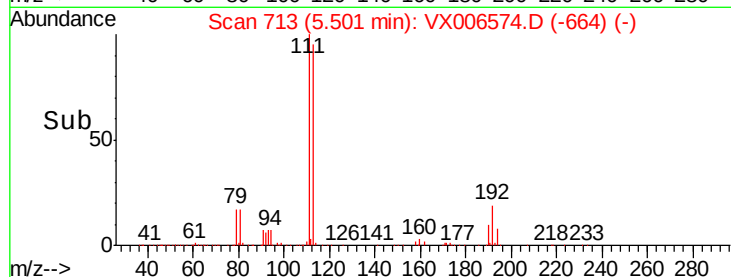
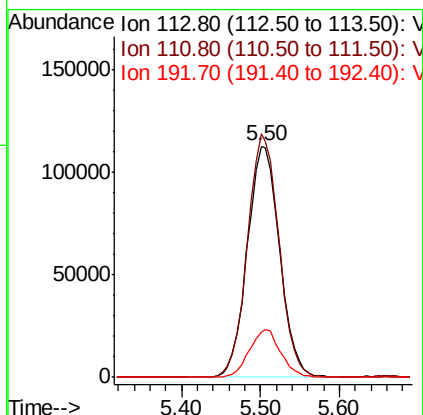
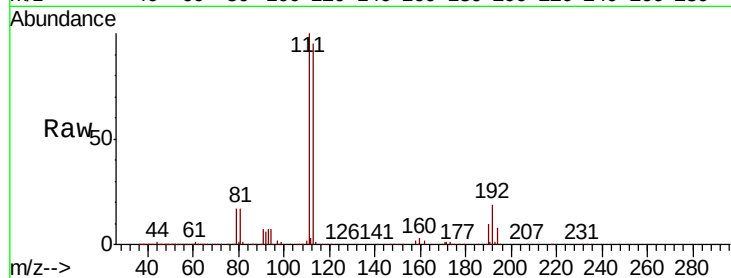




#35  
 Dibromofluoromethane  
 Concen: 46.346 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.00 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

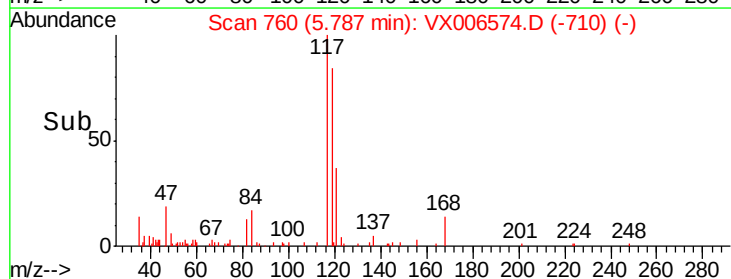
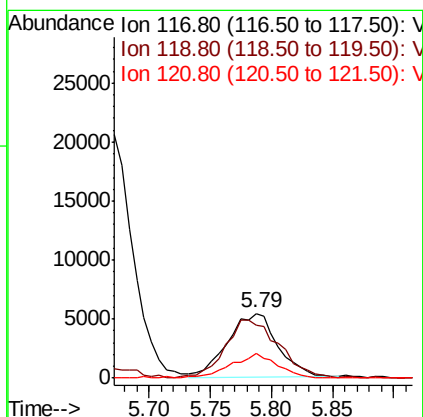
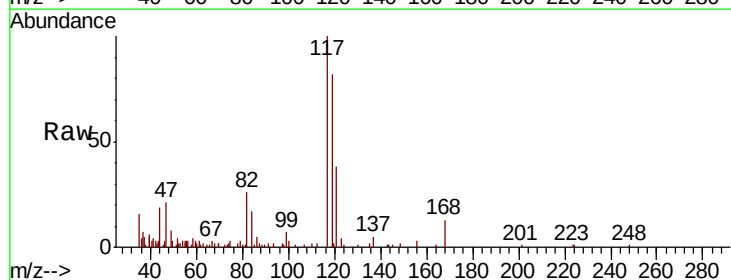
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP03-20181210

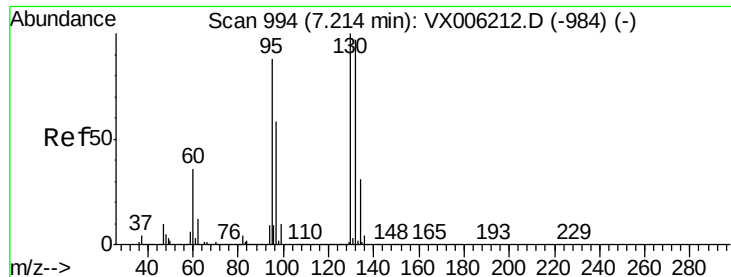
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.9 | 81.1  | 121.7 |
| 192     | 20.2  | 18.2  | 27.2  |



#38  
 Carbon Tetrachloride  
 Concen: 1.454 ug/l  
 RT: 5.79 min Scan# 760  
 Delta R.T. 0.01 min  
 Lab File: VX006574.D  
 Acq: 17 Dec 2018 15:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 119     | 81.8  | 75.8  | 113.8 |
| 121     | 38.3  | 24.6  | 37.0# |





#44

Trichloroethene

Concen: 1698.212 ug/l

RT: 7.22 min Scan# 995

Delta R.T. 0.01 min

Lab File: VX006574.D

Acq: 17 Dec 2018 15:52

Instrument :

MSVOA\_X

ClientSampleId :

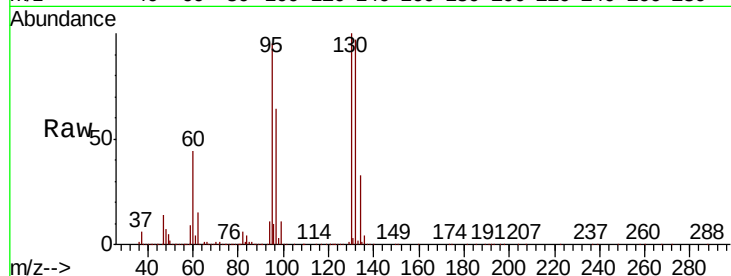
DUP03-20181210

Tot Ion:130 Resp:13915689

Ion Ratio Lower Upper

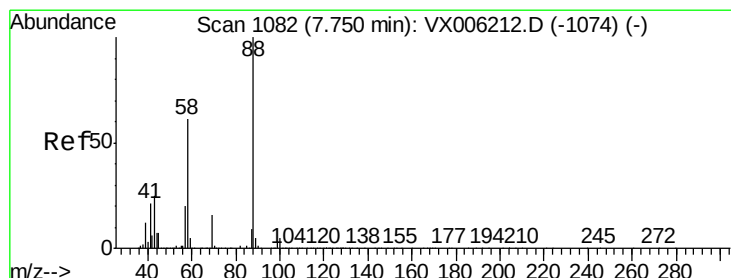
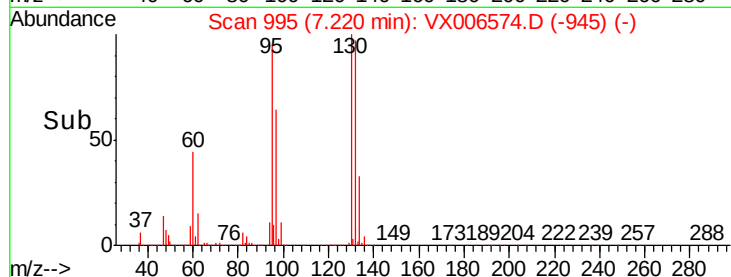
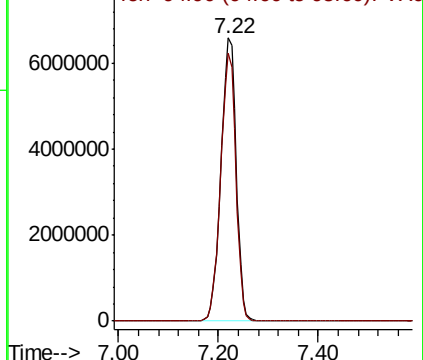
130 100

95 94.8 0.0 175.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0



#49

1,4-Dioxane

Concen: 17.924 ug/l

RT: 7.76 min Scan# 1084

Delta R.T. 0.01 min

Lab File: VX006574.D

Acq: 17 Dec 2018 15:52

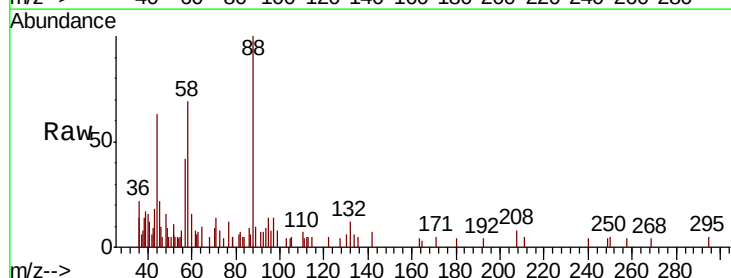
Tgt Ion: 88 Resp: 3624

Ion Ratio Lower Upper

88 100

43 11.1 23.2 34.8#

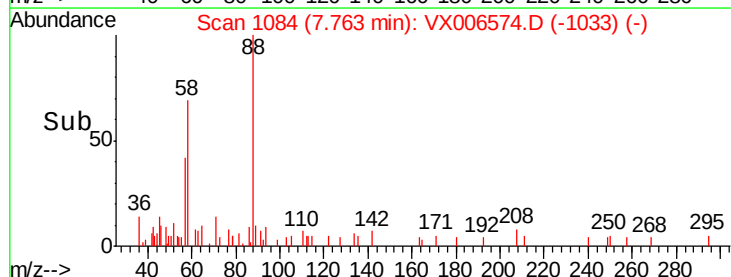
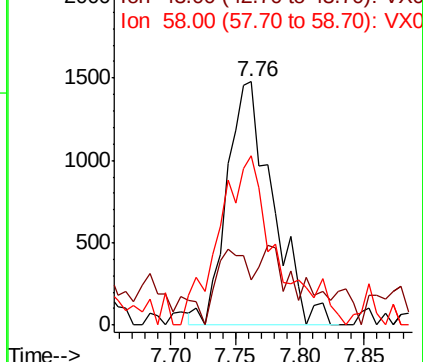
58 88.0 51.4 77.0#



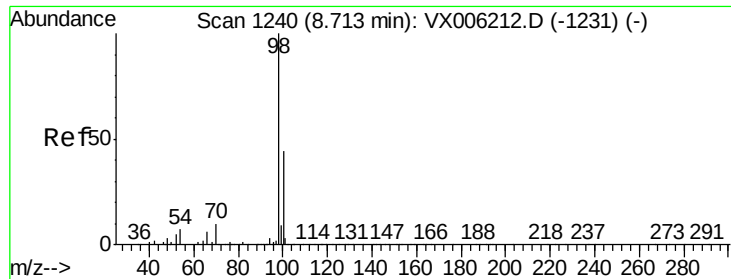
Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0







#50

Toluene-d8

Concen: 50.150 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX006574.D

Acq: 17 Dec 2018 15:52

Instrument :

MSVOA\_X

ClientSampleId :

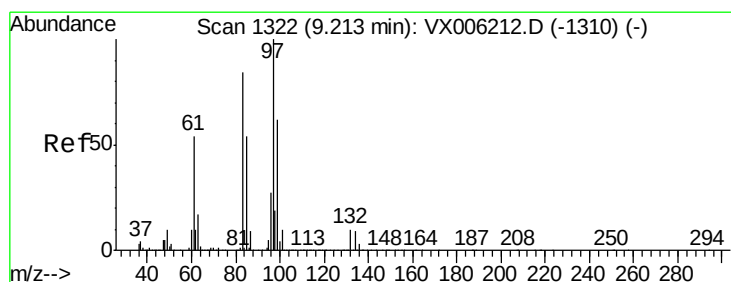
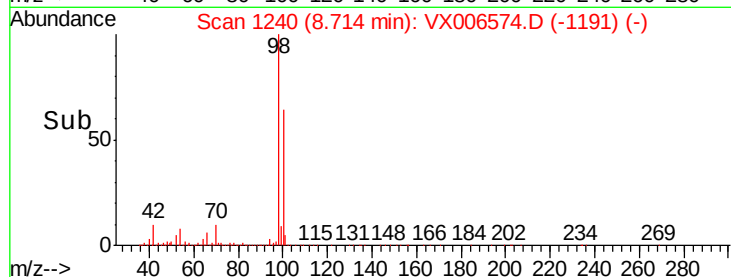
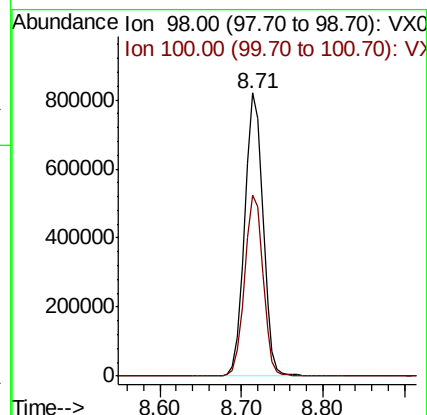
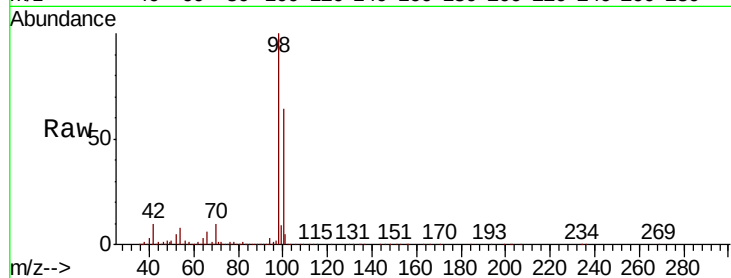
DUP03-20181210

Tot Ion: 98 Resp: 1266657

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.2



#55

1,1,2-Trichloroethane

Concen: 1.025 ug/l

RT: 9.22 min Scan# 1323

Delta R.T. 0.01 min

Lab File: VX006574.D

Acq: 17 Dec 2018 15:52

Tgt Ion: 97 Resp: 7407

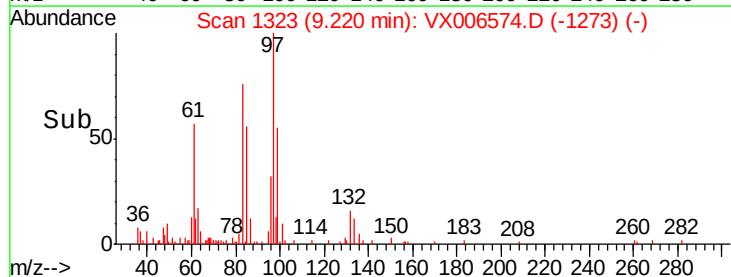
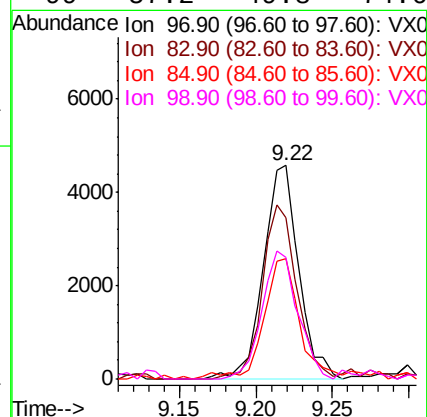
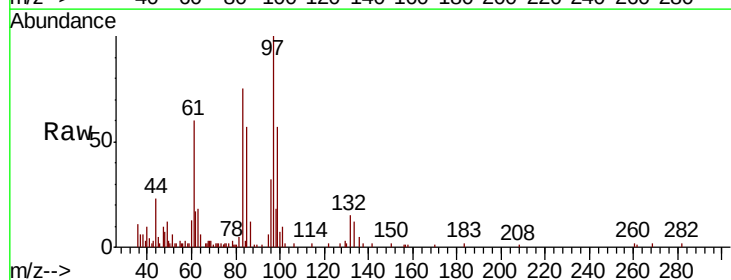
Ion Ratio Lower Upper

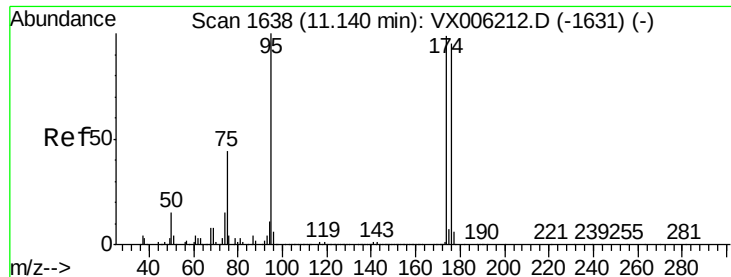
97 100

83 75.3 67.1 100.7

85 56.5 43.2 64.8

99 57.2 49.8 74.6

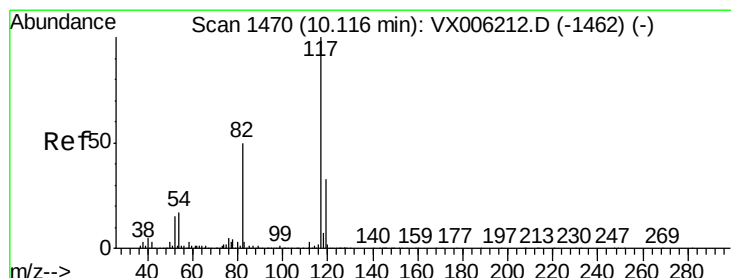
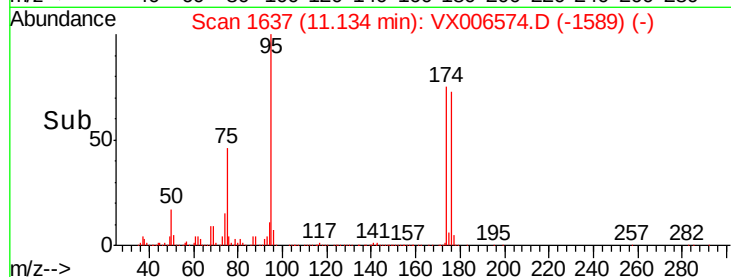
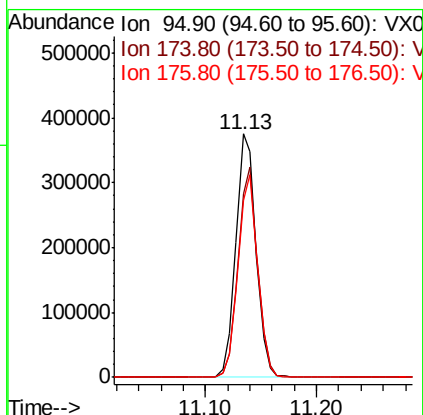
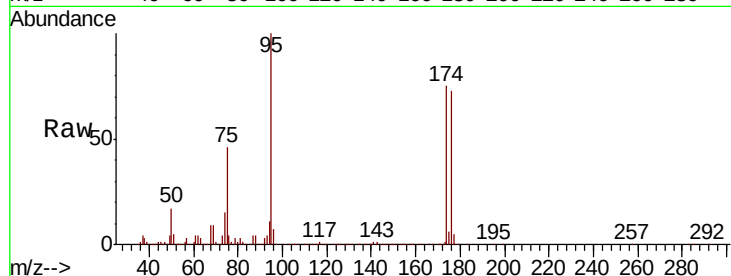




#62  
4-Bromofluorobenzene  
Concen: 49.333 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.01 min  
Lab File: VX006574.D  
Acq: 17 Dec 2018 15:52

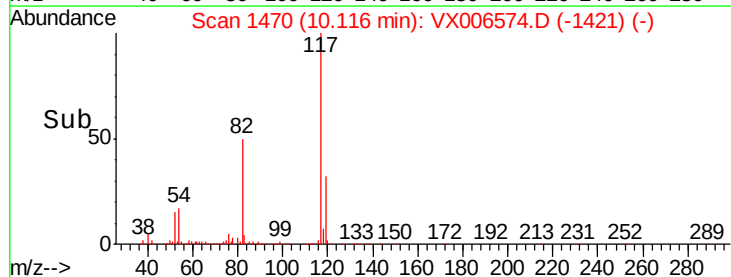
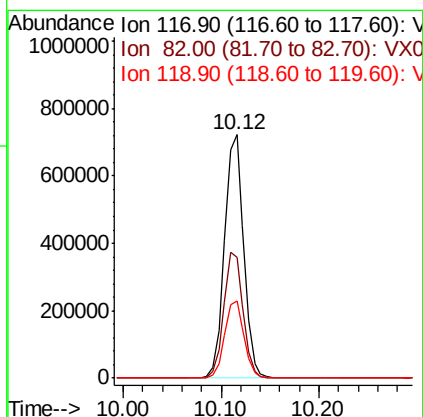
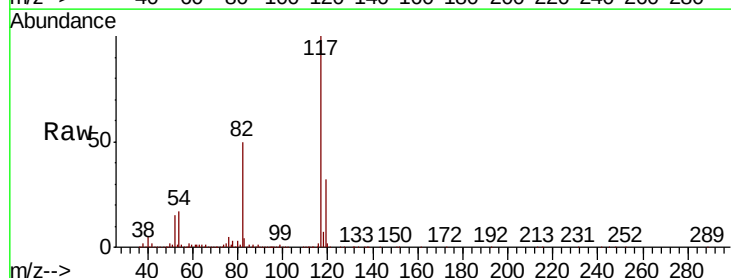
Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP03-20181210

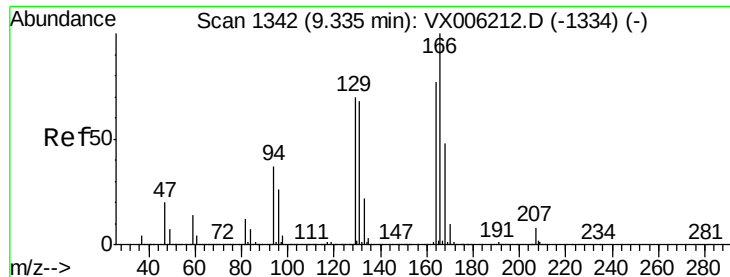
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 84.1  | 0.0   | 187.0 |
| 176     | 81.3  | 0.0   | 181.8 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX006574.D  
Acq: 17 Dec 2018 15:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 49.6  | 39.6  | 59.4  |
| 119     | 31.9  | 26.3  | 39.5  |

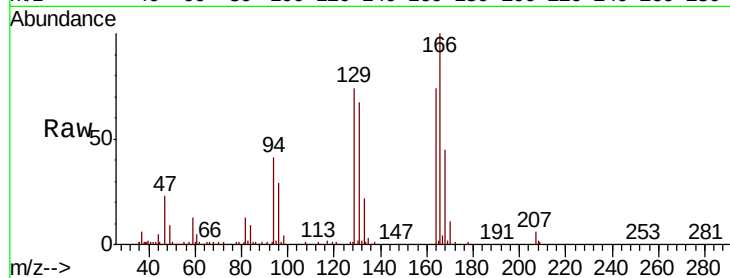




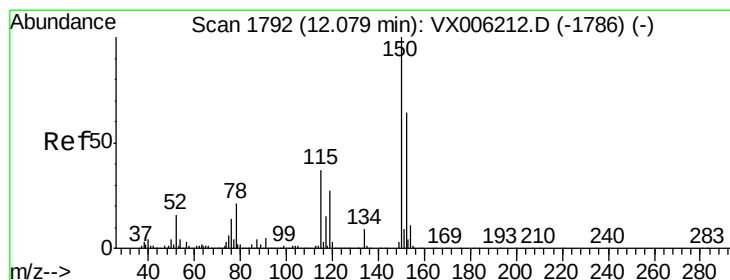
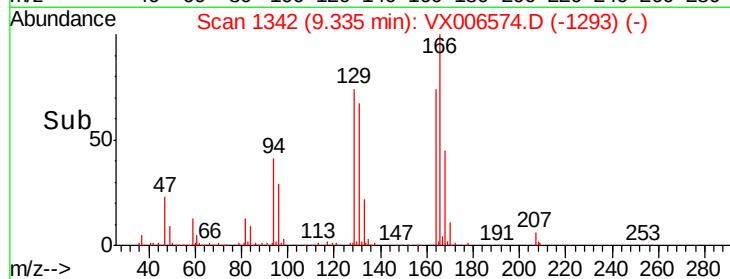
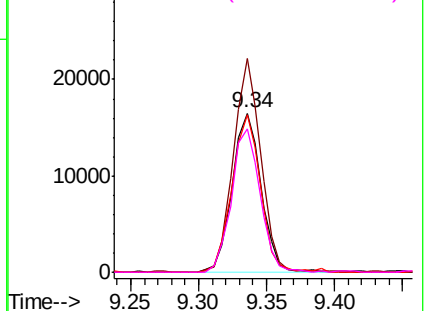
#64  
Tetrachloroethene  
Concen: 3.302 ug/l  
RT: 9.34 min Scan# 1342  
Delta R.T. 0.00 min  
Lab File: VX006574.D  
Acq: 17 Dec 2018 15:52

Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP03-20181210

Tot Ion:164 Resp: 24421  
Ion Ratio Lower Upper  
164 100  
166 134.3 104.2 156.2  
129 98.8 72.6 108.8  
131 90.1 70.3 105.5

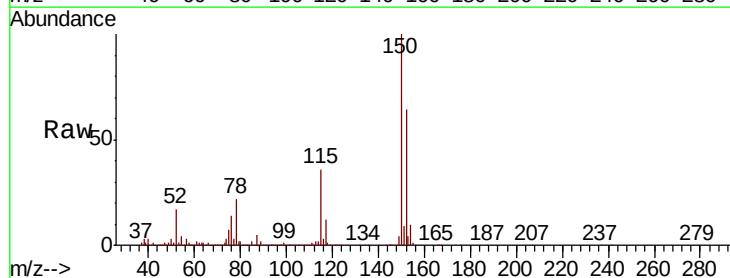


Abundance Ion 163.80 (163.50 to 164.50): V  
Ion 165.80 (165.50 to 166.50): V  
Ion 128.80 (128.50 to 129.50): V  
Ion 130.80 (130.50 to 131.50): V



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX006574.D  
Acq: 17 Dec 2018 15:52

Tgt Ion:152 Resp: 464896  
Ion Ratio Lower Upper  
152 100  
115 57.5 39.0 116.9  
150 157.1 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

