

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX050818\  
 Data File : VX001524.D  
 Acq On : 08 May 2018 19:47  
 Operator : JC/MD  
 Sample : J2687-06  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-DUP06-20180501

Quant Time: May 09 06:47:43 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sun May 06 07:59:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 230136   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 313125   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 275118   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 152407   | 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   | 193840   | 58.60 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 117.20% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 149716   | 53.75 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 107.50% |          |
| 50) Toluene-d8              | 8.72  | 98   | 529426   | 52.08 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 104.16% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 174200   | 44.64 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 89.28%  |          |

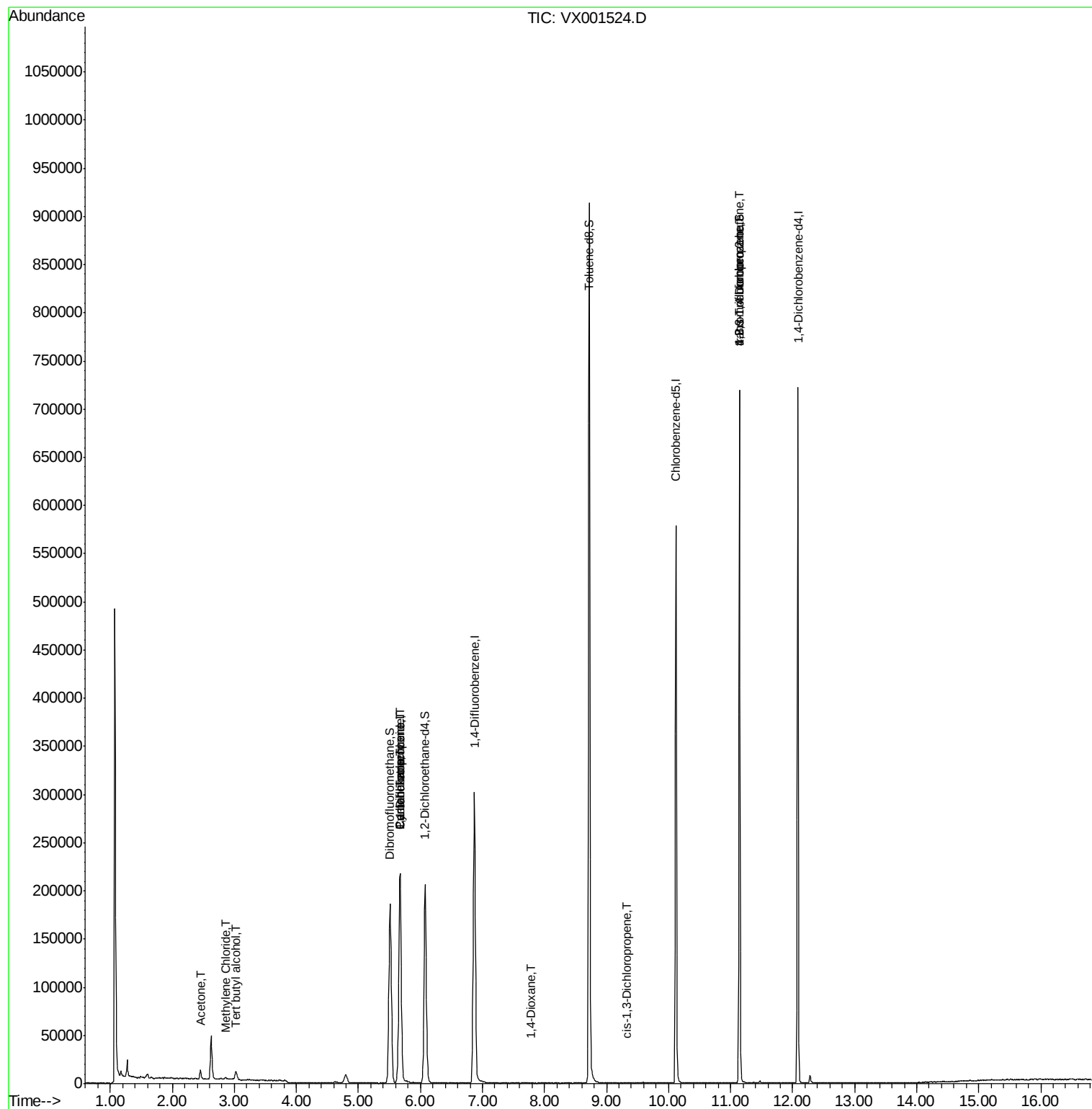
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 5) Bromomethane                | 1.65  | 94   | 706      | Below Cal | #     | 79     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 4980     | 7.14      | ug/l  | # 74   |
| 13) Acrolein                   | 2.32  | 56   | 109      | Below Cal | #     | 1      |
| 16) Acetone                    | 2.45  | 43   | 9613     | 6.40      | ug/l  | 97     |
| 20) Methylene Chloride         | 2.85  | 84   | 740      | 0.25      | ug/l  | 97     |
| 31) Cyclohexane                | 5.67  | 56   | 3967     | 0.93      | ug/l  | # 24   |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14528    | 3.65      | ug/l  | # 50   |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 20501    | 4.83      | ug/l  | # 15   |
| 49) 1,4-Dioxane                | 7.77  | 88   | 74       | 0.94      | ug/l  | 95     |
| 54) cis-1,3-Dichloropropene    | 9.32  | 75   | 20       | 2.27      | ug/l  | # 34   |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 87891    | 28.43     | ug/l  | # 38   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 87891    | 87.17     | ug/l  | # 7    |

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

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX050818\  
Data File : VX001524.D  
Acq On : 08 May 2018 19:47  
Operator : JC/MD  
Sample : J2687-06  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-DUP06-20180501

Quant Time: May 09 06:47:43 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050518W.M  
Quant Title : SW846 8260  
QLast Update : Sun May 06 07:59:25 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.00 min

Lab File: VX001524.D

Acq: 08 May 2018 19:47

Instrument :

MSVOA\_X

ClientSampleId :

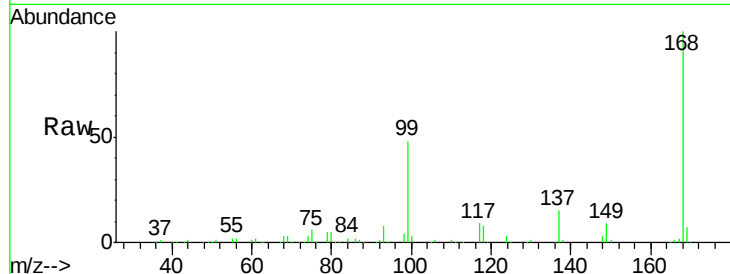
BP-DUP06-20180501

Tgt Ion: 168 Resp: 230136

Ion Ratio Lower Upper

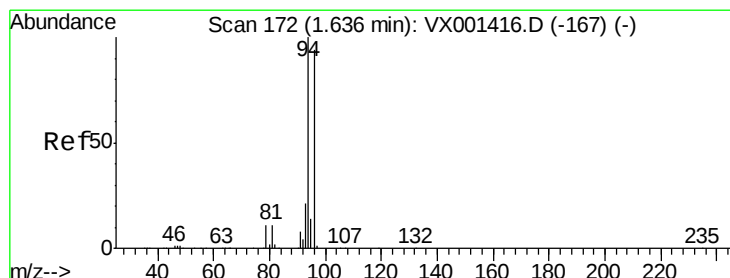
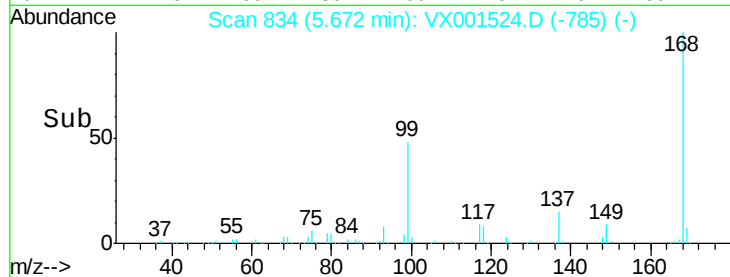
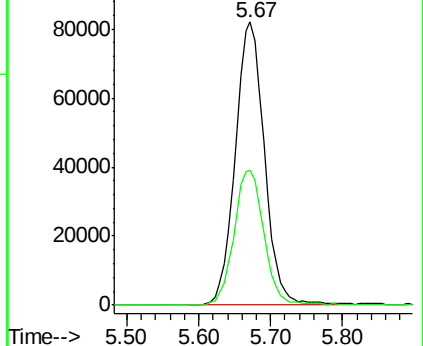
168 100

99 47.7 36.6 54.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 175

Delta R.T. 0.02 min

Lab File: VX001524.D

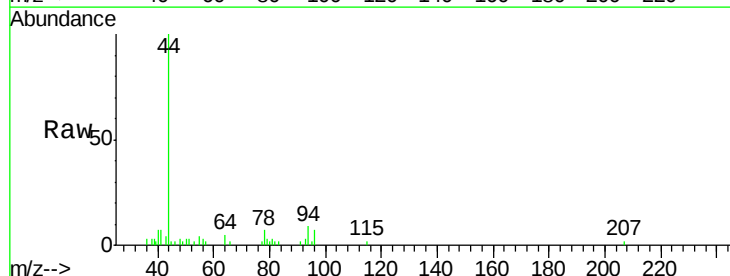
Acq: 08 May 2018 19:47

Tgt Ion: 94 Resp: 706

Ion Ratio Lower Upper

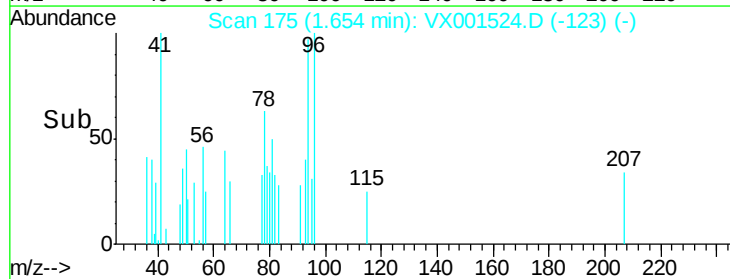
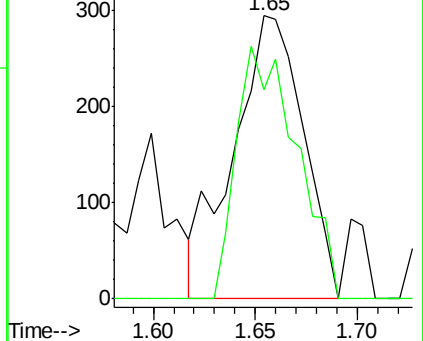
94 100

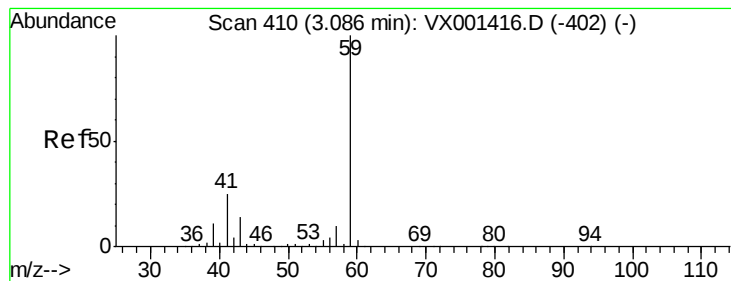
96 73.9 75.0 112.6#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



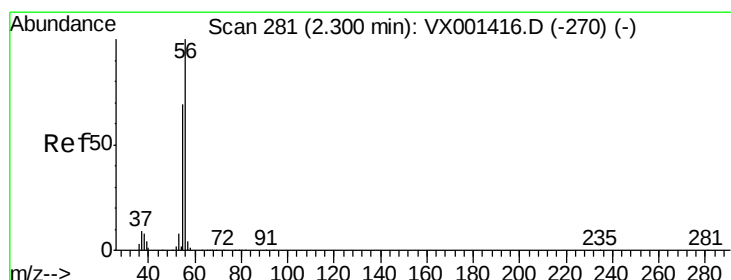
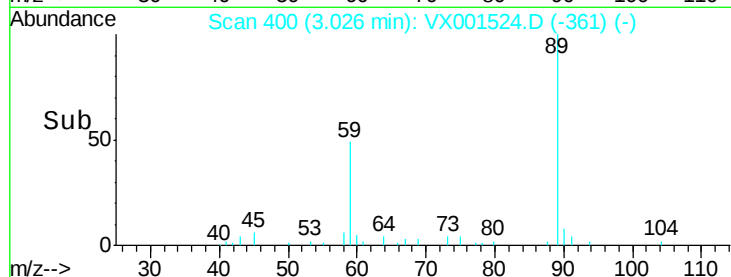
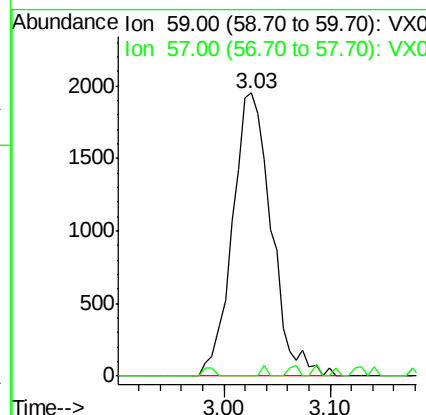
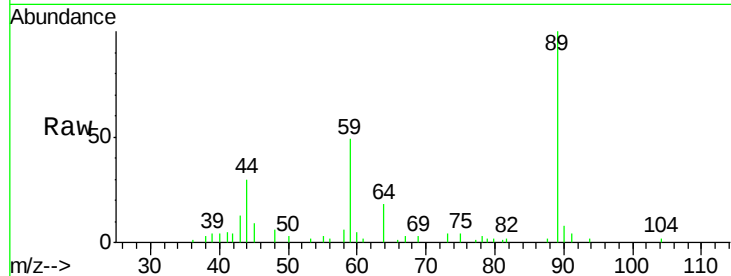


#11

Tert butyl alcohol  
 Concen: 7.14 ug/l  
 RT: 3.03 min Scan# 400  
 Delta R.T. -0.06 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-DUP06-20180501

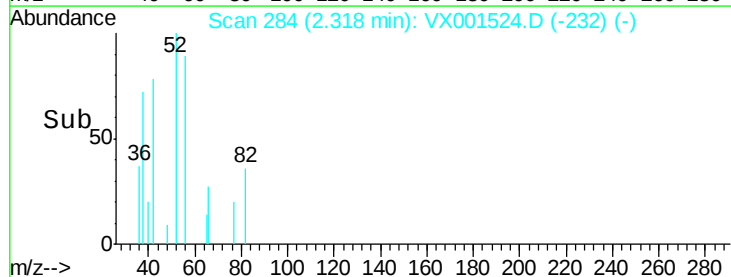
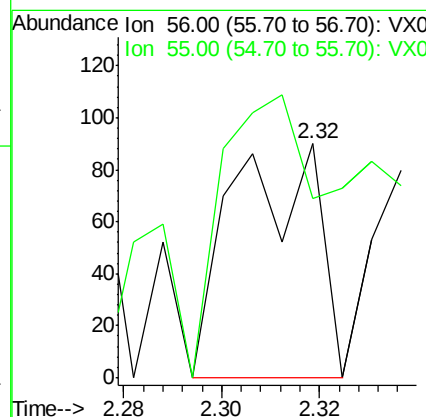
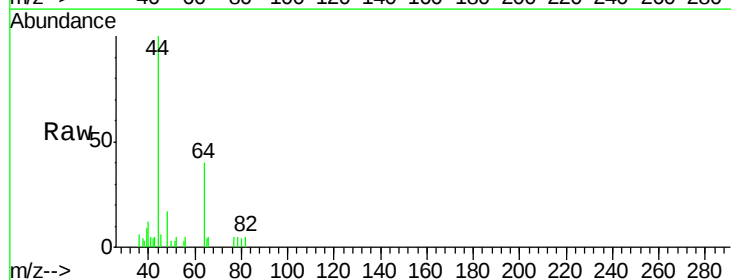
Tgt Ion: 59 Resp: 4980  
 Ion Ratio Lower Upper  
 59 100  
 57 0.6 8.2 12.4#

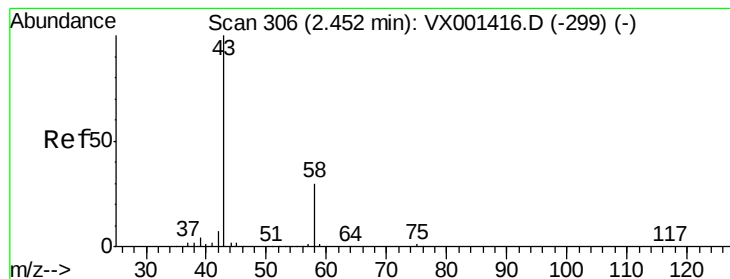


#13

Acrolein  
 Concen: Below Cal  
 RT: 2.32 min Scan# 284  
 Delta R.T. 0.02 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Tgt Ion: 56 Resp: 109  
 Ion Ratio Lower Upper  
 56 100  
 55 185.3 54.5 81.7#





#16

Acetone

Concen: 6.40 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX001524.D

Acq: 08 May 2018 19:47

Instrument :

MSVOA\_X

ClientSampleId :

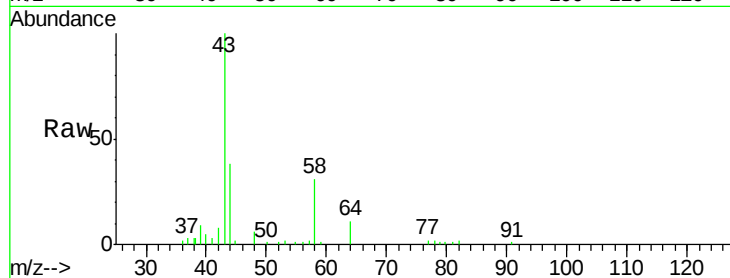
BP-DUP06-20180501

Tgt Ion: 43 Resp: 9613

Ion Ratio Lower Upper

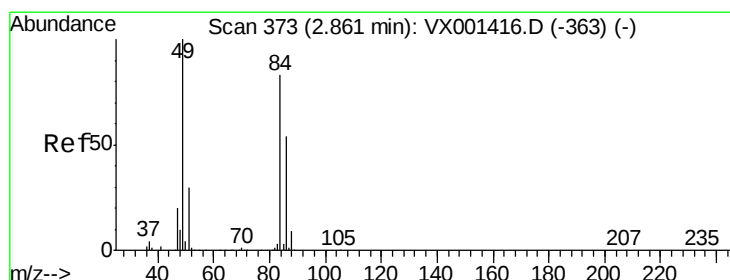
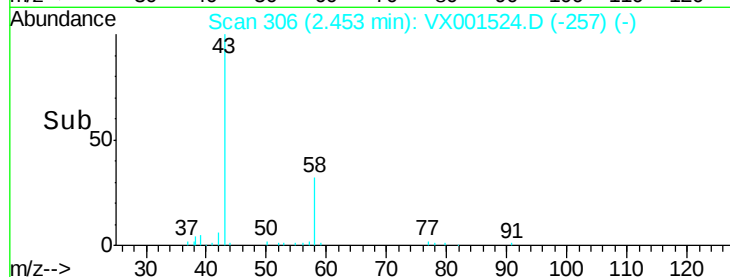
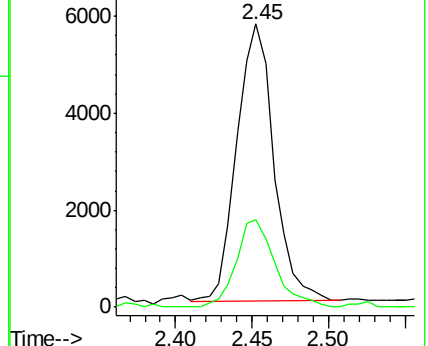
43 100

58 31.6 23.8 35.8



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#20

Methylene Chloride

Concen: 0.25 ug/l

RT: 2.85 min Scan# 372

Delta R.T. -0.01 min

Lab File: VX001524.D

Acq: 08 May 2018 19:47

Tgt Ion: 84 Resp: 740

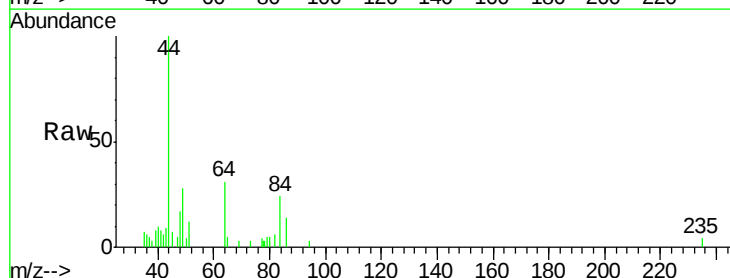
Ion Ratio Lower Upper

84 100

49 119.5 96.6 144.8

51 38.7 29.0 43.4

86 59.4 52.2 78.4

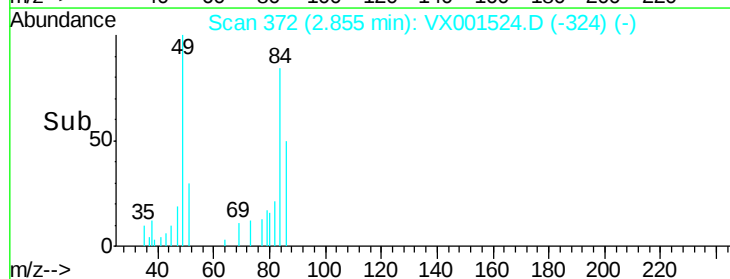
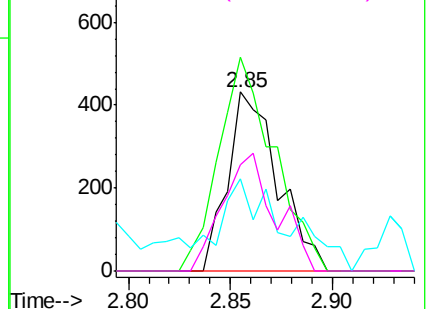


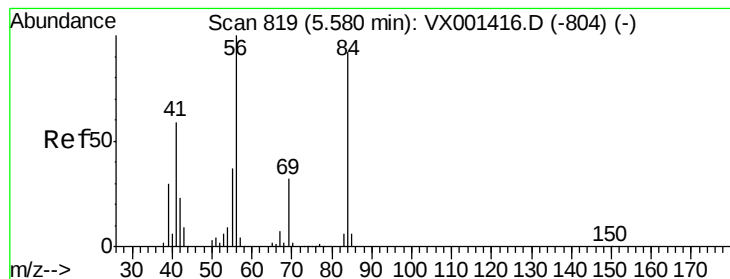
Abundance Ion 83.90 (83.60 to 84.60): VX0

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





#31

Cyclohexane

Concen: 0.93 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.09 min

Lab File: VX001524.D

Acq: 08 May 2018 19:47

Instrument :

MSVOA\_X

ClientSampleId :

BP-DUP06-20180501

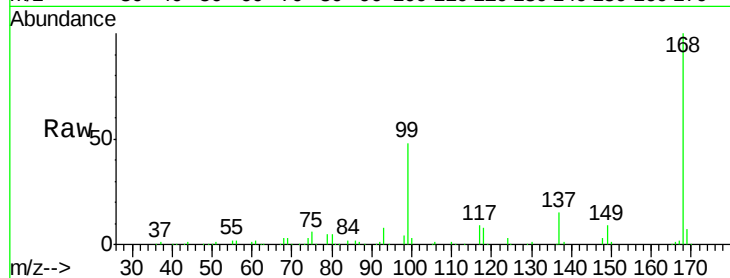
Tgt Ion: 56 Resp: 3967

Ion Ratio Lower Upper

56 100

69 148.4 25.4 38.0#

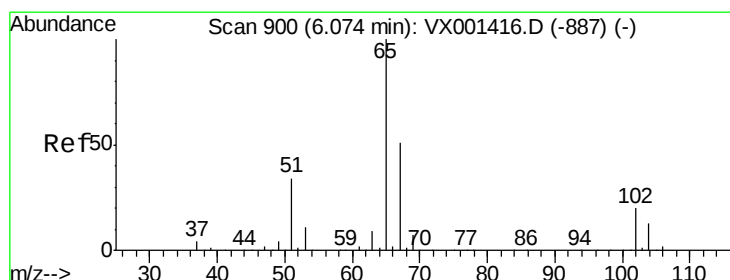
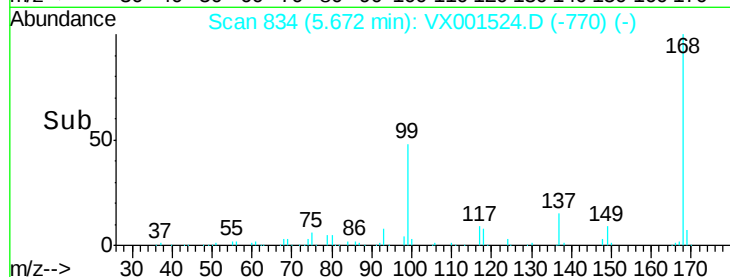
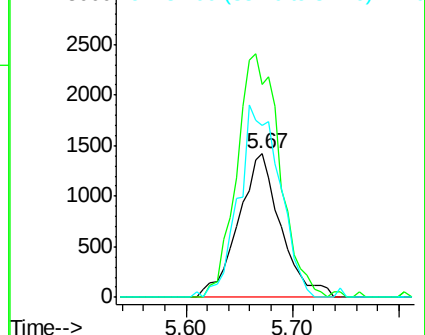
84 120.3 73.8 110.8#



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: 58.60 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.00 min

Lab File: VX001524.D

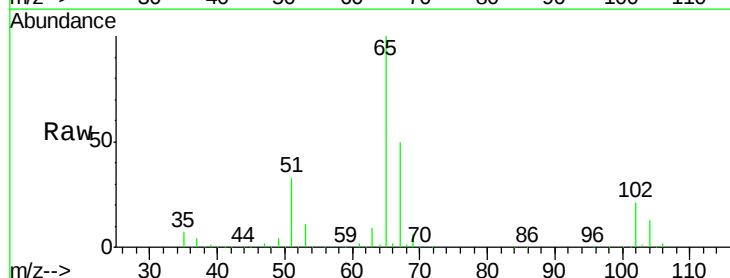
Acq: 08 May 2018 19:47

Tgt Ion: 65 Resp: 193840

Ion Ratio Lower Upper

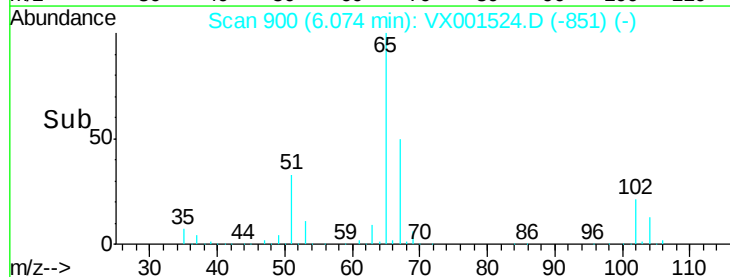
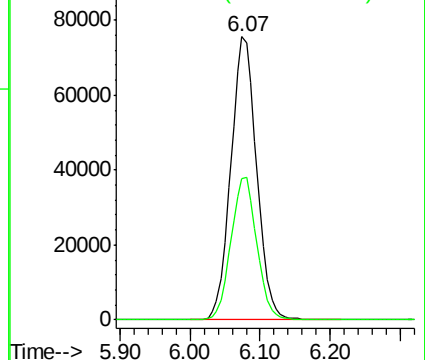
65 100

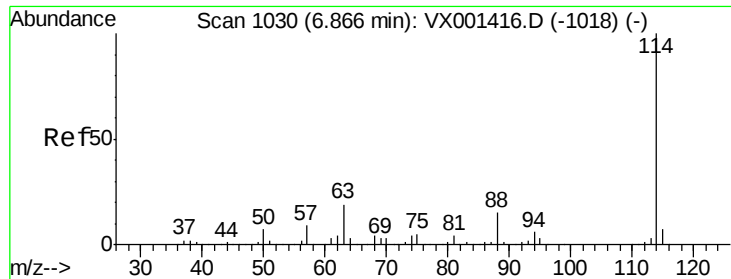
67 50.3 0.0 101.8



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

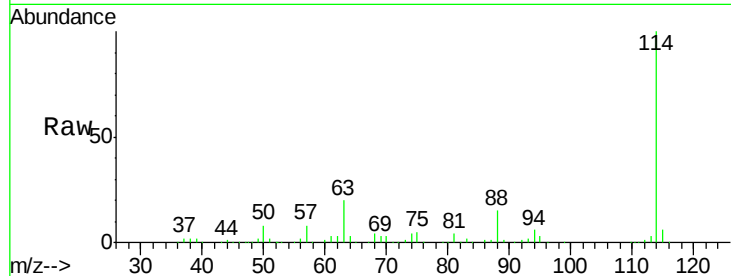




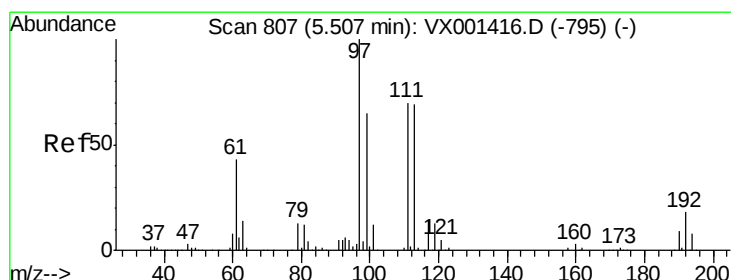
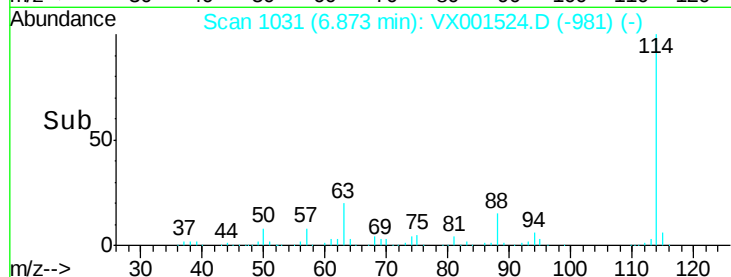
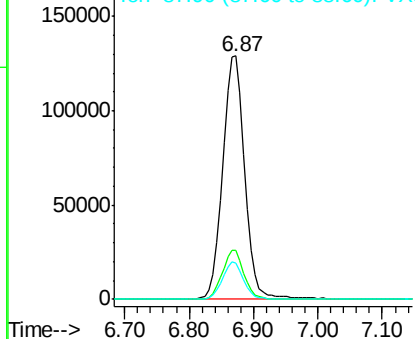
#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1031  
 Delta R.T. 0.01 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-DUP06-20180501

Tgt Ion:114 Resp: 313125  
 Ion Ratio Lower Upper  
 114 100  
 63 20.1 0.0 38.6  
 88 14.7 0.0 30.8

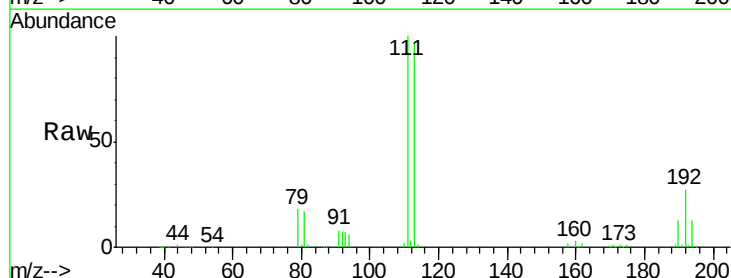


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX  
 Ion 87.90 (87.60 to 88.60): VX

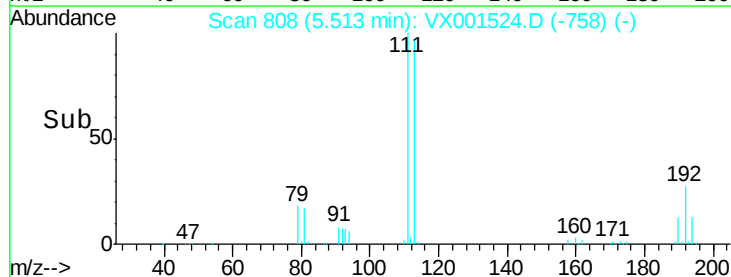
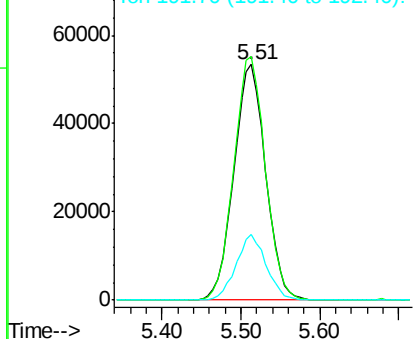


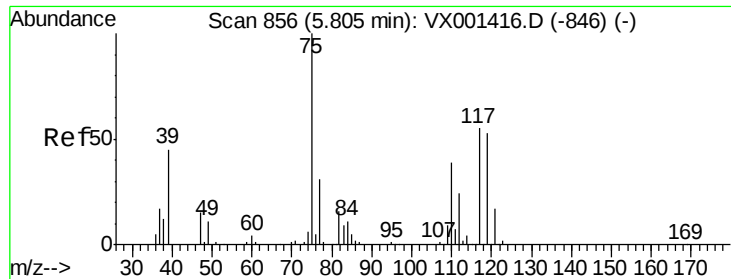
#35  
 Dibromofluoromethane  
 Concen: 53.75 ug/l  
 RT: 5.51 min Scan# 808  
 Delta R.T. 0.01 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Tgt Ion:113 Resp: 149716  
 Ion Ratio Lower Upper  
 113 100  
 111 102.6 82.2 123.2  
 192 26.5 21.4 32.0



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

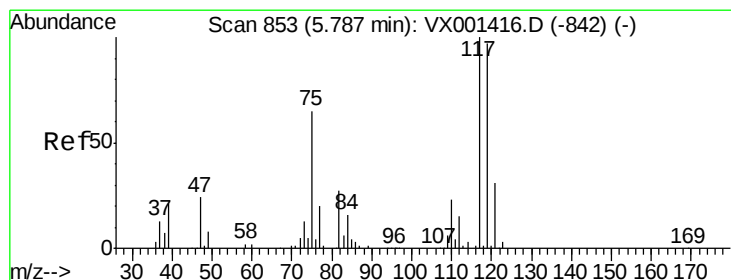
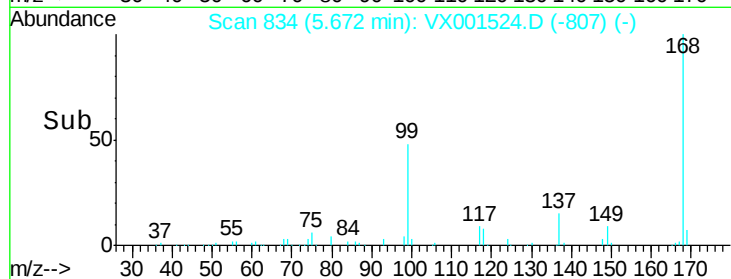
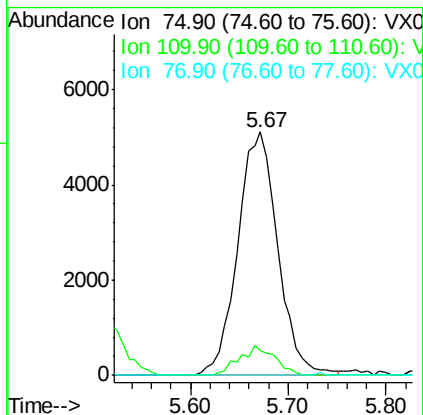
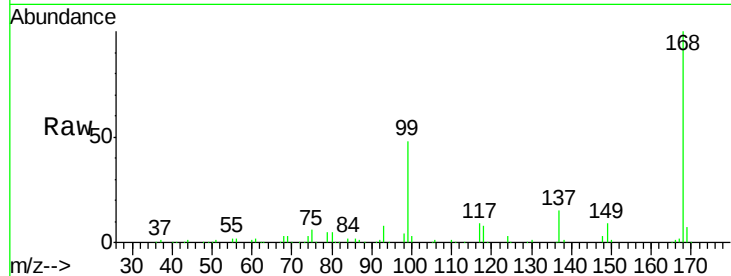




#36  
 1,1-Dichloropropene  
 Concen: 3.65 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.13 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

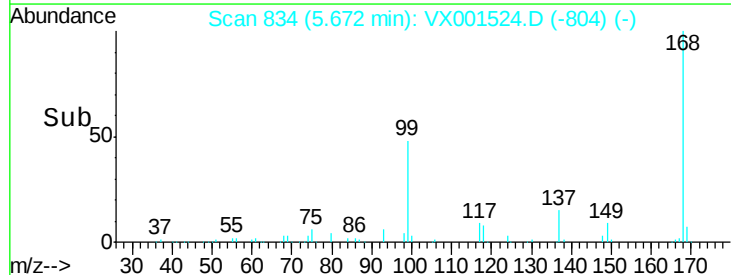
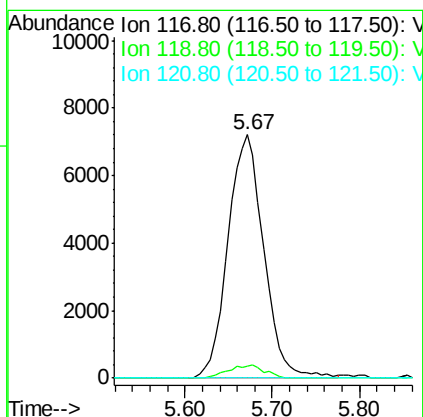
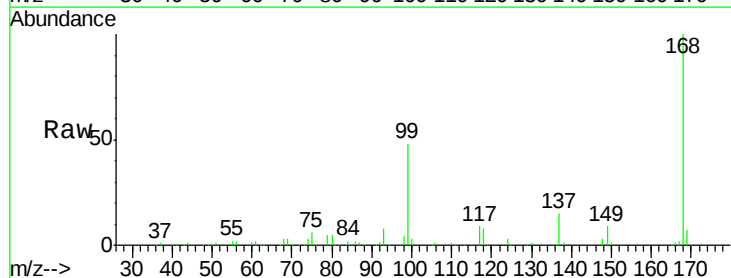
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-DUP06-20180501

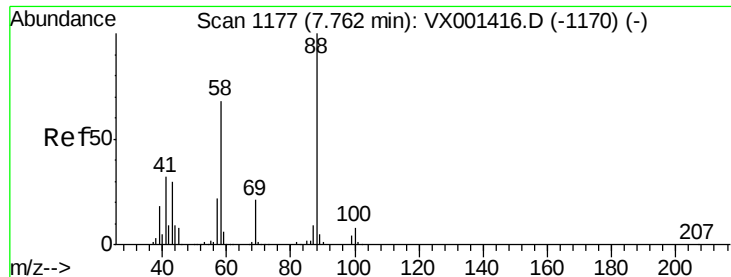
Tgt Ion: 75 Resp: 14528  
 Ion Ratio Lower Upper  
 75 100  
 110 10.8 18.9 56.7#  
 77 0.0 24.9 37.3#



#38  
 Carbon Tetrachloride  
 Concen: 4.83 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.12 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Tgt Ion: 117 Resp: 20501  
 Ion Ratio Lower Upper  
 117 100  
 119 4.7 77.0 115.6#  
 121 0.0 25.1 37.7#





#49

1,4-Dioxane

Concen: 0.94 ug/l

RT: 7.77 min Scan# 1179

Delta R.T. 0.01 min

Lab File: VX001524.D

Acq: 08 May 2018 19:47

Instrument :

MSVOA\_X

ClientSampleId :

BP-DUP06-20180501

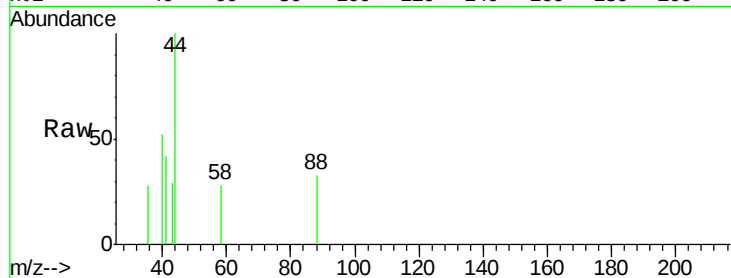
Tgt Ion: 88 Resp: 74

Ion Ratio Lower Upper

88 100

43 31.1 26.4 39.6

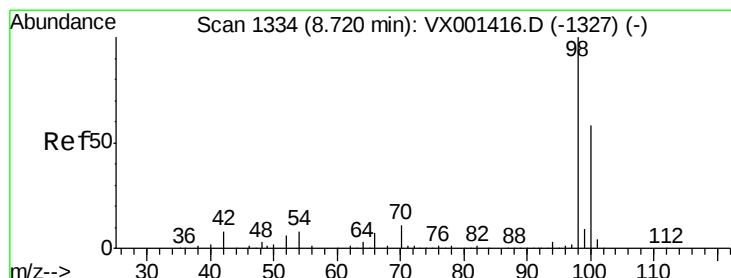
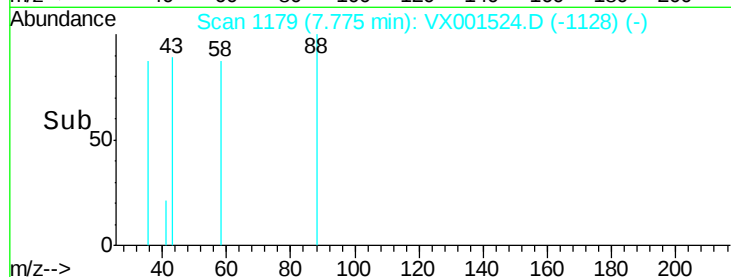
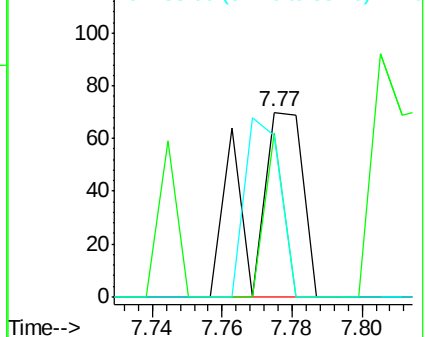
58 63.5 54.1 81.1



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: 52.08 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX001524.D

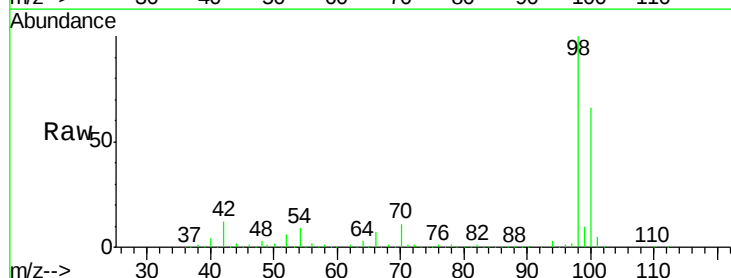
Acq: 08 May 2018 19:47

Tgt Ion: 98 Resp: 529426

Ion Ratio Lower Upper

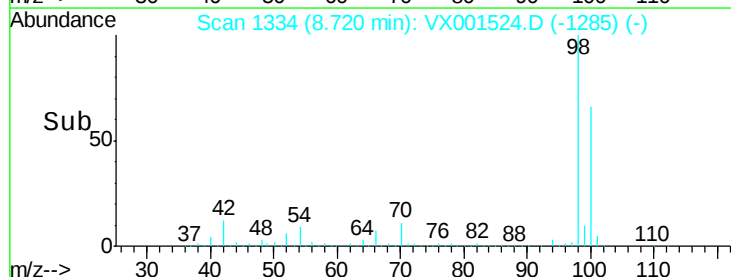
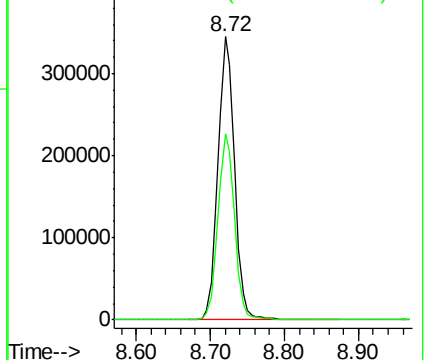
98 100

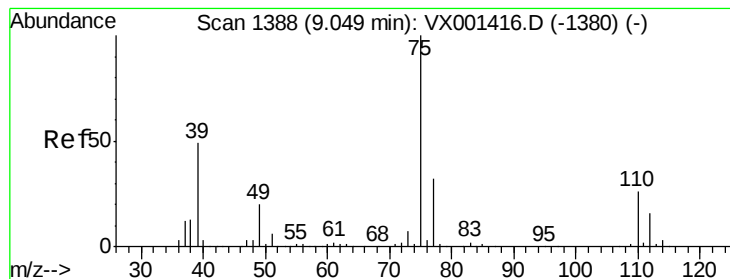
100 65.7 54.0 81.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0



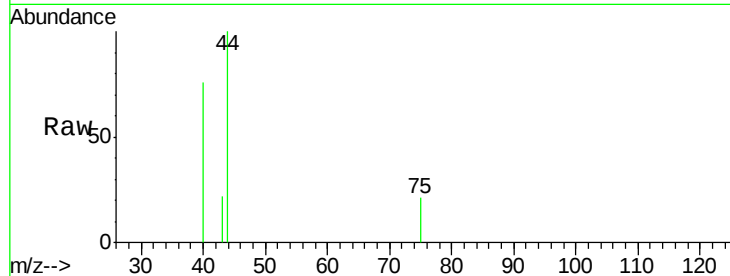


#54

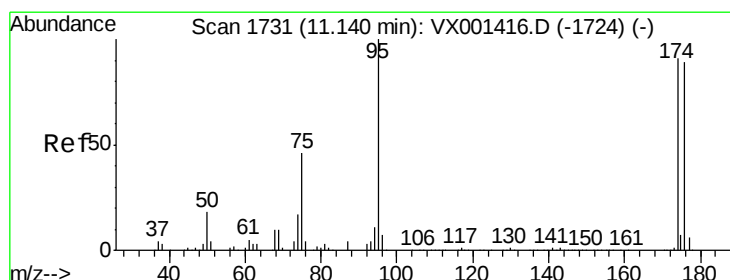
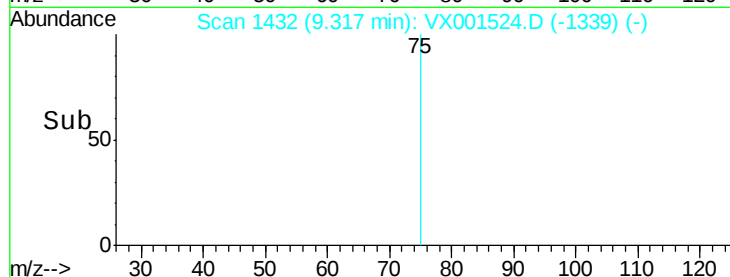
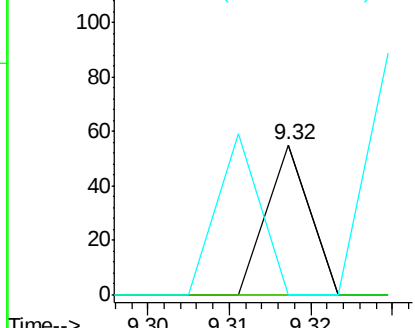
cis-1,3-Dichloropropene  
Concen: 2.27 ug/l  
RT: 9.32 min Scan# 1432  
Delta R.T. 0.27 min  
Lab File: VX001524.D  
Acq: 08 May 2018 19:47

Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-DUP06-20180501

Tgt Ion: 75 Resp: 20  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.5 38.3#  
39 0.0 38.9 58.3#



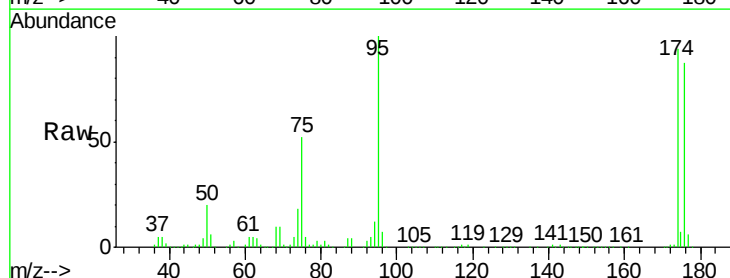
Abundance Ion 74.90 (74.60 to 75.60): VX0  
Ion 76.90 (76.60 to 77.60): VX0  
Ion 39.00 (38.70 to 39.70): VX0



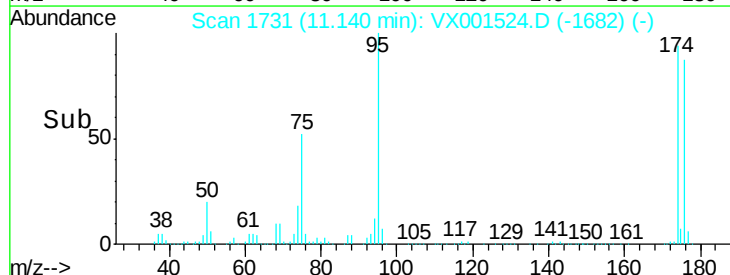
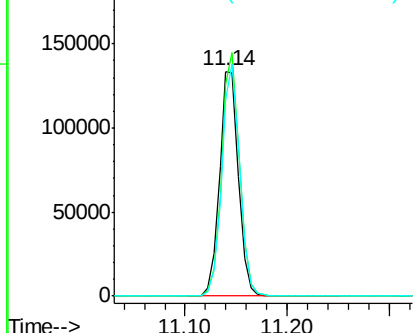
#62

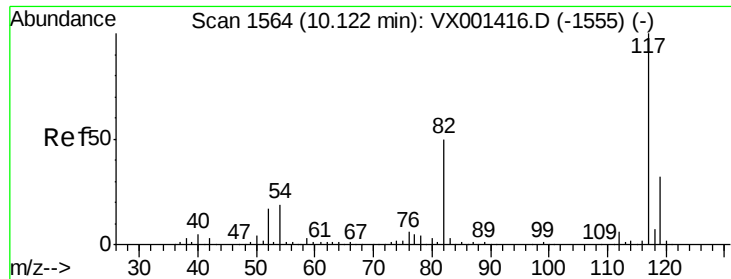
4-Bromofluorobenzene  
Concen: 44.64 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX001524.D  
Acq: 08 May 2018 19:47

Tgt Ion: 95 Resp: 174200  
Ion Ratio Lower Upper  
95 100  
174 101.5 0.0 202.0  
176 97.3 0.0 197.4



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

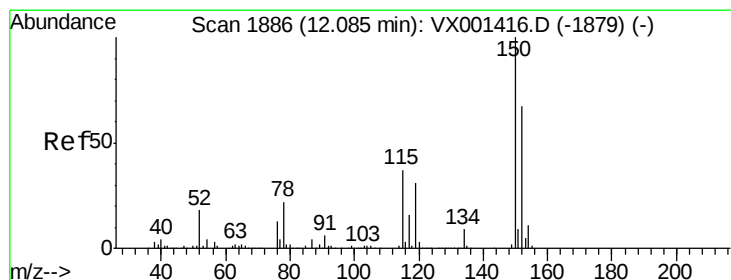
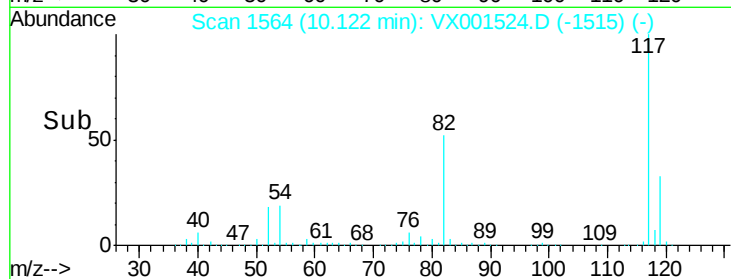
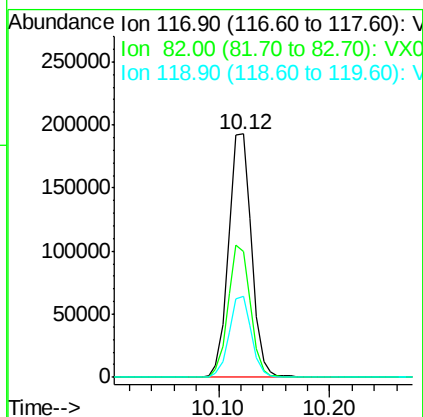
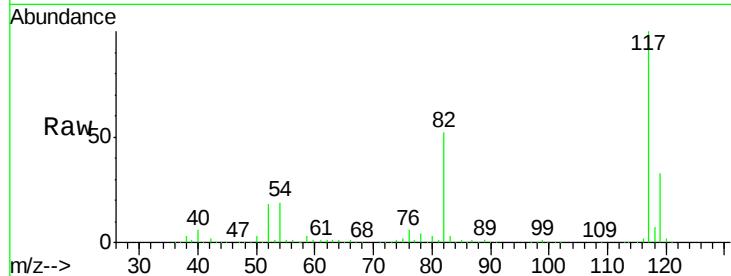




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1564  
Delta R.T. 0.00 min  
Lab File: VX001524.D  
Acq: 08 May 2018 19:47

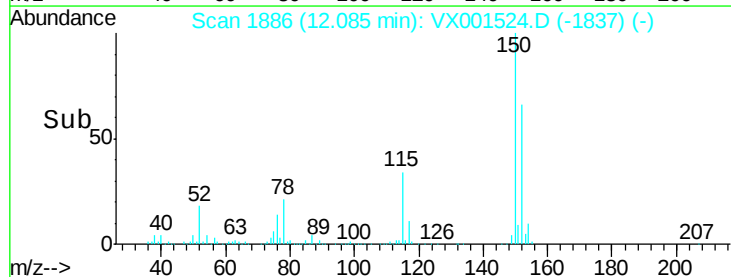
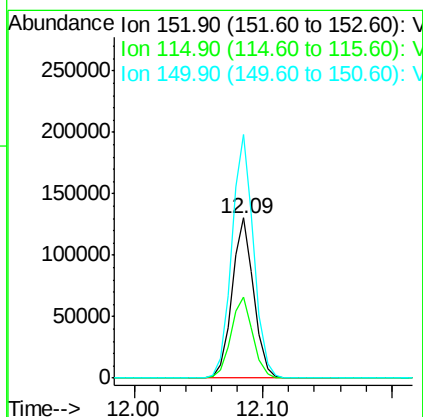
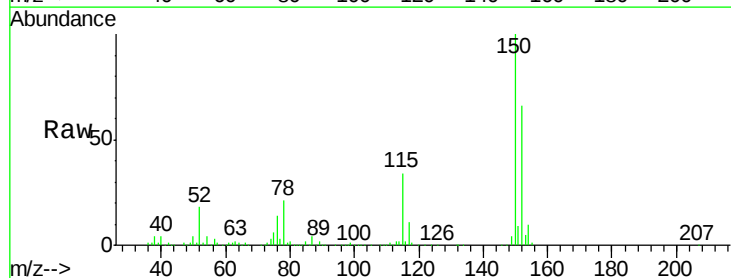
Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-DUP06-20180501

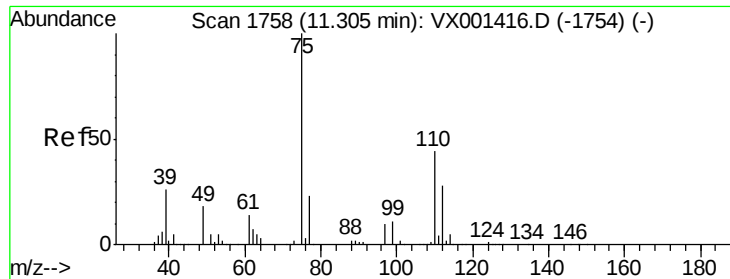
Tgt Ion:117 Resp: 275118  
Ion Ratio Lower Upper  
117 100  
82 51.6 40.0 60.0  
119 33.1 25.8 38.8



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.09 min Scan# 1886  
Delta R.T. 0.00 min  
Lab File: VX001524.D  
Acq: 08 May 2018 19:47

Tgt Ion:152 Resp: 152407  
Ion Ratio Lower Upper  
152 100  
115 51.4 37.7 113.1  
150 153.7 0.0 349.4

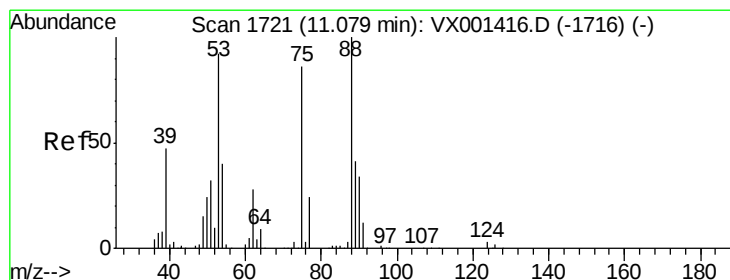
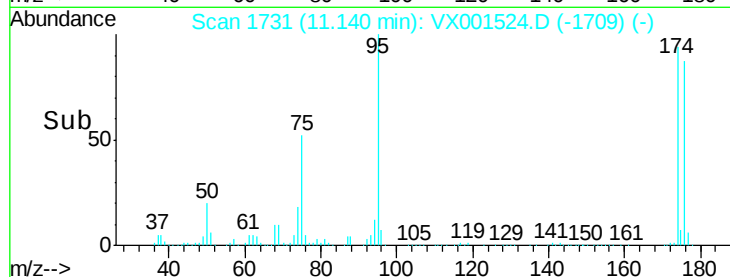
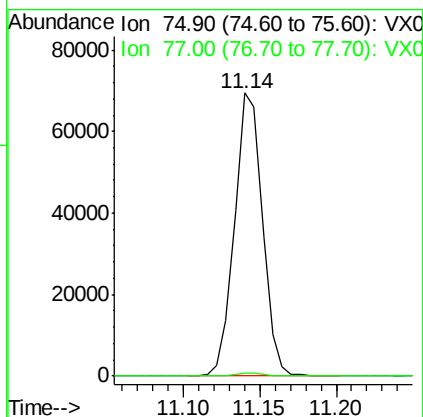
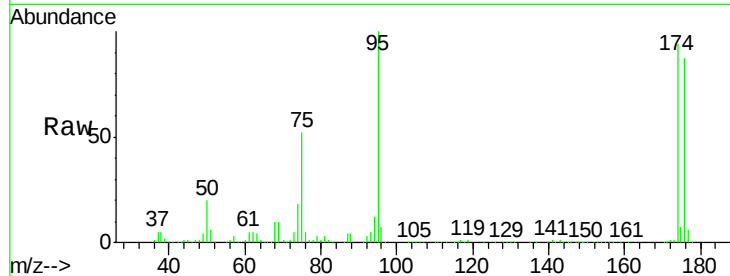




#76  
 1,2,3-Trichloropropane  
 Concen: 28.43 ug/l  
 RT: 11.14 min Scan# 1731  
 Delta R.T. -0.16 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-DUP06-20180501

Tgt Ion: 75 Resp: 87891  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 19.6 58.7#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 87.17 ug/l  
 RT: 11.14 min Scan# 1731  
 Delta R.T. 0.06 min  
 Lab File: VX001524.D  
 Acq: 08 May 2018 19:47

Tgt Ion: 75 Resp: 87891  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 84.5 126.7#  
 89 0.0 39.5 59.3#

