

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX033018\  
 Data File : VX000571.D  
 Acq On : 30 Mar 2018 20:05  
 Operator : JC/MD  
 Sample : J2131-04 5X  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 4540-2

Quant Time: Mar 31 05:03:09 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X032018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 21 04:52:42 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 144582   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 252292   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 255356   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 136547   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.08  | 65   | 102648   | 54.39 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.78% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 80289    | 50.51 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.02% |          |
| 50) Toluene-d8              | 8.73  | 98   | 328103   | 49.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.68%  |          |
| 62) 4-Bromofluorobenzene    | 11.15 | 95   | 118865   | 43.62 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.24%  |          |

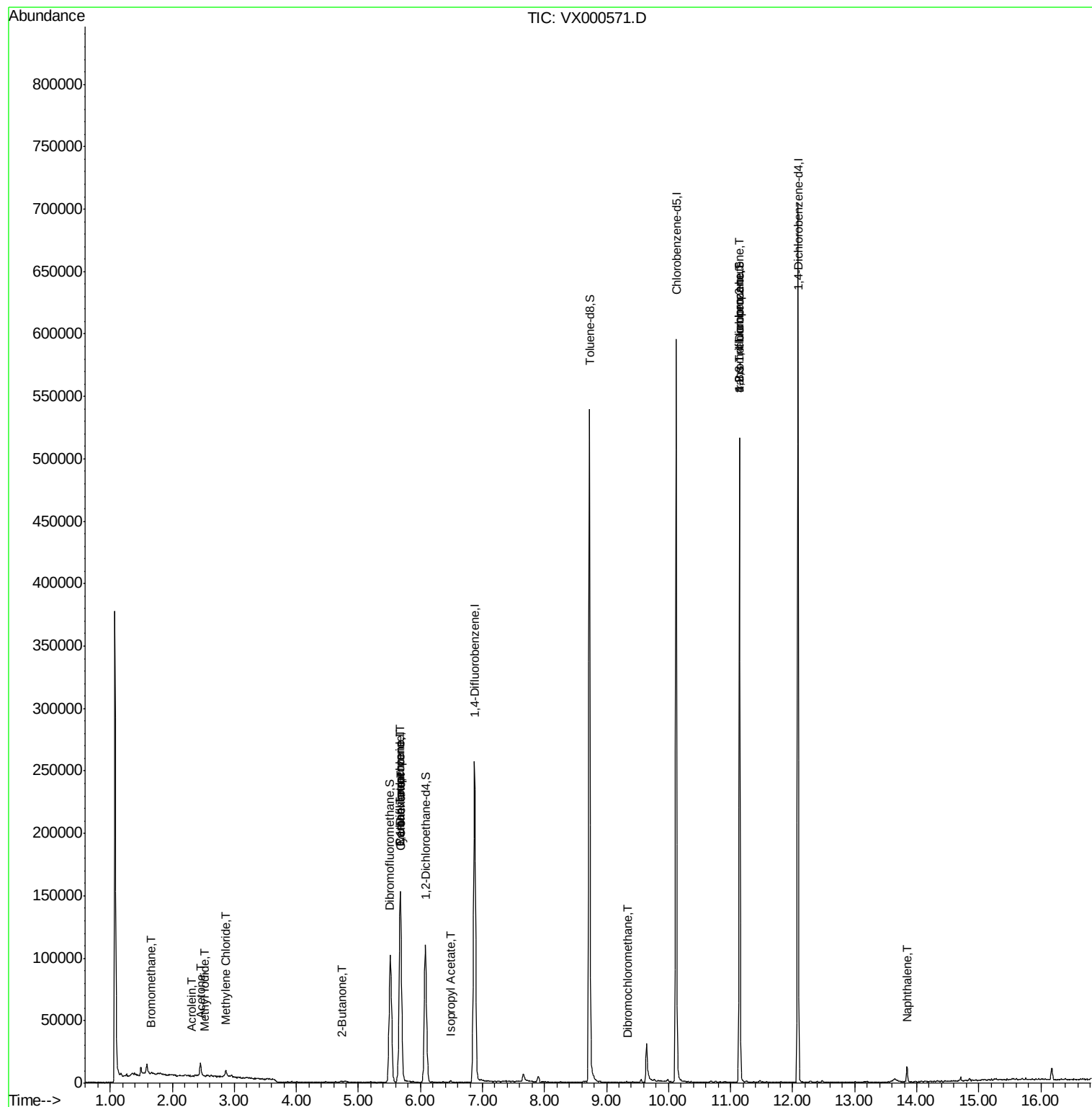
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 5) Bromomethane                | 1.65  | 94   | 337      | 0.20      | ug/l  | 92     |
| 6) Chloroethane                | 1.74  | 64   | 289      | Below Cal | #     | 48     |
| 10) Methyl Iodide              | 2.53  | 142  | 199      | 4.38      | ug/l  | # 47   |
| 13) Acrolein                   | 2.31  | 56   | 345      | 16.15     | ug/l  | # 62   |
| 14) Allyl chloride             | 2.73  | 41   | 161      | Below Cal | #     | 28     |
| 16) Acetone                    | 2.45  | 43   | 11351    | 7.23      | ug/l  | 93     |
| 20) Methylene Chloride         | 2.87  | 84   | 2142     | 1.18      | ug/l  | 93     |
| 25) 2-Butanone                 | 4.73  | 43   | 1717     | 0.97      | ug/l  | 94     |
| 31) Cyclohexane                | 5.68  | 56   | 3608     | 1.52      | ug/l  | # 41   |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 11584    | 4.90      | ug/l  | # 51   |
| 38) Carbon Tetrachloride       | 5.68  | 117  | 14635    | 5.90      | ug/l  | # 16   |
| 43) Isopropyl Acetate          | 6.49  | 43   | 1284     | 0.27      | ug/l  | # 89   |
| 60) Dibromochloromethane       | 9.34  | 129  | 22       | 4.13      | ug/l  | # 12   |
| 74) N-amyl acetate             | 6.49  | 43   | 1284     | Below Cal | #     | 90     |
| 76) 1,2,3-Trichloropropane     | 11.15 | 75   | 67218    | 22.91     | ug/l  | # 35   |
| 81) trans-1,4-Dichloro-2-buten | 11.15 | 75   | 67218    | 74.16     | ug/l  | # 9    |
| 95) Naphthalene                | 13.84 | 128  | 7481     | 0.67      | ug/l  | 99     |

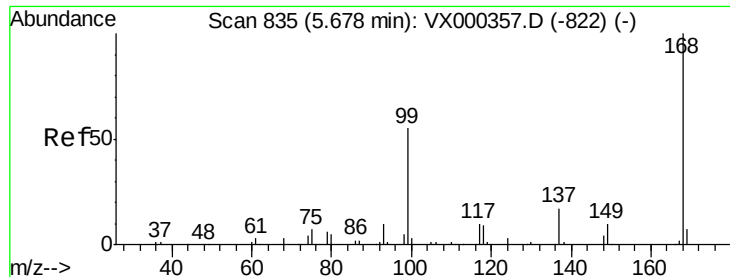
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Mar 31 05:03:09 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X032018W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 21 04:52:42 2018  
Response via : Initial Calibration

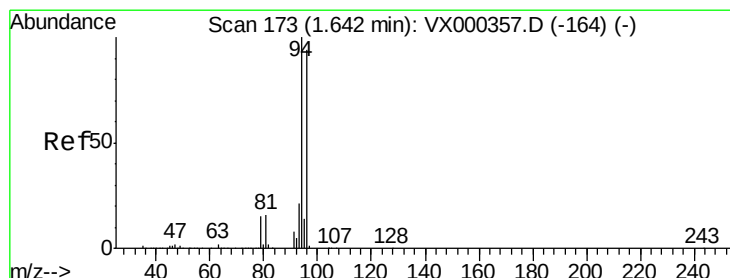
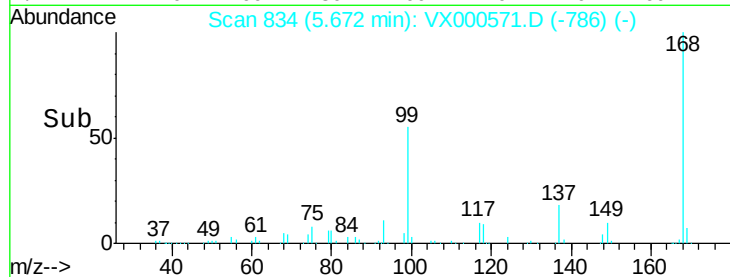
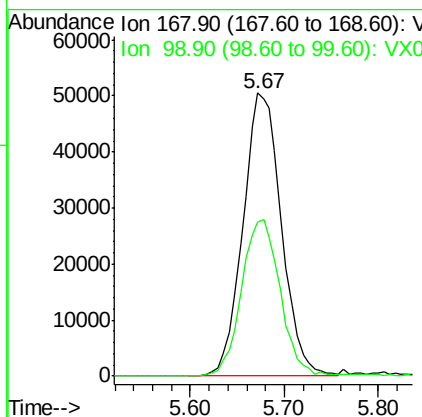
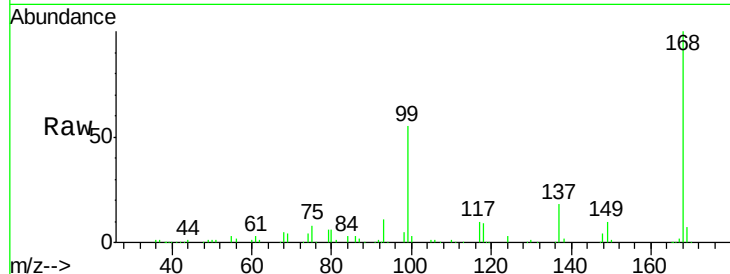




#1  
Pentafluorobenzene  
Concen: 50.00 ug/l  
RT: 5.67 min Scan# 834  
Delta R.T. -0.01 min  
Lab File: VX000571.D  
Acq: 30 Mar 2018 20:05

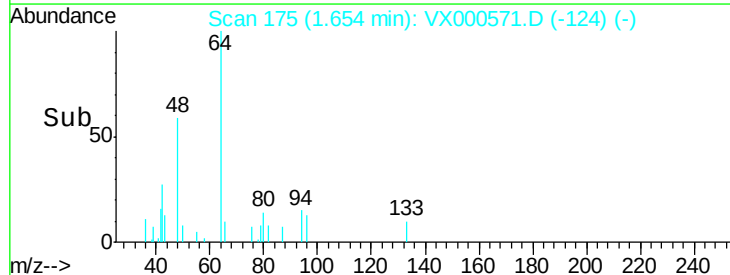
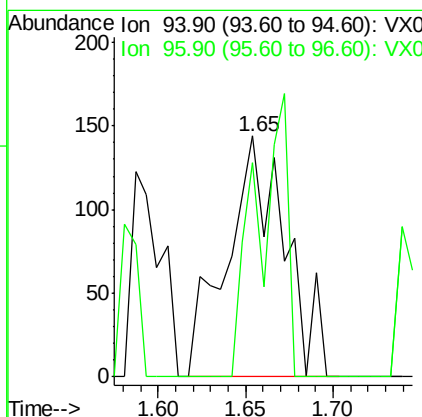
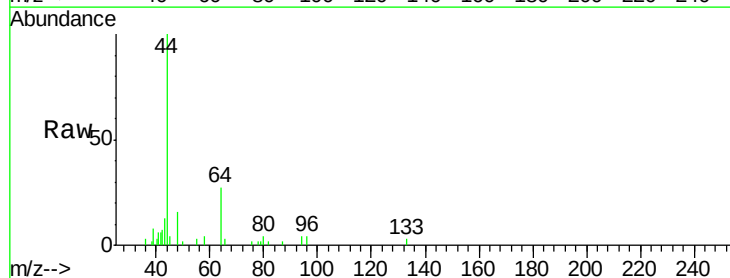
Instrument :  
MSVOA\_X  
ClientSampled :  
4540-2

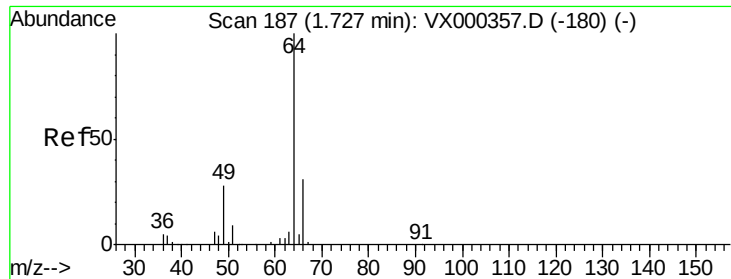
Tgt Ion: 168 Resp: 144582  
Ion Ratio Lower Upper  
168 100  
99 54.6 45.8 68.6



#5  
Bromomethane  
Concen: 0.20 ug/l  
RT: 1.65 min Scan# 175  
Delta R.T. 0.01 min  
Lab File: VX000571.D  
Acq: 30 Mar 2018 20:05

Tgt Ion: 94 Resp: 337  
Ion Ratio Lower Upper  
94 100  
96 88.9 77.7 116.5





#6

Chloroethane

Concen: Below Cal

RT: 1.74 min Scan# 189

Delta R.T. 0.01 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampled :

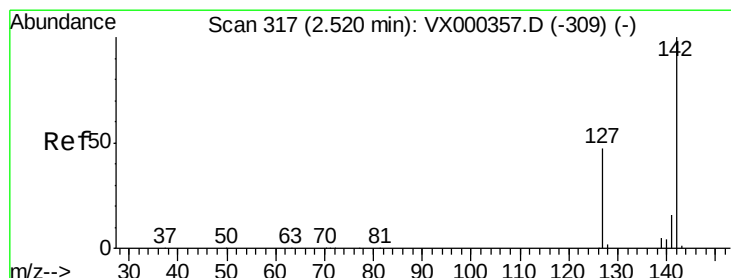
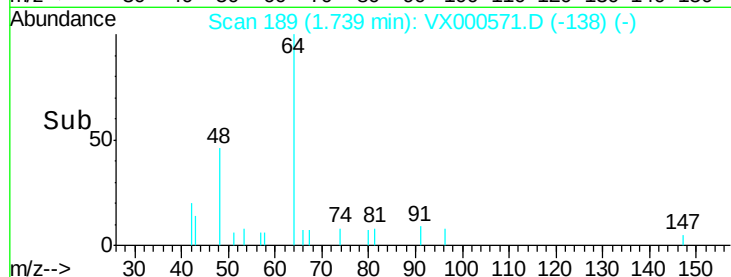
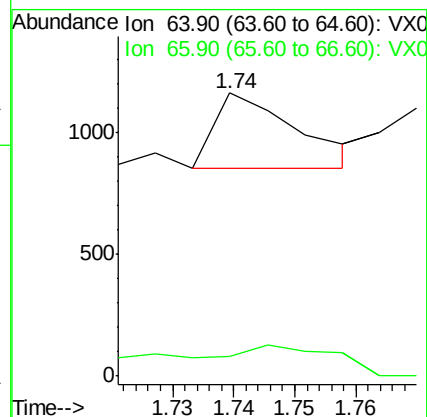
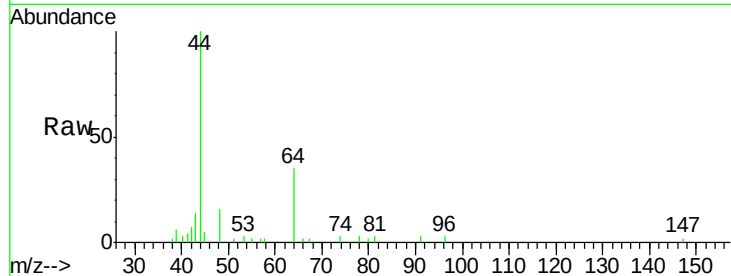
4540-2

Tgt Ion: 64 Resp: 289

Ion Ratio Lower Upper

64 100

66 2.3 24.8 37.2#



#10

Methyl Iodide

Concen: 4.38 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

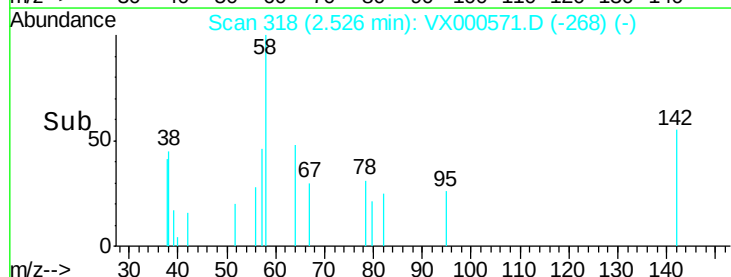
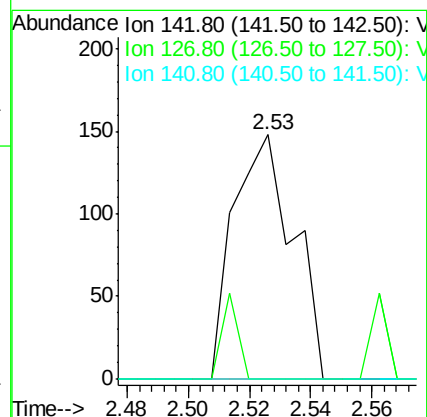
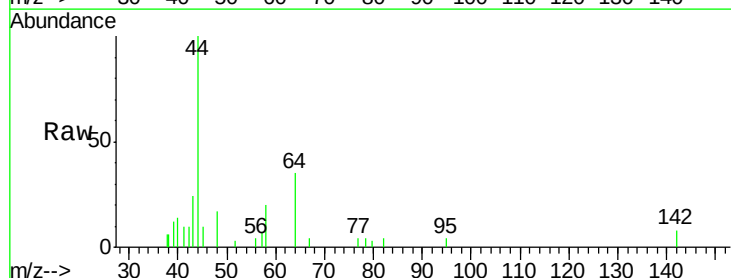
Tgt Ion: 142 Resp: 199

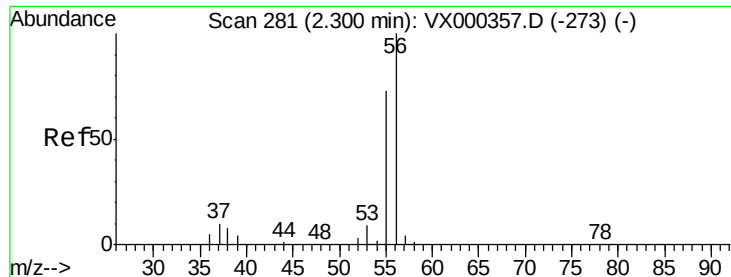
Ion Ratio Lower Upper

142 100

127 9.5 39.2 58.8#

141 0.0 11.7 17.5#





#13

Acrolein

Concen: 16.15 ug/l

RT: 2.31 min Scan# 282

Delta R.T. 0.01 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampled :

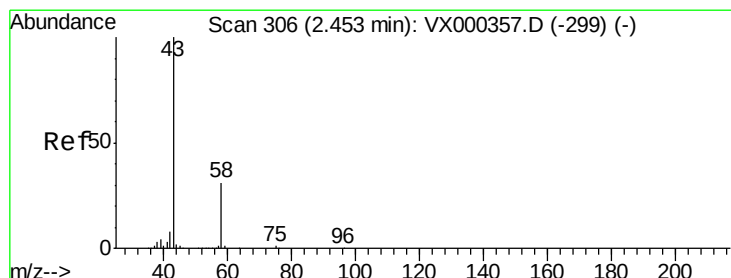
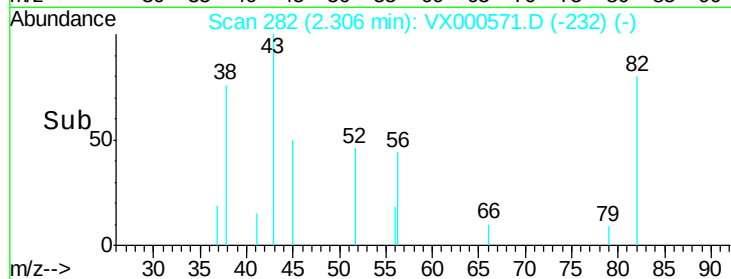
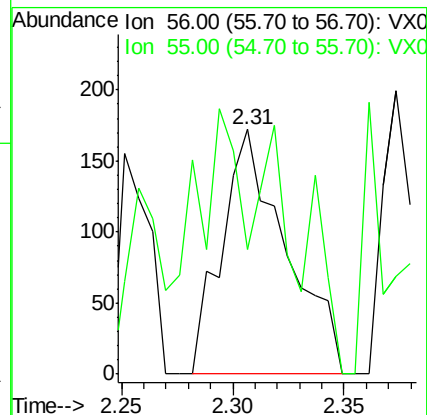
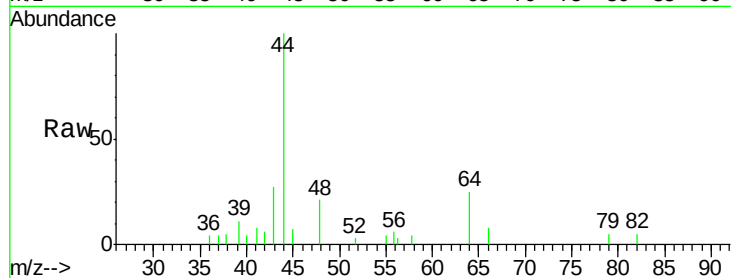
4540-2

Tgt Ion: 56 Resp: 345

Ion Ratio Lower Upper

56 100

55 41.2 58.8 88.2#



#16

Acetone

Concen: 7.23 ug/l

RT: 2.45 min Scan# 306

Delta R.T. -0.00 min

Lab File: VX000571.D

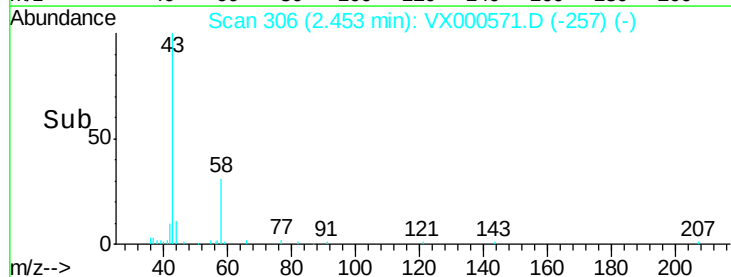
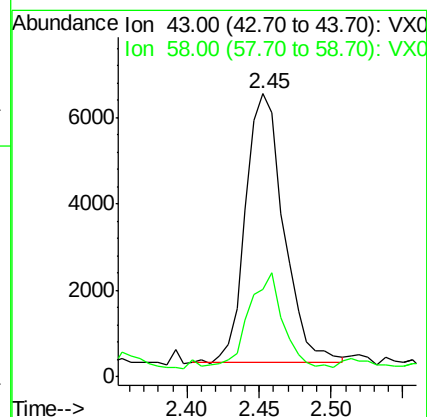
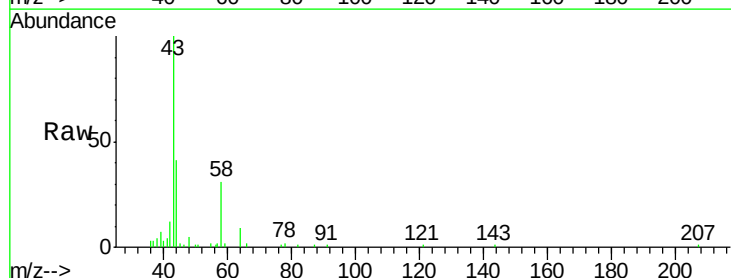
Acq: 30 Mar 2018 20:05

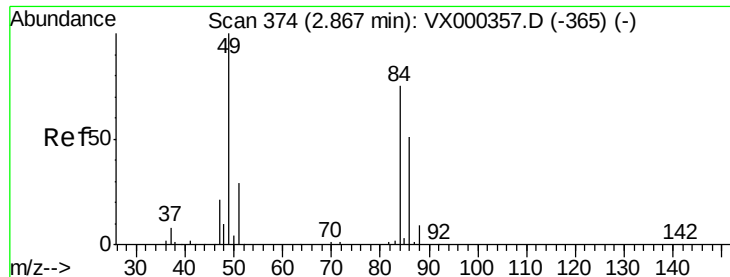
Tgt Ion: 43 Resp: 11351

Ion Ratio Lower Upper

43 100

58 26.8 24.7 37.1





#20

Methylene Chloride

Concen: 1.18 ug/l

RT: 2.87 min Scan# 374

Delta R.T. -0.00 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampled :

4540-2

Tgt Ion: 84 Resp: 2142

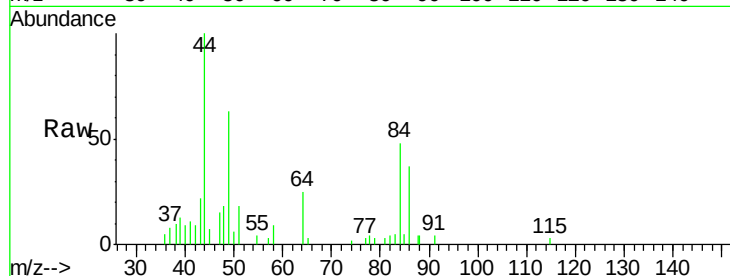
Ion Ratio Lower Upper

84 100

49 130.9 100.6 151.0

51 37.5 31.6 47.4

86 77.4 52.6 78.8

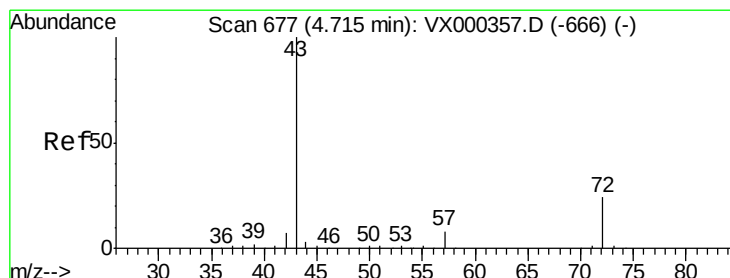
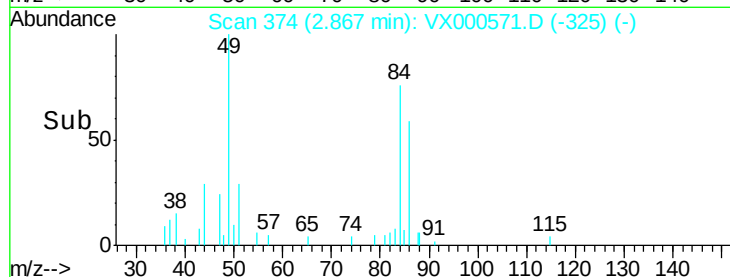
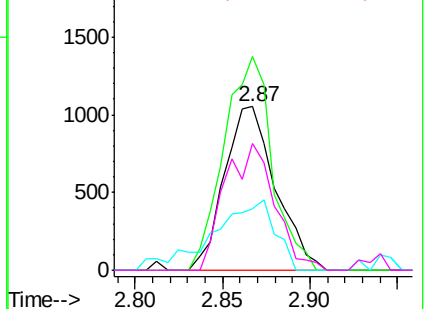


Abundance Ion 83.90 (83.60 to 84.60): VX0

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: 0.97 ug/l

RT: 4.73 min Scan# 680

Delta R.T. 0.02 min

Lab File: VX000571.D

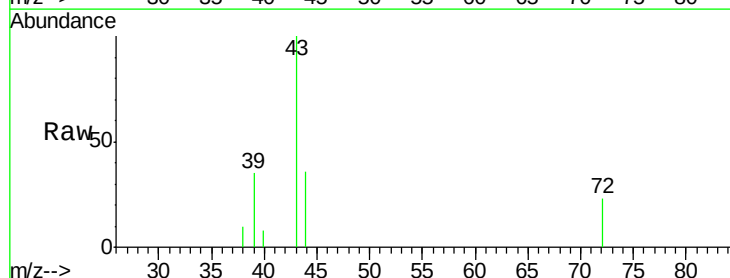
Acq: 30 Mar 2018 20:05

Tgt Ion: 43 Resp: 1717

Ion Ratio Lower Upper

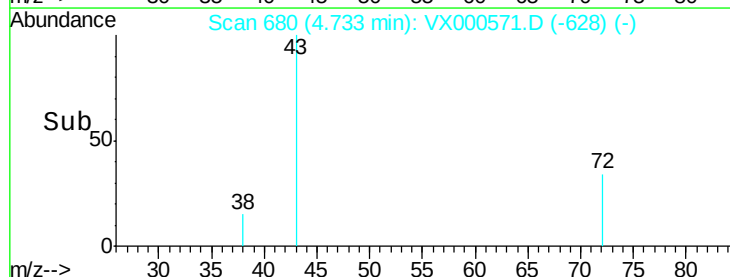
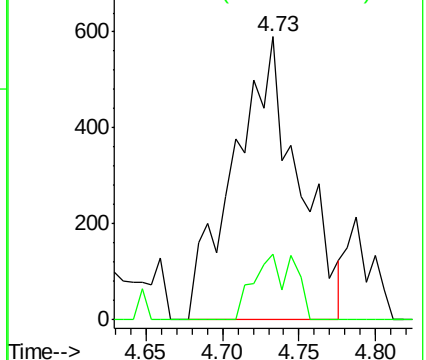
43 100

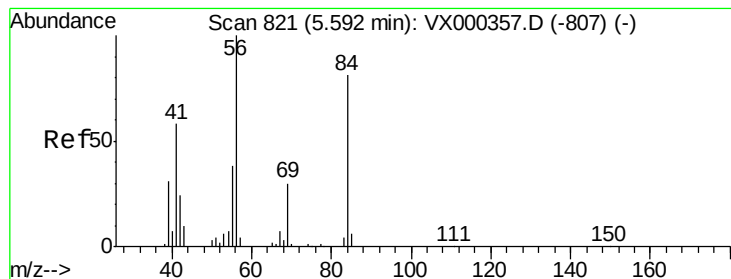
72 23.2 21.0 31.6



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0





#31

Cyclohexane

Concen: 1.52 ug/l

RT: 5.68 min Scan# 836

Delta R.T. 0.09 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampled :

4540-2

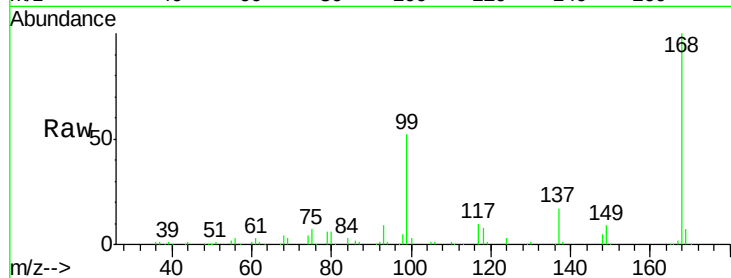
Tgt Ion: 56 Resp: 3608

Ion Ratio Lower Upper

56 100

69 110.9 23.4 35.0#

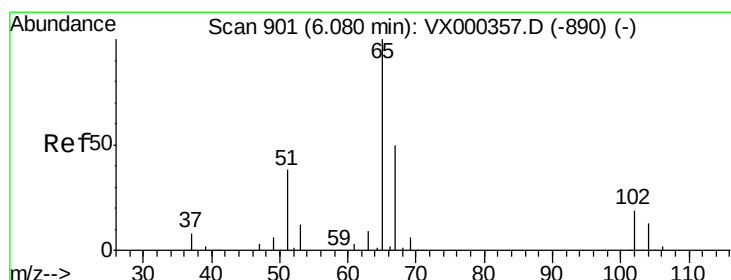
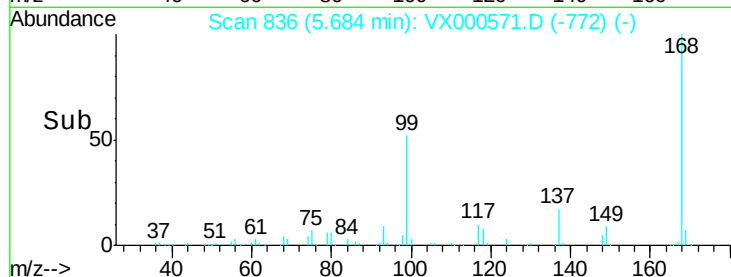
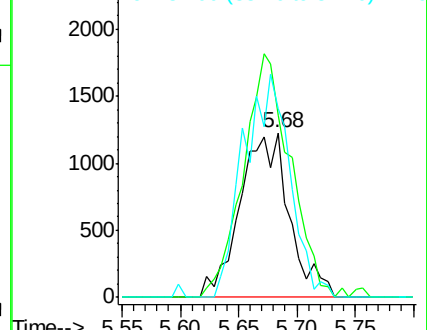
84 114.5 71.0 106.4#



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: 54.39 ug/l

RT: 6.08 min Scan# 901

Delta R.T. 0.00 min

Lab File: VX000571.D

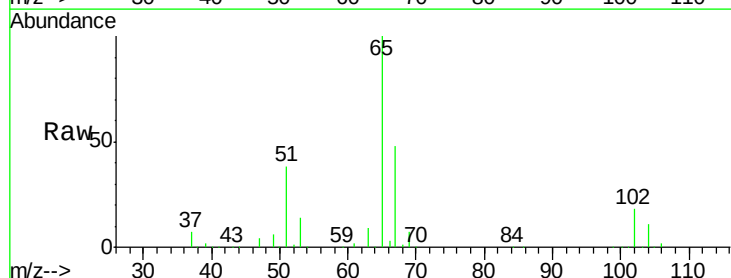
Acq: 30 Mar 2018 20:05

Tgt Ion: 65 Resp: 102648

Ion Ratio Lower Upper

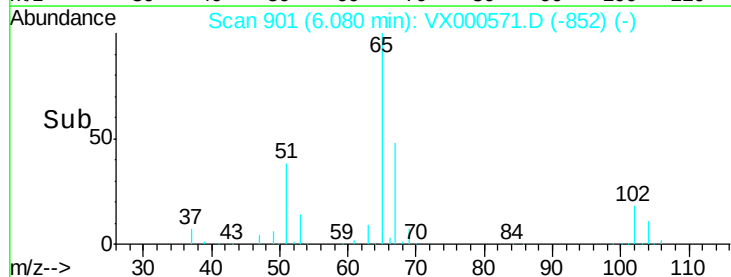
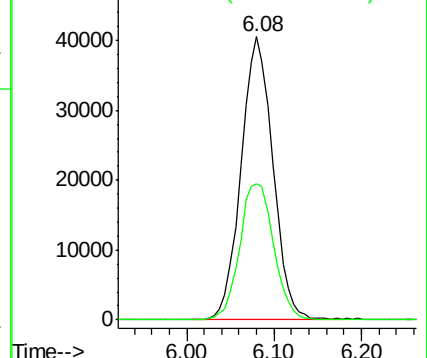
65 100

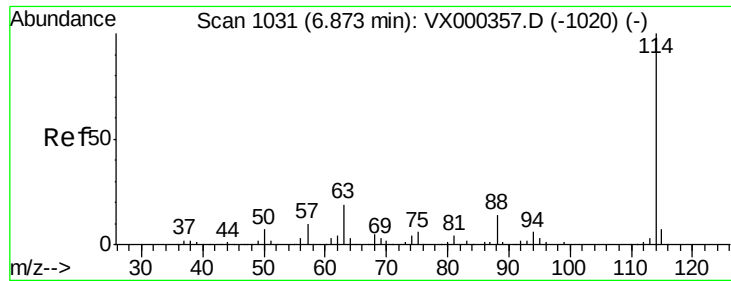
67 51.4 0.0 103.2



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.87 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampleID :

4540-2

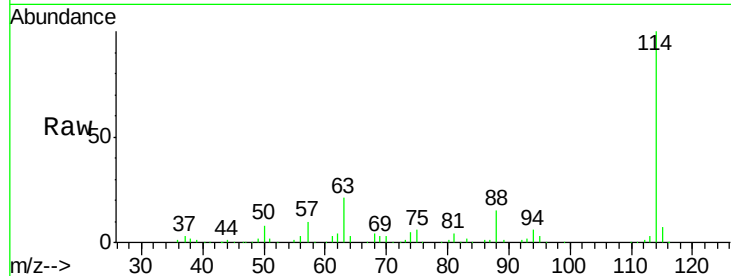
Tgt Ion:114 Resp: 252292

Ion Ratio Lower Upper

114 100

63 20.6 0.0 38.4

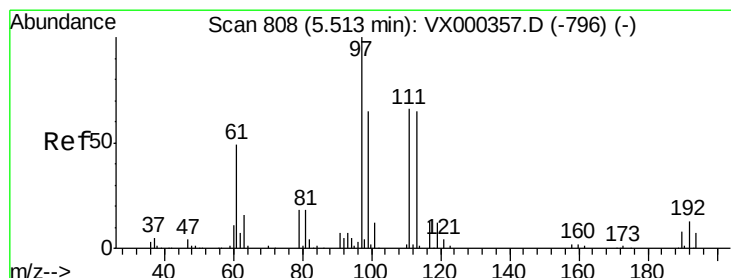
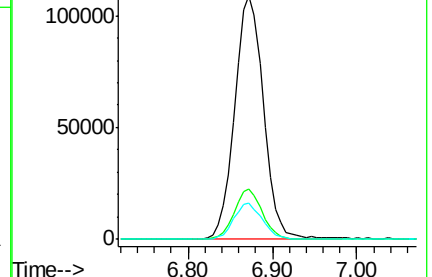
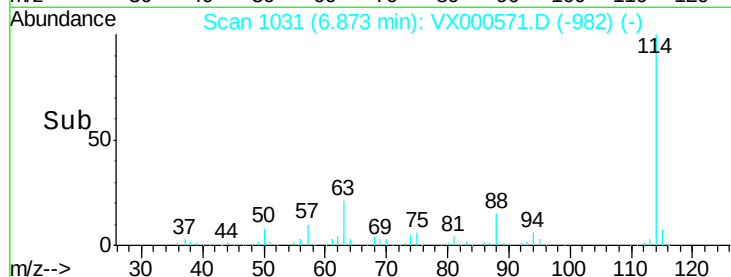
88 14.9 0.0 27.0



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: 50.51 ug/l

RT: 5.51 min Scan# 808

Delta R.T. -0.00 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

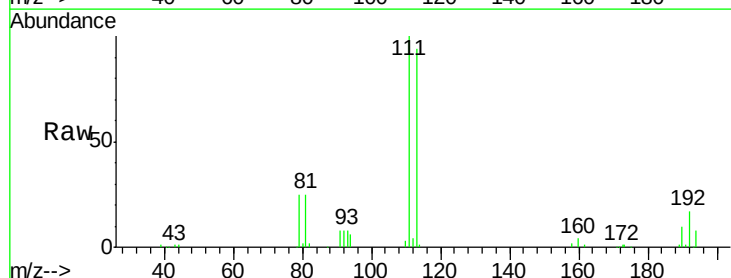
Tgt Ion:113 Resp: 80289

Ion Ratio Lower Upper

113 100

111 101.6 82.4 123.6

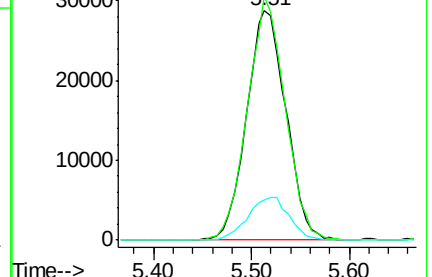
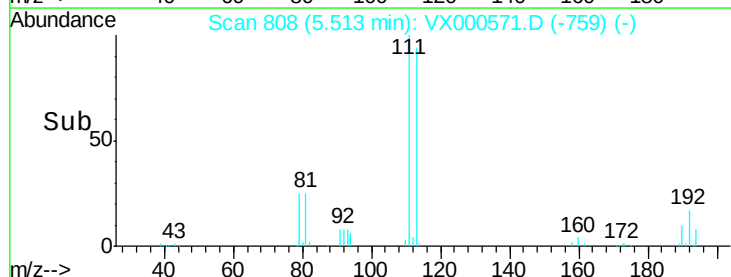
192 19.4 15.8 23.6



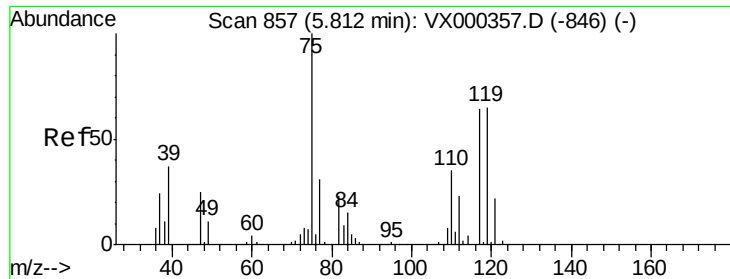
Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V







#36

1,1-Dichloropropene

Concen: 4.90 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.14 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampled :

4540-2

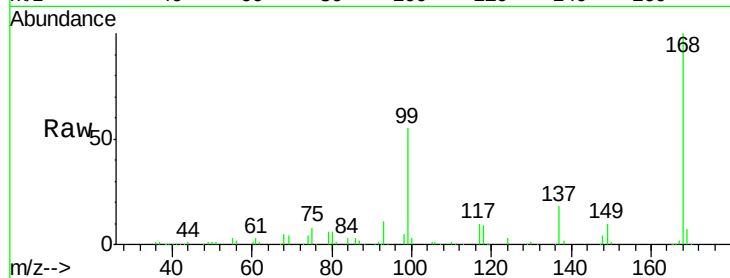
Tgt Ion: 75 Resp: 11584

Ion Ratio Lower Upper

75 100

110 10.3 17.9 53.7#

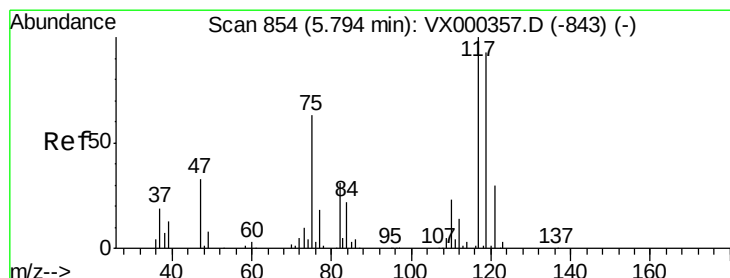
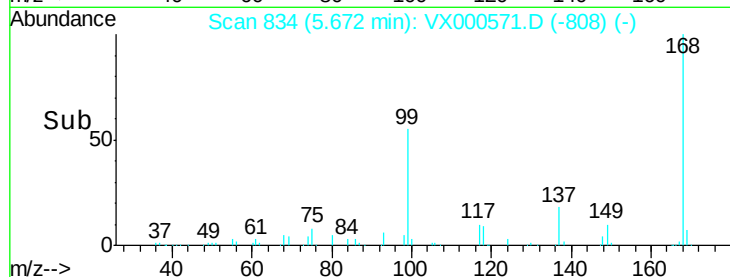
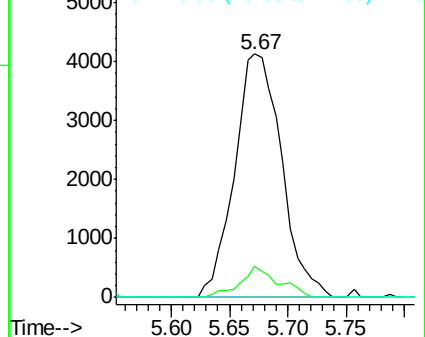
77 0.0 24.0 36.0#



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: 5.90 ug/l

RT: 5.68 min Scan# 835

Delta R.T. -0.12 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

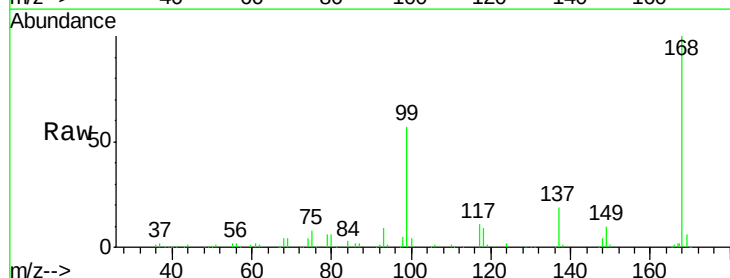
Tgt Ion: 117 Resp: 14635

Ion Ratio Lower Upper

117 100

119 5.0 77.4 116.2#

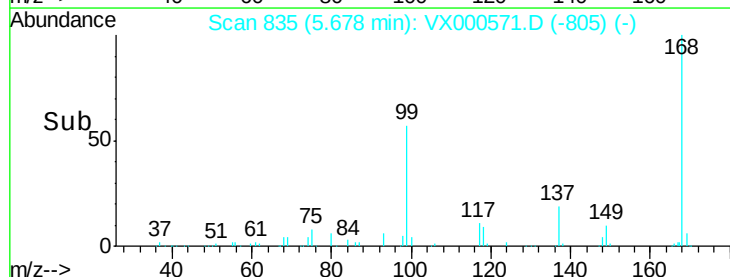
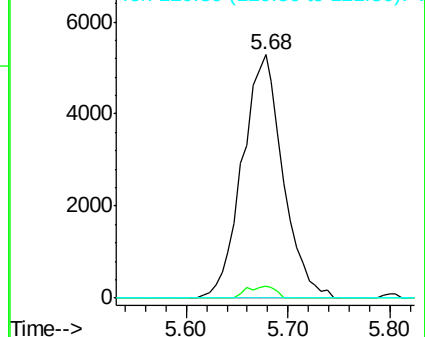
121 0.0 24.8 37.2#

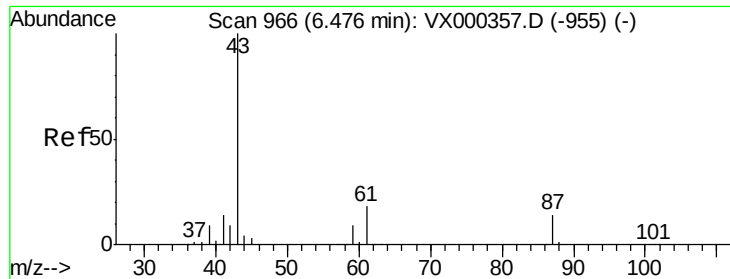


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#43

Isopropyl Acetate

Concen: 0.27 ug/l

RT: 6.49 min Scan# 968

Delta R.T. 0.01 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampleId :

4540-2

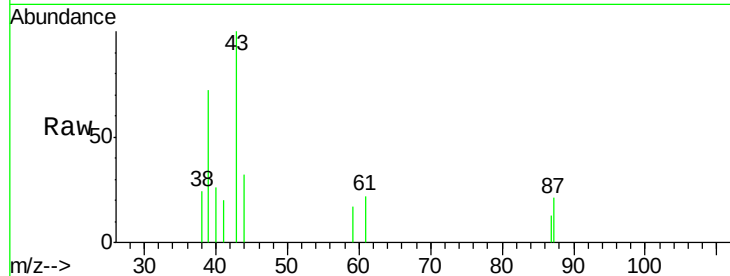
Tgt Ion: 43 Resp: 1284

Ion Ratio Lower Upper

43 100

61 13.5 14.4 21.6#

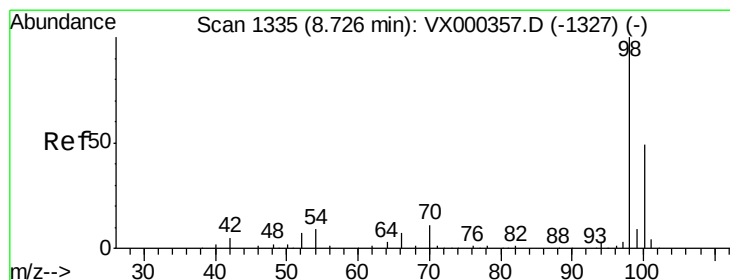
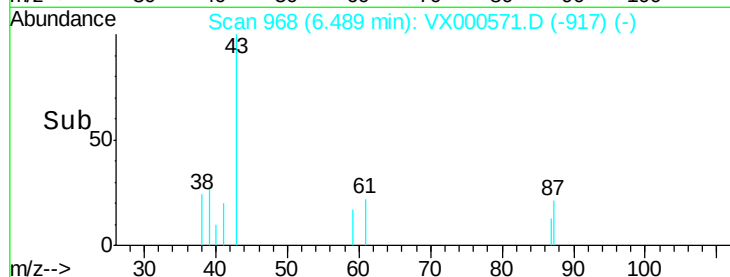
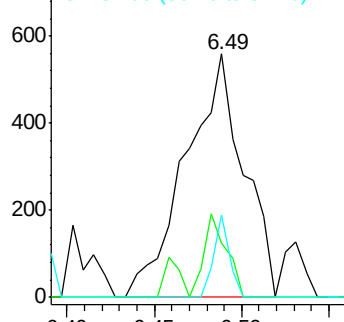
87 9.0 11.0 16.4#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#50

Toluene-d8

Concen: 49.84 ug/l

RT: 8.73 min Scan# 1335

Delta R.T. -0.00 min

Lab File: VX000571.D

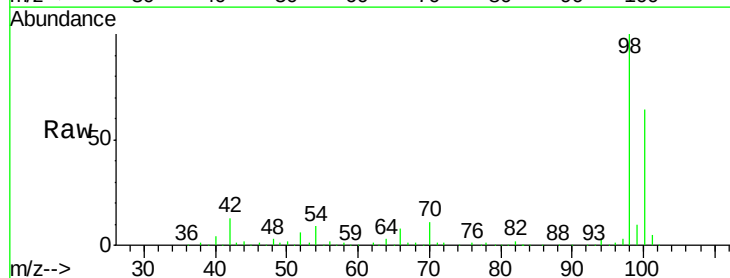
Acq: 30 Mar 2018 20:05

Tgt Ion: 98 Resp: 328103

Ion Ratio Lower Upper

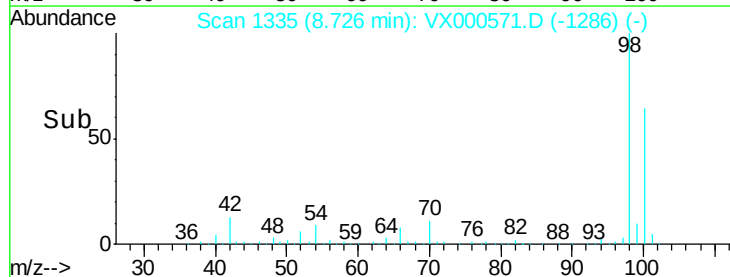
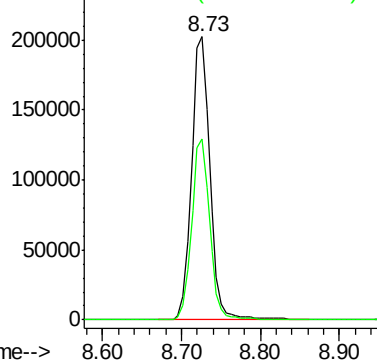
98 100

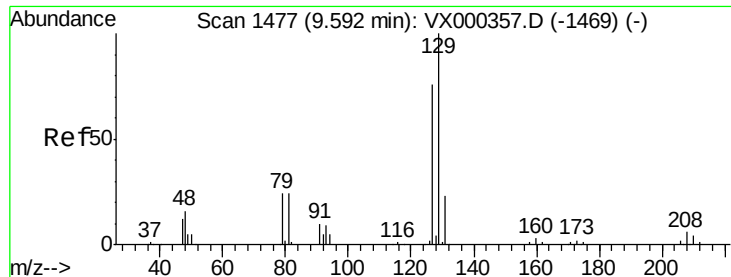
100 63.0 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0





#60

Dibromochloromethane

Concen: 4.13 ug/l

RT: 9.34 min Scan# 1436

Delta R.T. -0.25 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

Instrument :

MSVOA\_X

ClientSampleId :

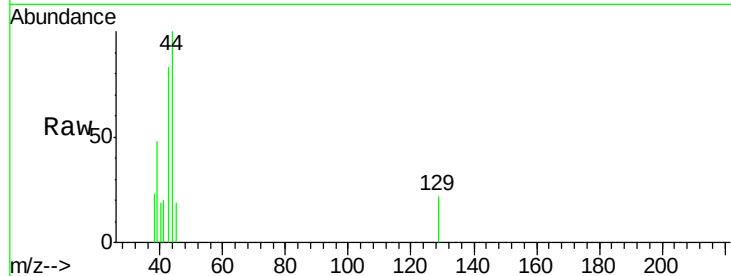
4540-2

Tgt Ion:129 Resp: 22

Ion Ratio Lower Upper

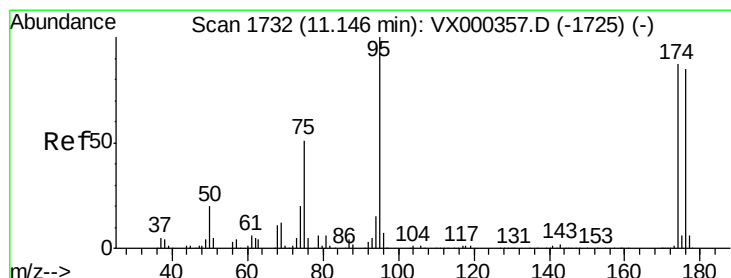
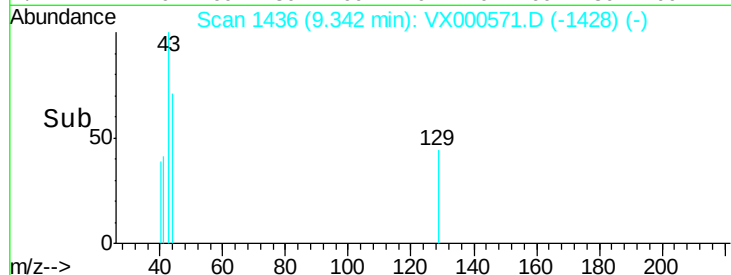
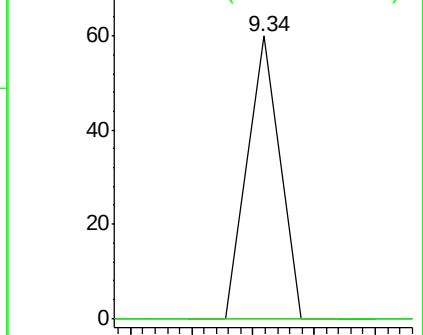
129 100

127 0.0 37.9 113.6#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 43.62 ug/l

RT: 11.15 min Scan# 1732

Delta R.T. 0.00 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

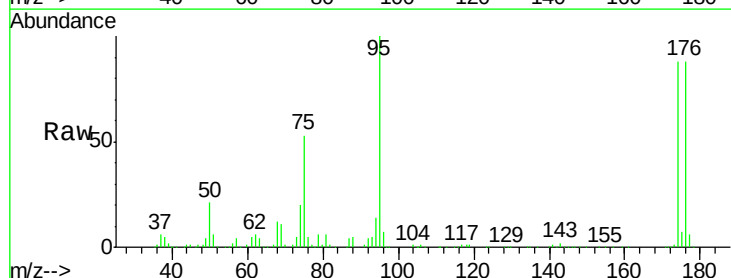
Tgt Ion: 95 Resp: 118865

Ion Ratio Lower Upper

95 100

174 87.4 0.0 173.6

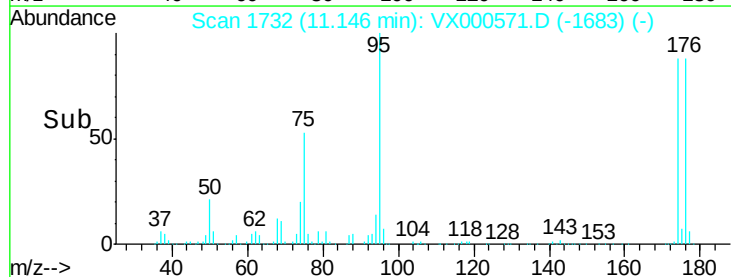
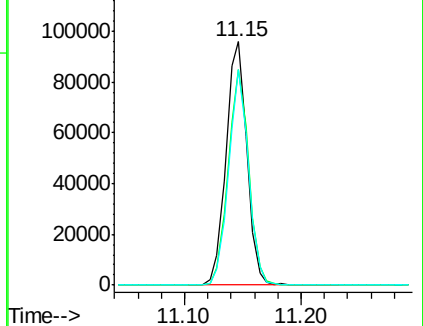
176 84.6 0.0 164.6

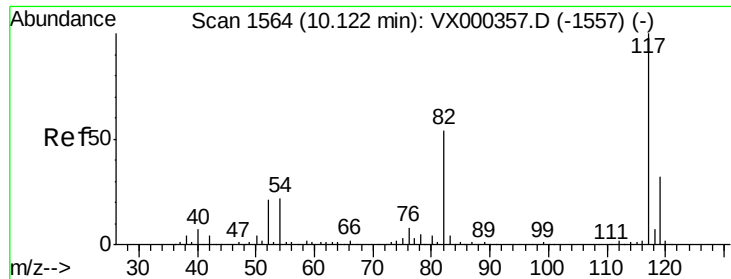


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

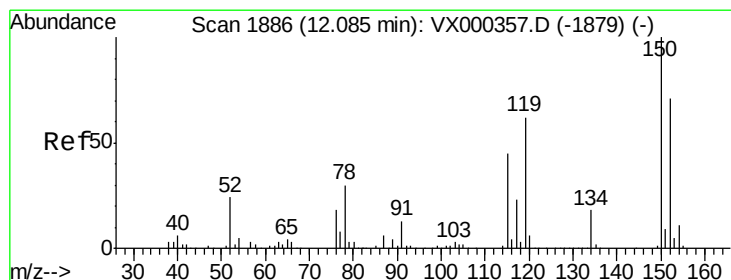
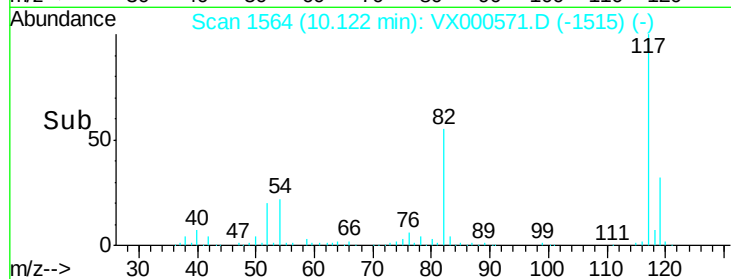
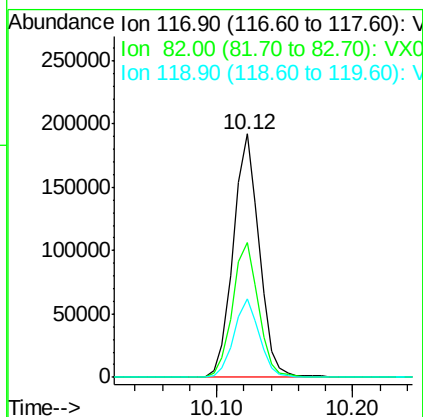
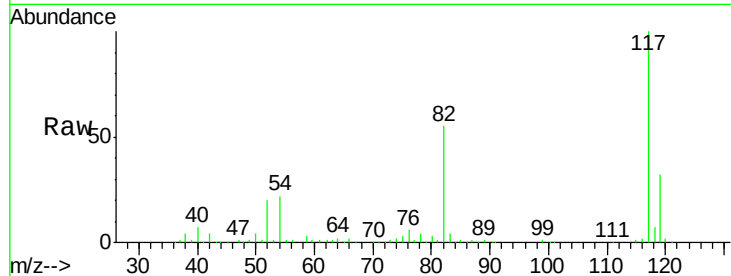




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1564  
Delta R.T. -0.00 min  
Lab File: VX000571.D  
Acq: 30 Mar 2018 20:05

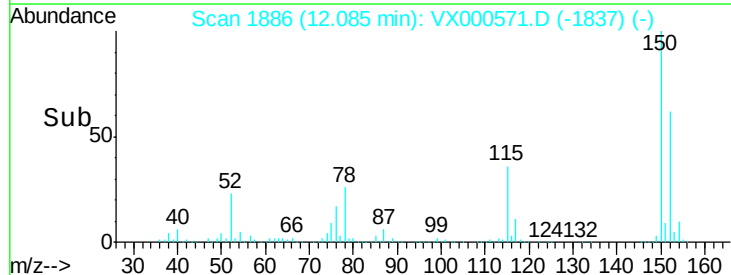
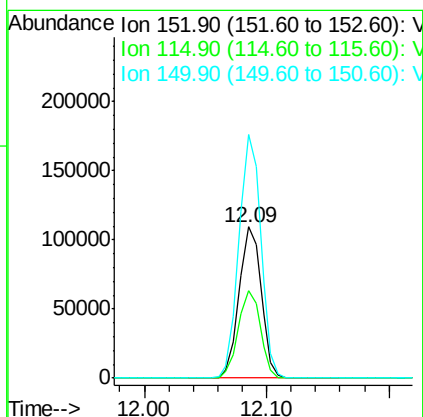
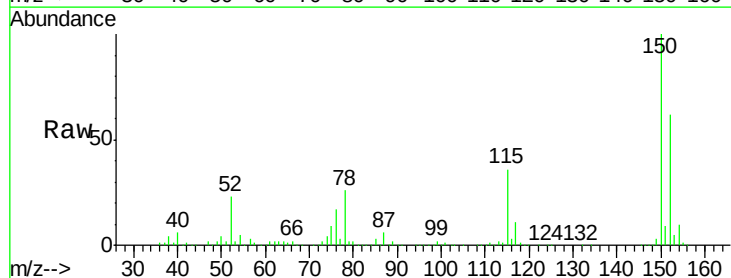
Instrument :  
MSVOA\_X  
ClientSampled :  
4540-2

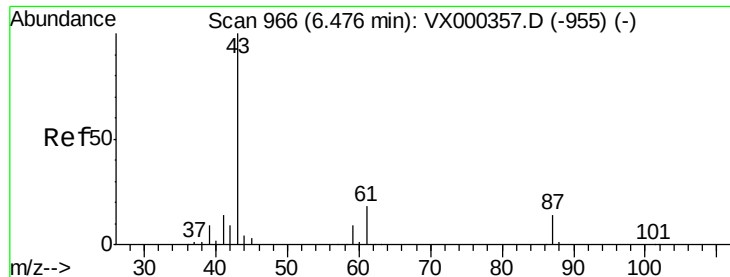
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 55.4  | 43.8  | 65.8  |
| 119     | 32.2  | 24.9  | 37.3  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.09 min Scan# 1886  
Delta R.T. -0.00 min  
Lab File: VX000571.D  
Acq: 30 Mar 2018 20:05

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 57.5  | 39.8  | 119.3 |
| 150     | 159.2 | 0.0   | 344.4 |





#74

N-amyI acetate

Concen: Below Cal

RT: 6.49 min Scan# 968

Delta R.T. 0.01 min

Lab File: VX000571.D

Acq: 30 Mar 2018 20:05

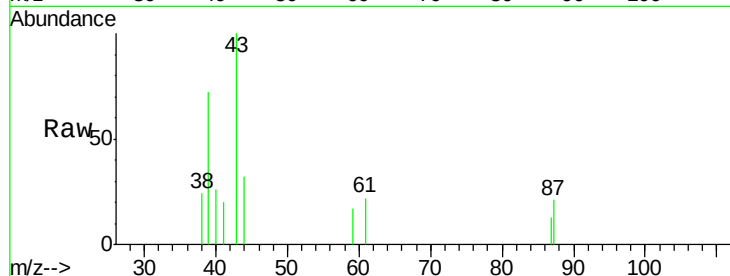
Instrument :

MSVOA\_X

ClientSampleId :

4540-2

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 1284  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 0.0   | 0.0   | 0.0   |
| 55       | 0.0   | 0.0   | 0.0   |
| 61       | 13.5  | 14.4  | 21.6# |

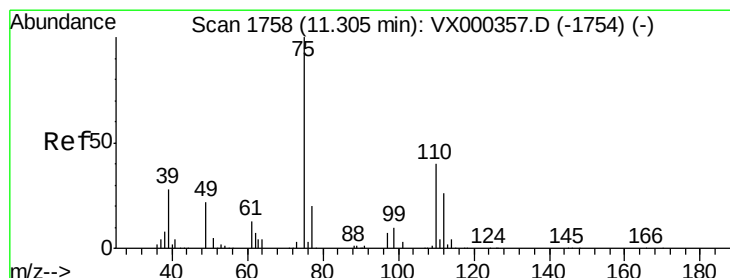
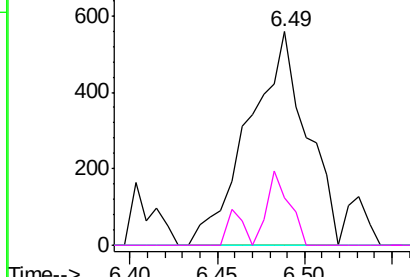
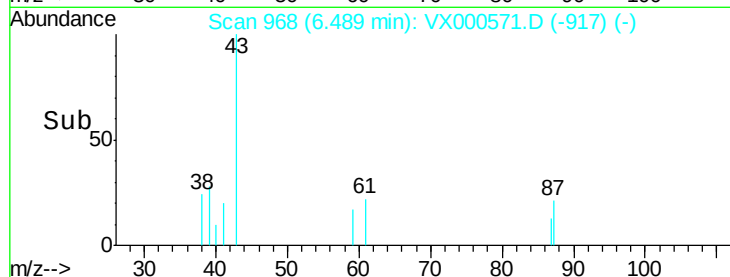


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0



#76

1,2,3-Trichloropropane

Concen: 22.91 ug/l

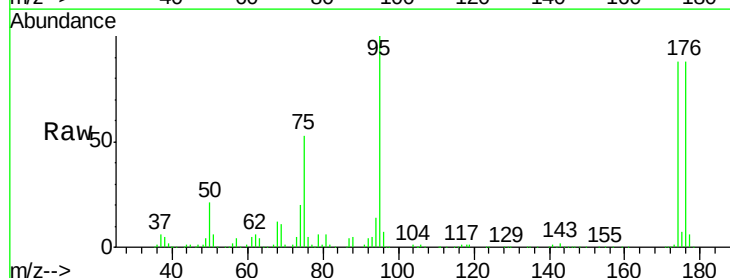
RT: 11.15 min Scan# 1732

Delta R.T. -0.16 min

Lab File: VX000571.D

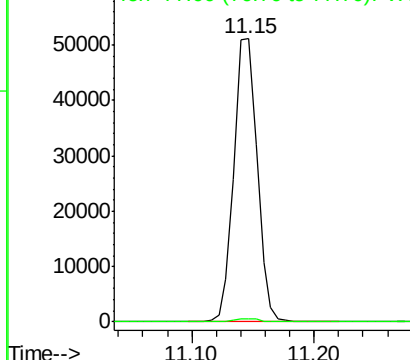
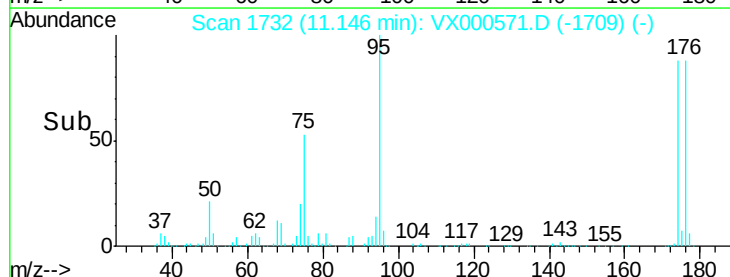
Acq: 30 Mar 2018 20:05

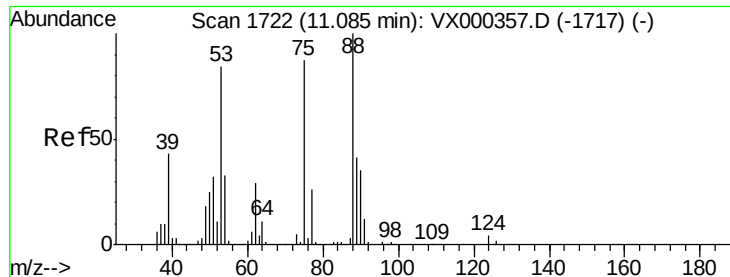
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 67218 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 1.2   | 21.4  | 64.2# |



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

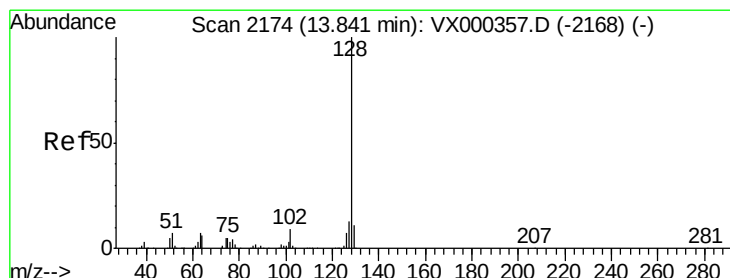
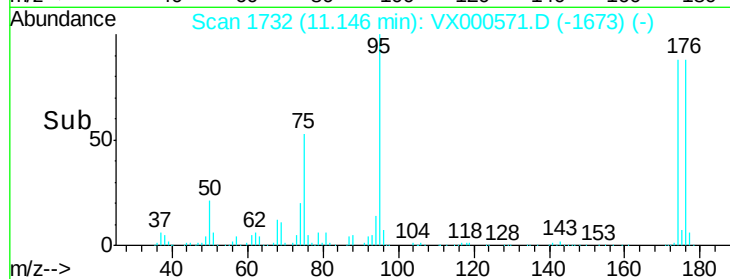
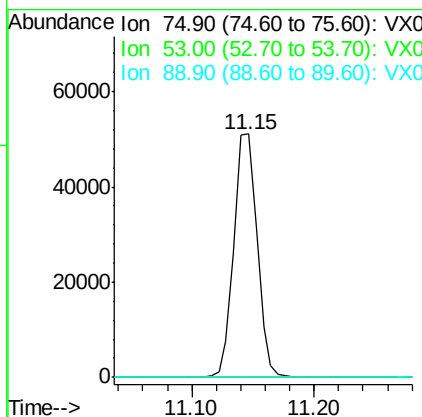
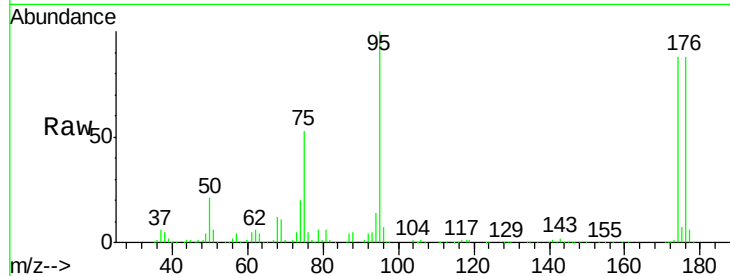




#81  
trans-1,4-Dichloro-2-butene  
Concen: 74.16 ug/l  
RT: 11.15 min Scan# 1732  
Delta R.T. 0.06 min  
Lab File: VX000571.D  
Acq: 30 Mar 2018 20:05

Instrument :  
MSVOA\_X  
ClientSampleId :  
4540-2

Tgt Ion: 75 Resp: 67218  
Ion Ratio Lower Upper  
75 100  
53 0.0 80.7 121.1#  
89 0.0 39.4 59.0#



#95  
Naphthalene  
Concen: 0.67 ug/l  
RT: 13.84 min Scan# 2174  
Delta R.T. -0.00 min  
Lab File: VX000571.D  
Acq: 30 Mar 2018 20:05

Tgt Ion: 128 Resp: 7481  
Ion Ratio Lower Upper  
128 100  
127 13.5 10.6 15.8  
129 11.2 8.9 13.3

