

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX110218\  
 Data File : VX005756.D  
 Acq On : 02 Nov 2018 15:08  
 Operator : JC/MD  
 Sample : PB114401ZHE#07  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB114401ZHE#07

Quant Time: Nov 03 01:27:42 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X103118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 31 18:23:06 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 108975   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 185064   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 168624   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 70391    | 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   | 88669    | 55.65 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 111.30% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 65254    | 50.92 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.84% |          |
| 50) Toluene-d8              | 8.72  | 98   | 234966   | 52.28 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.56% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 71555    | 43.14 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 86.28%  |          |

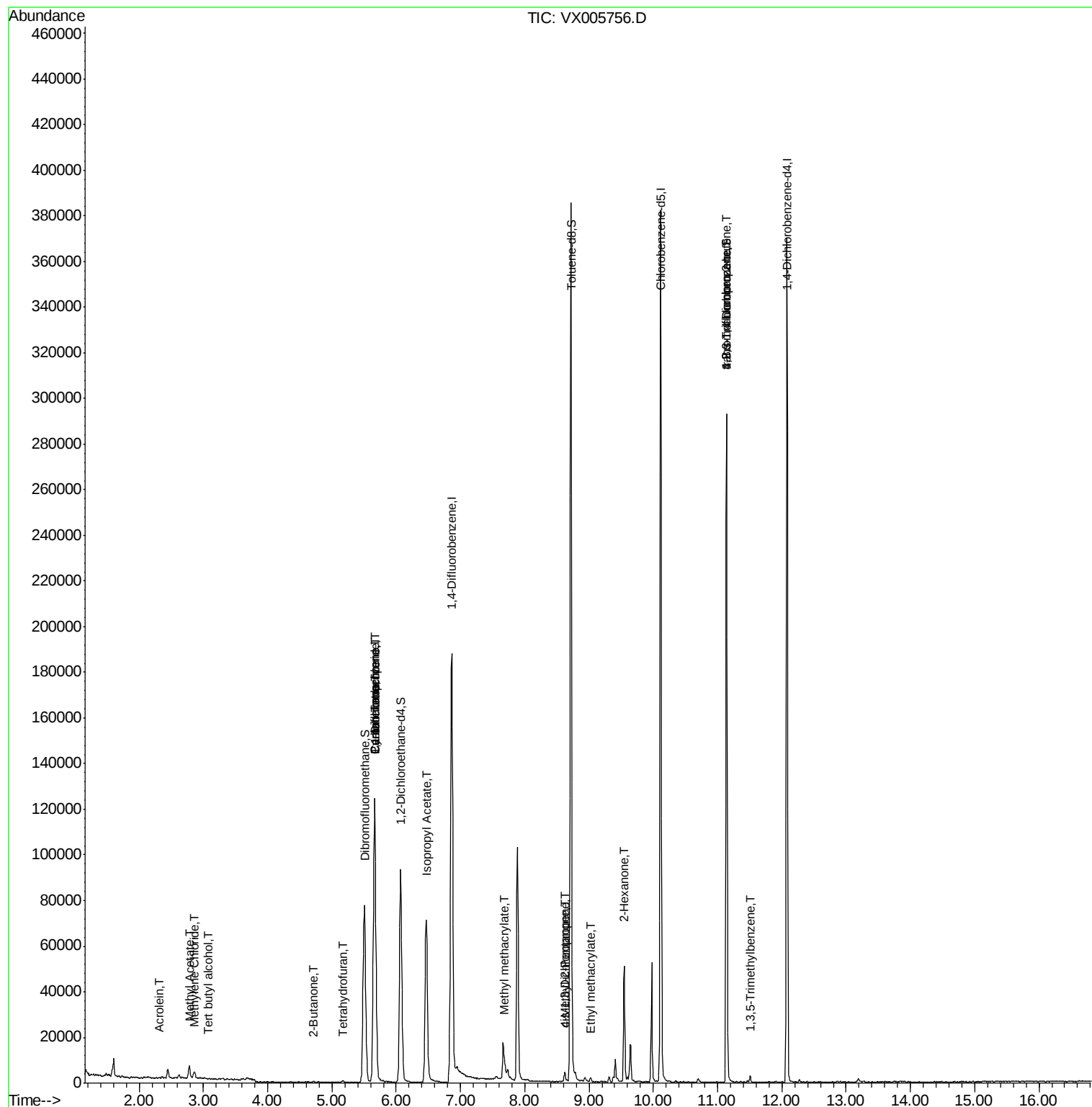
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 6) Chloroethane                | 1.71  | 64   | 72       | Below Cal | #      | 42     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 108      | 0.250     | ug/l # | 72     |
| 13) Acrolein                   | 2.31  | 56   | 94       | 12.472    | ug/l # | 41     |
| 16) Acetone                    | 2.45  | 43   | 4568     | Below Cal | #      | 82     |
| 18) Methyl Acetate             | 2.78  | 43   | 6781     | 2.966     | ug/l   | 95     |
| 20) Methylene Chloride         | 2.86  | 84   | 1377     | 1.002     | ug/l # | 82     |
| 25) 2-Butanone                 | 4.71  | 43   | 834      | 0.621     | ug/l   | 93     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 547      | 0.667     | ug/l # | 57     |
| 31) Cyclohexane                | 5.67  | 56   | 2808     | 1.319     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 9892     | 5.017     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 11371    | 6.383     | ug/l # | 15     |
| 43) Isopropyl Acetate          | 6.46  | 43   | 95998    | 26.293    | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.69  | 41   | 4543     | 2.571     | ug/l # | 24     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 1780     | 0.715     | ug/l # | 49     |
| 54) cis-1,3-Dichloropropene    | 8.62  | 75   | 575      | 0.275     | ug/l # | 59     |
| 56) Ethyl methacrylate         | 9.02  | 69   | 65       | 2.497     | ug/l # | 1      |
| 59) 2-Hexanone                 | 9.55  | 43   | 5443     | 2.687     | ug/l   | 66     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 38940    | 22.211    | ug/l # | 37     |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 1040     | 0.264     | ug/l   | 91     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 38940    | 71.763    | ug/l # | 9      |

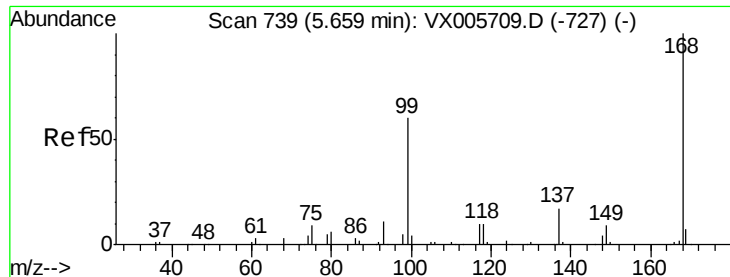
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX110218\  
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Instrument :  
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Quant Time: Nov 03 01:27:42 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X103118W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 31 18:23:06 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 741

Delta R.T. 0.01 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

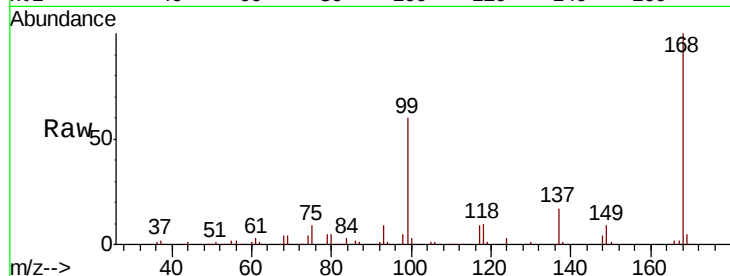
PB114401ZHE#07

Tot Ion:168 Resp: 108975

Ion Ratio Lower Upper

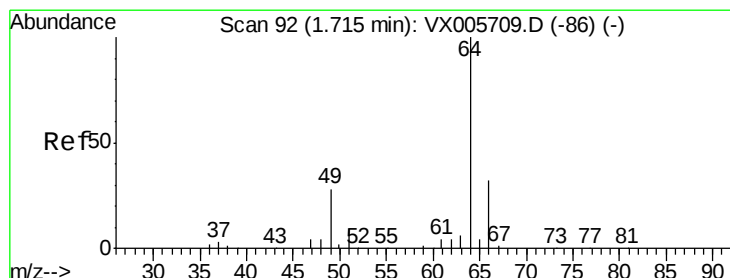
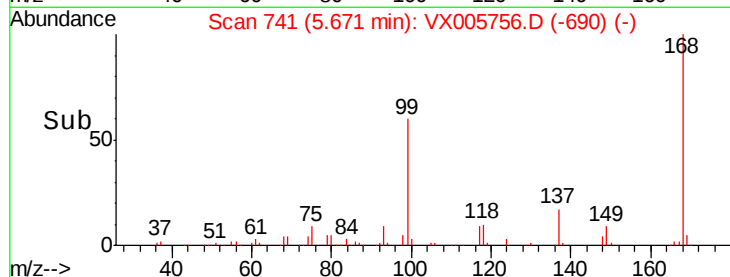
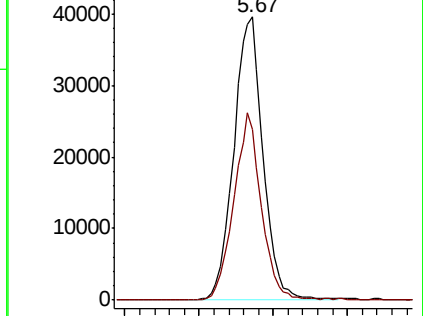
168 100

99 60.5 40.7 61.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#6

Chloroethane

Concen: Below Cal

RT: 1.71 min Scan# 92

Delta R.T. 0.00 min

Lab File: VX005756.D

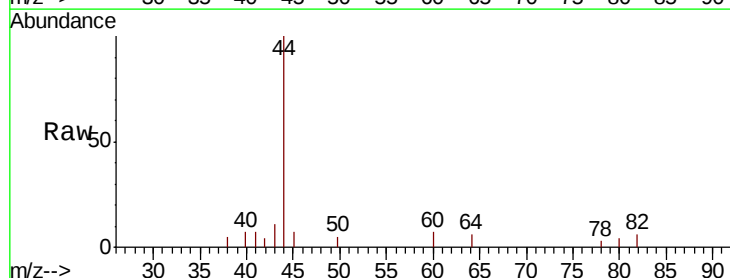
Acq: 02 Nov 2018 15:08

Tgt Ion: 64 Resp: 72

Ion Ratio Lower Upper

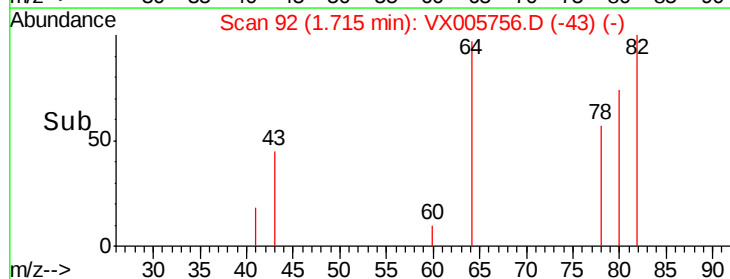
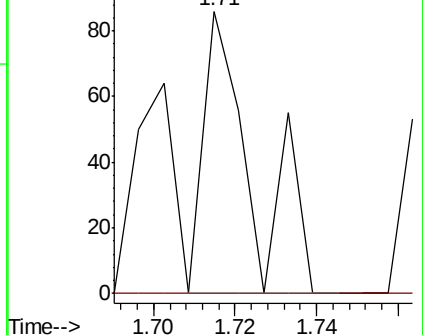
64 100

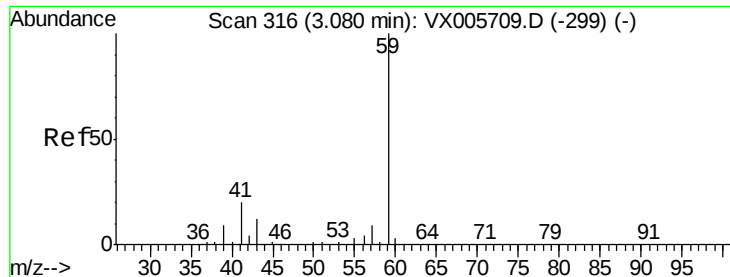
66 0.0 25.8 38.6#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

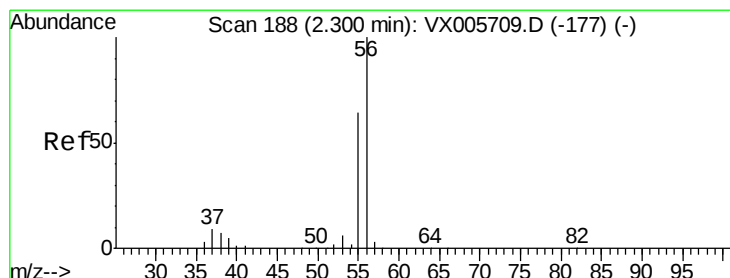
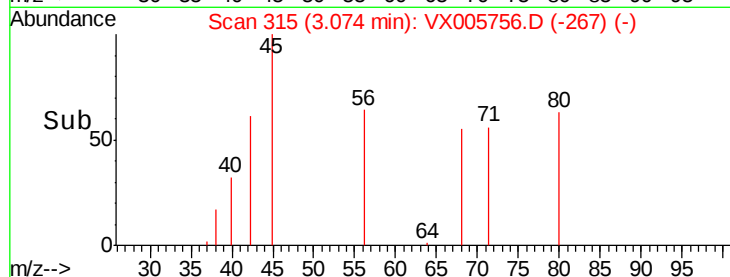
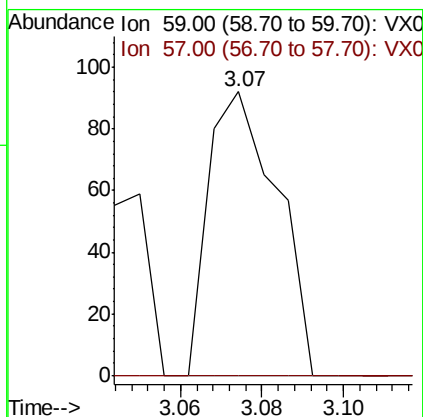
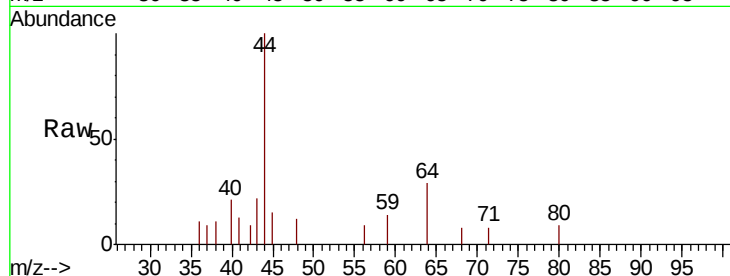




#11  
Tert butyl alcohol  
Concen: 0.250 ug/l  
RT: 3.07 min Scan# 315  
Delta R.T. -0.01 min  
Lab File: VX005756.D  
Acq: 02 Nov 2018 15:08

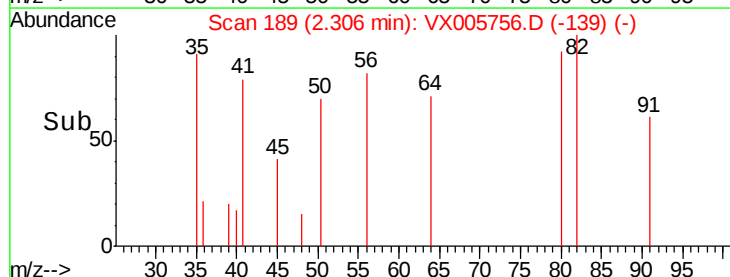
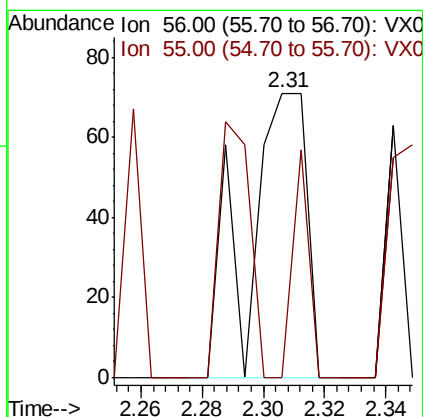
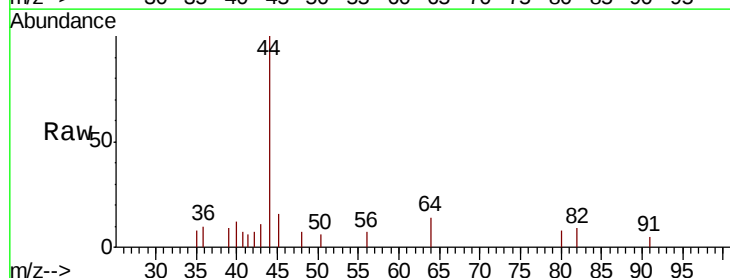
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#07

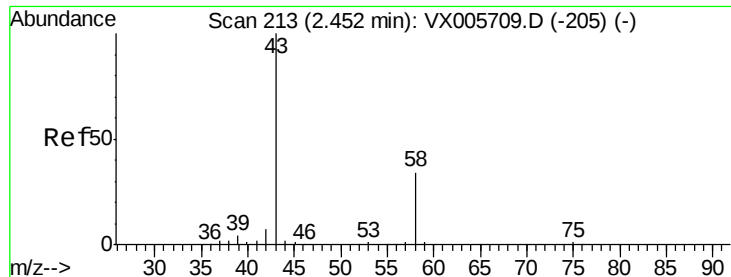
Tot Ion: 59 Resp: 108  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.5 12.7#



#13  
Acrolein  
Concen: 12.472 ug/l  
RT: 2.31 min Scan# 189  
Delta R.T. 0.01 min  
Lab File: VX005756.D  
Acq: 02 Nov 2018 15:08

Tgt Ion: 56 Resp: 94  
Ion Ratio Lower Upper  
56 100  
55 22.3 57.3 85.9#





#16

Acetone

Concen: Below Cal

RT: 2.45 min Scan# 212

Delta R.T. -0.01 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

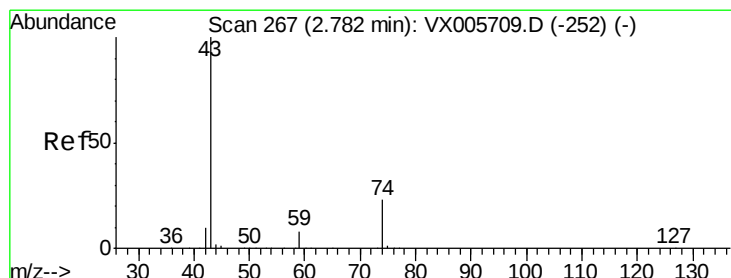
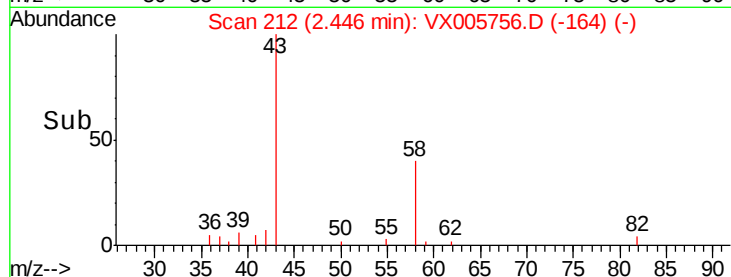
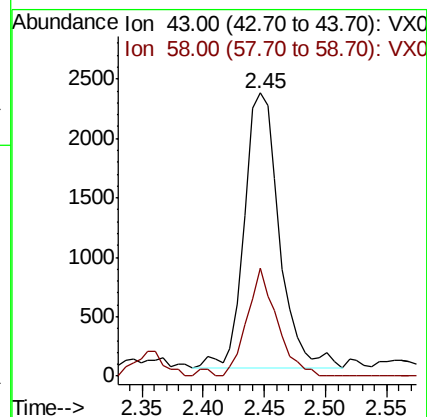
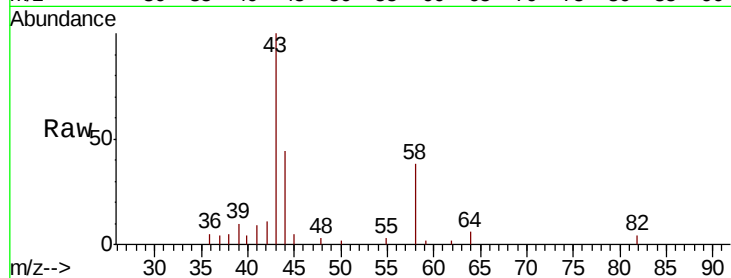
PB114401ZHE#07

Tot Ion: 43 Resp: 4568

Ion Ratio Lower Upper

43 100

58 39.3 23.8 35.6#



#18

Methyl Acetate

Concen: 2.966 ug/l

RT: 2.78 min Scan# 267

Delta R.T. -0.00 min

Lab File: VX005756.D

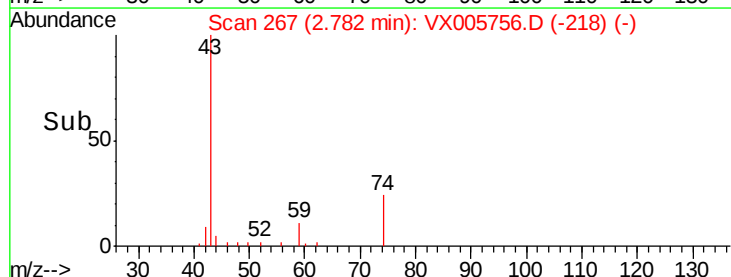
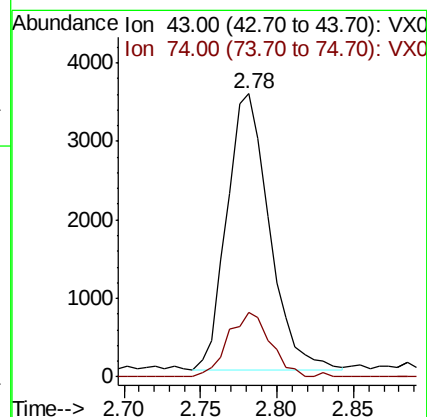
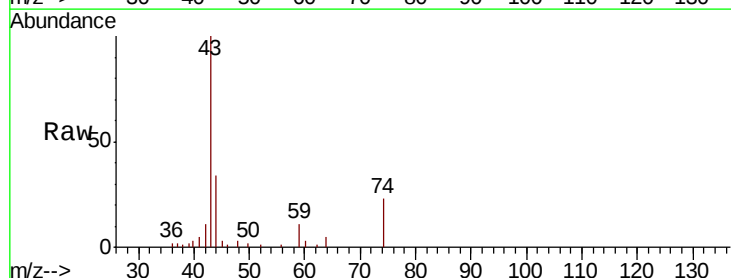
Acq: 02 Nov 2018 15:08

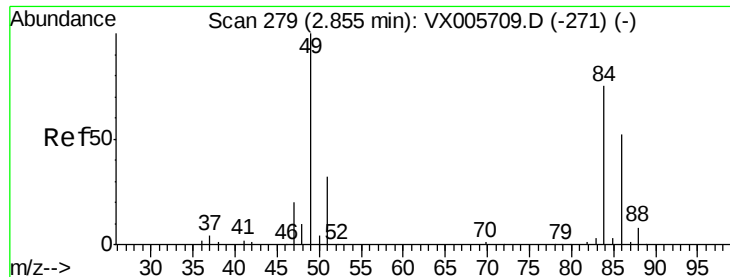
Tgt Ion: 43 Resp: 6781

Ion Ratio Lower Upper

43 100

74 23.1 16.8 25.2

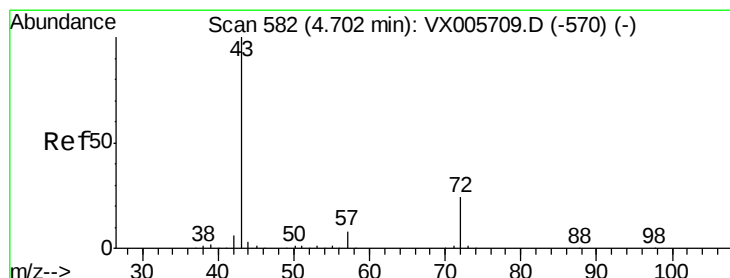
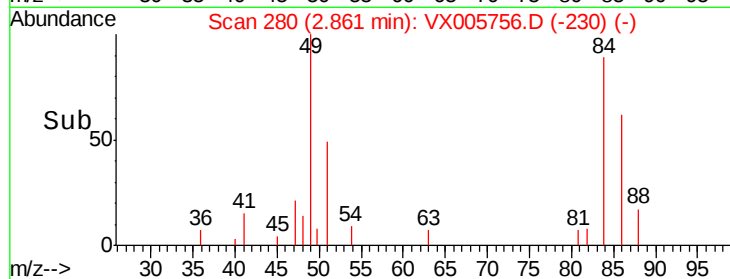
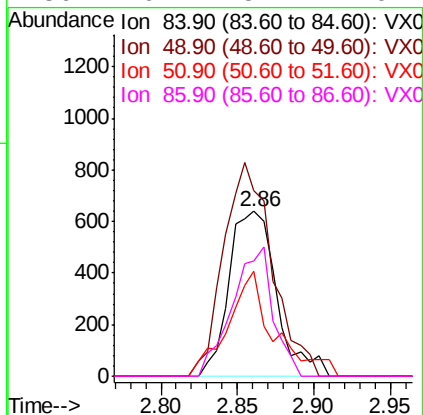
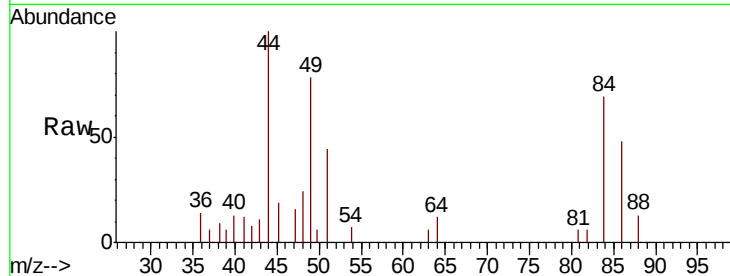




#20  
Methvlene Chloride  
Concen: 1.002 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.01 min  
Lab File: VX005756.D  
Acq: 02 Nov 2018 15:08

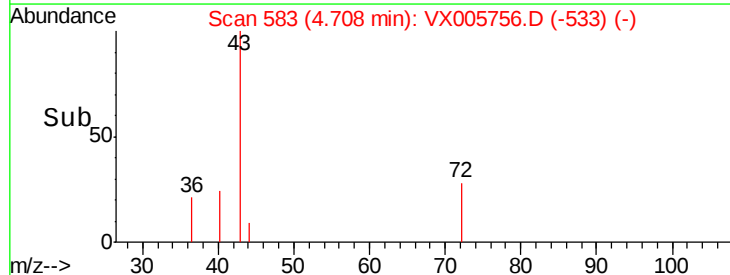
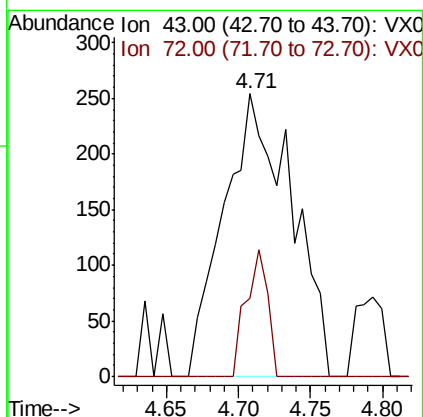
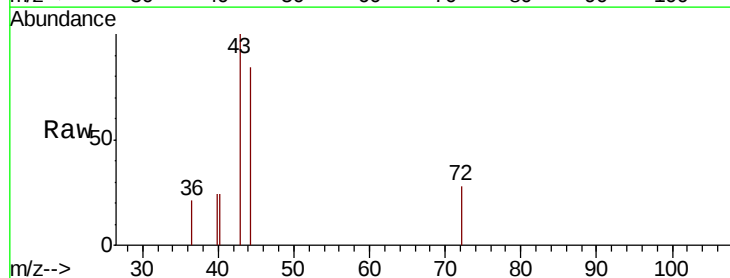
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#07

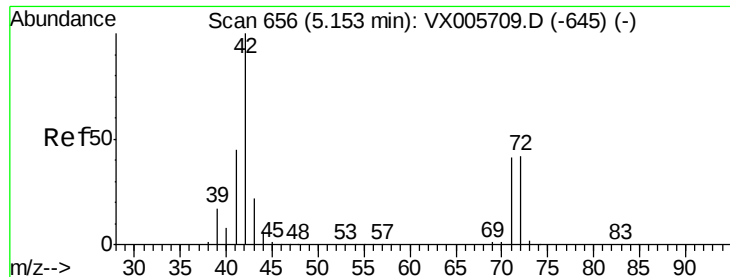
Tot Ion: 84 Resp: 1377  
Ion Ratio Lower Upper  
84 100  
49 113.0 109.5 164.3  
51 63.4 33.3 49.9#  
86 70.1 52.7 79.1



#25  
2-Butanone  
Concen: 0.621 ug/l  
RT: 4.71 min Scan# 583  
Delta R.T. 0.01 min  
Lab File: VX005756.D  
Acq: 02 Nov 2018 15:08

Tgt Ion: 43 Resp: 834  
Ion Ratio Lower Upper  
43 100  
72 27.6 19.2 28.8





#29

Tetrahydrofuran

Concen: 0.667 ug/l

RT: 5.17 min Scan# 659

Delta R.T. 0.02 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#07

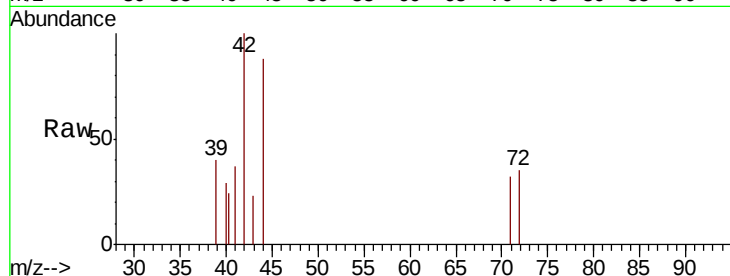
Tot Ion: 42 Resp: 547

Ion Ratio Lower Upper

42 100

72 15.4 32.0 48.0#

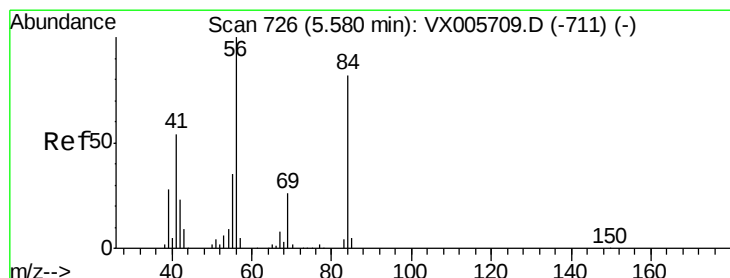
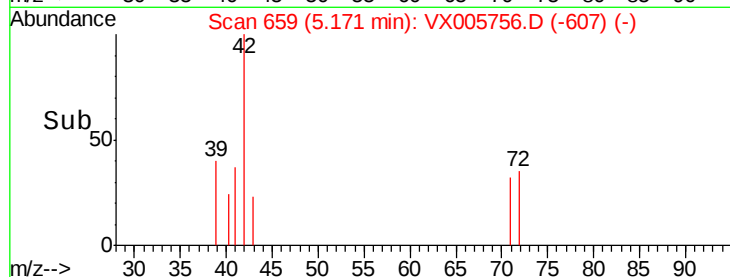
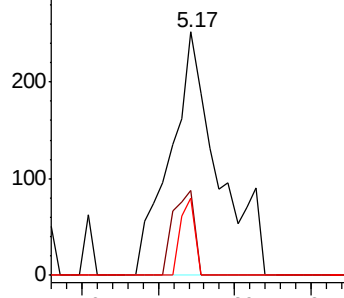
71 9.5 29.8 44.8#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



#31

Cyclohexane

Concen: 1.319 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.09 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

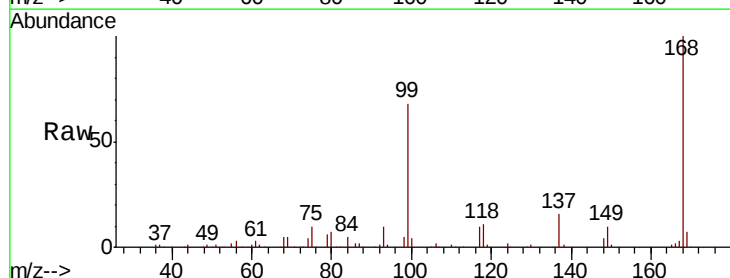
Tgt Ion: 56 Resp: 2808

Ion Ratio Lower Upper

56 100

69 159.4 22.6 34.0#

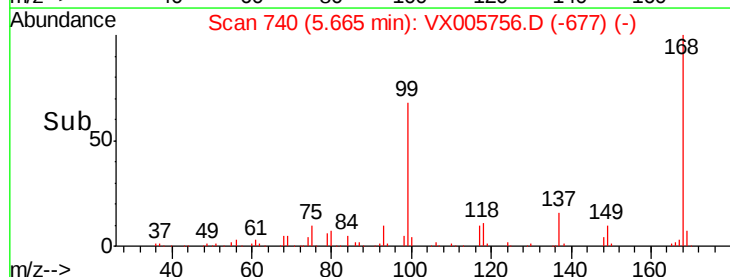
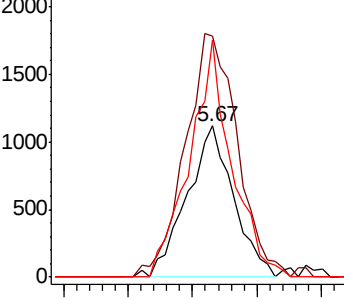
84 157.3 62.7 94.1#

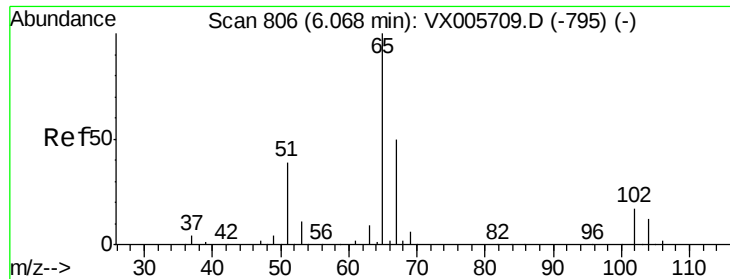


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

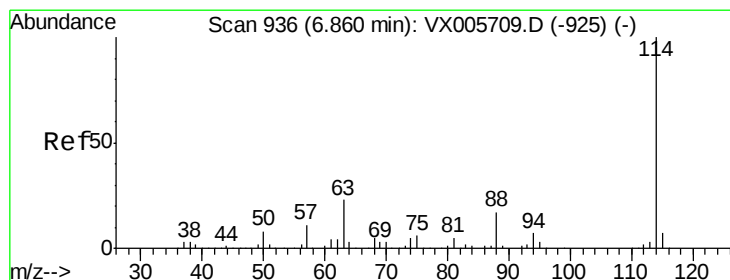
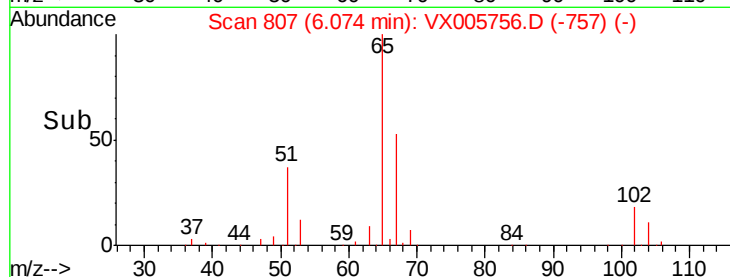
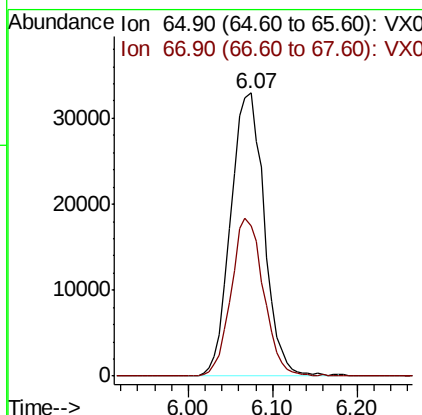
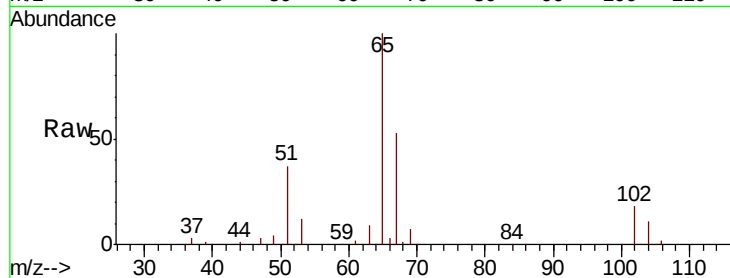




#33  
 1,2-Dichloroethane-d4  
 Concen: 55.653 ug/l  
 RT: 6.07 min Scan# 807  
 Delta R.T. 0.01 min  
 Lab File: VX005756.D  
 Acq: 02 Nov 2018 15:08

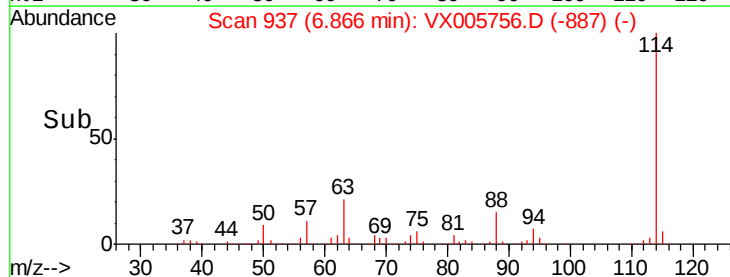
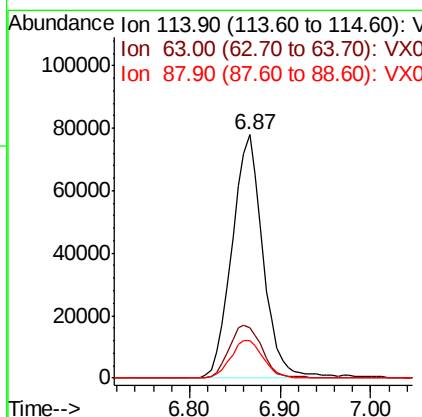
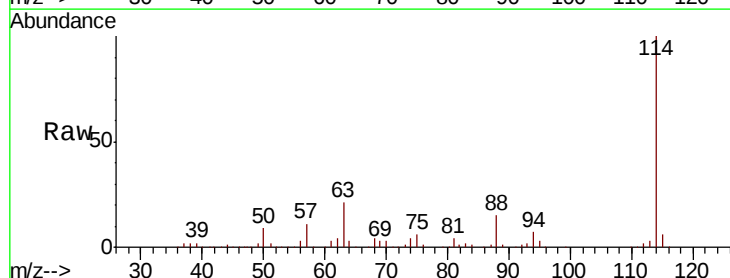
Instrument :  
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 ClientSampleId :  
 PB114401ZHE#07

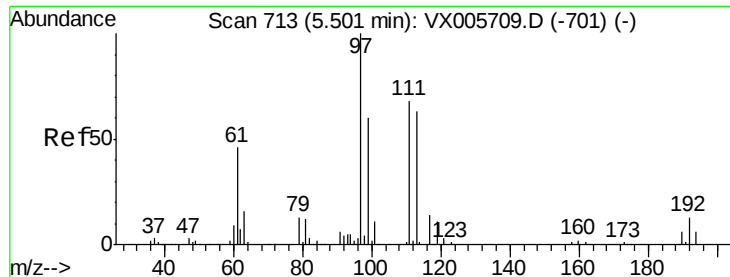
Tot Ion: 65 Resp: 88669  
 Ion Ratio Lower Upper  
 65 100  
 67 54.0 0.0 105.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.87 min Scan# 937  
 Delta R.T. 0.01 min  
 Lab File: VX005756.D  
 Acq: 02 Nov 2018 15:08

Tgt Ion: 114 Resp: 185064  
 Ion Ratio Lower Upper  
 114 100  
 63 20.9 0.0 42.8  
 88 15.4 0.0 31.2





#35

Dibromofluoromethane

Concen: 50.924 ug/l

RT: 5.51 min Scan# 714

Delta R.T. 0.01 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#07

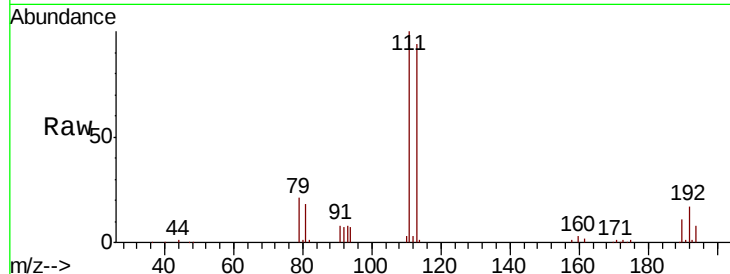
Tot Ion:113 Resp: 65254

Ion Ratio Lower Upper

113 100

111 106.5 82.3 123.5

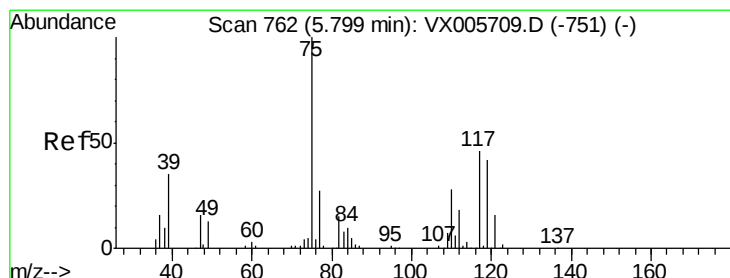
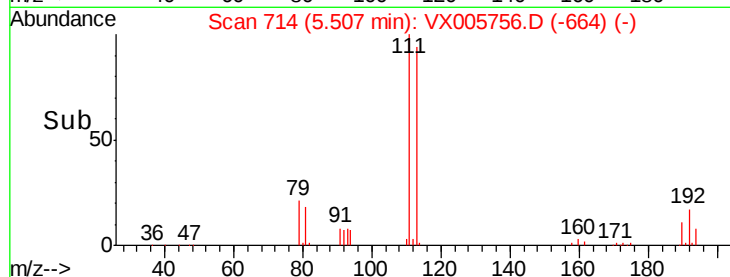
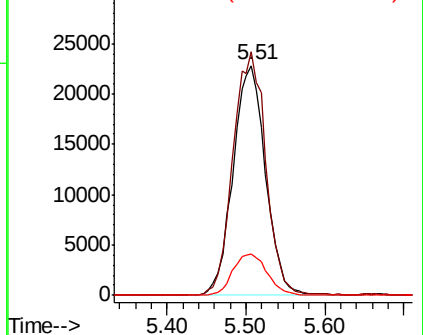
192 19.0 17.9 26.9



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: 5.017 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

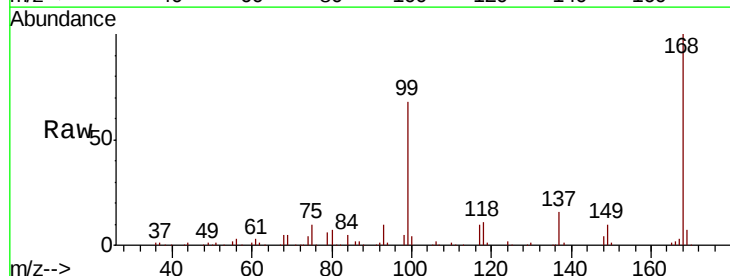
Tgt Ion: 75 Resp: 9892

Ion Ratio Lower Upper

75 100

110 8.7 17.4 52.2#

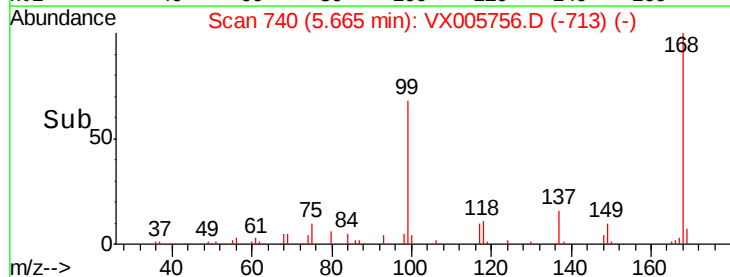
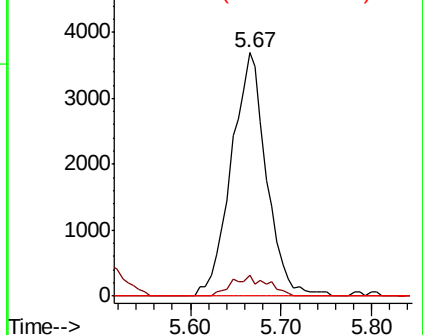
77 0.0 25.8 38.6#

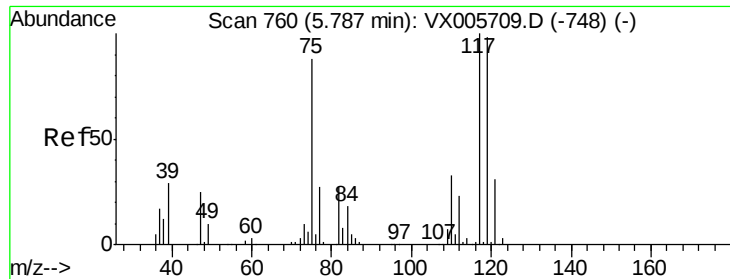


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

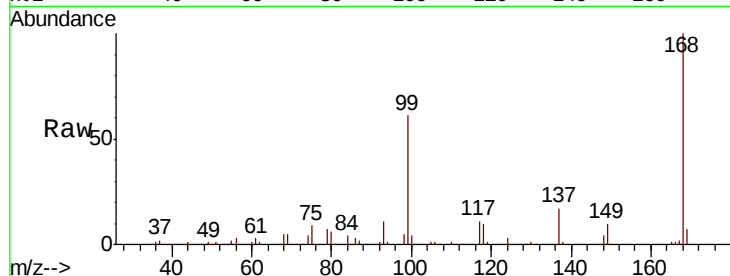




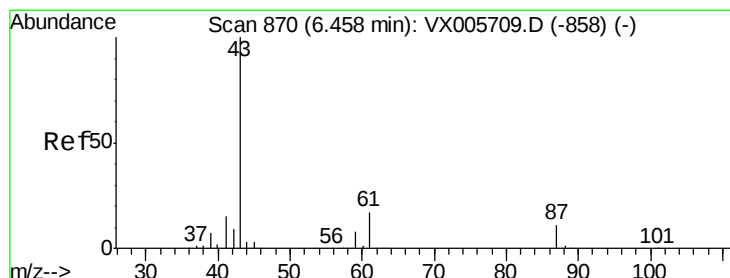
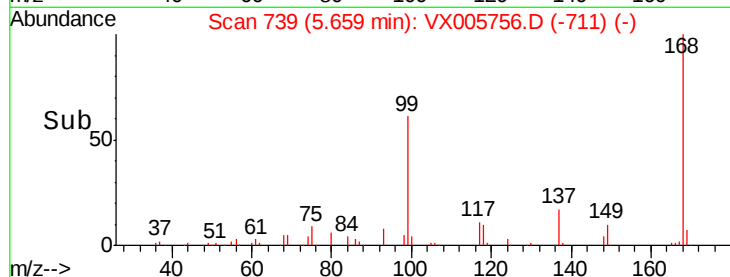
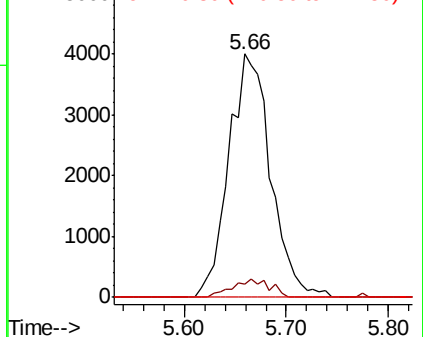
#38  
Carbon Tetrachloride  
Concen: 6.383 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.13 min  
Lab File: VX005756.D  
Acq: 02 Nov 2018 15:08

Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#07

Tot Ion:117 Resp: 11371  
Ion Ratio Lower Upper  
117 100  
119 5.3 78.1 117.1#  
121 0.0 24.6 36.8#

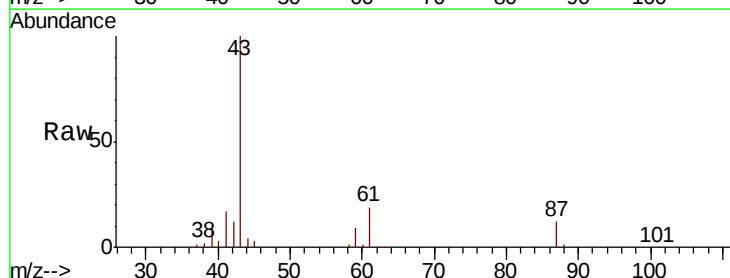


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

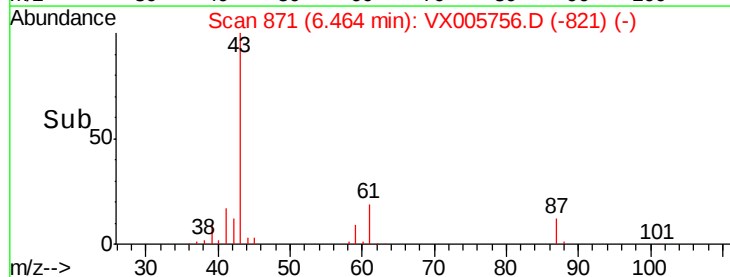
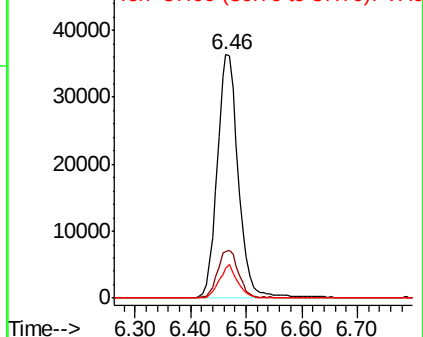


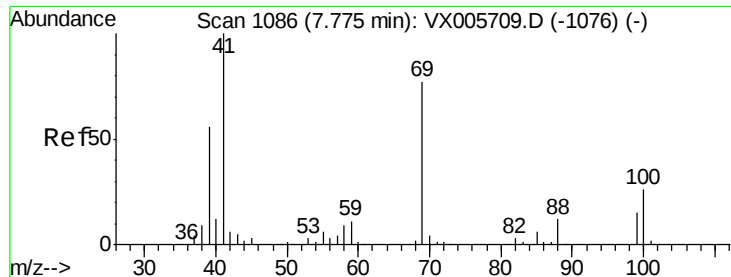
#43  
Isopropyl Acetate  
Concen: 26.293 ug/l  
RT: 6.46 min Scan# 871  
Delta R.T. 0.01 min  
Lab File: VX005756.D  
Acq: 02 Nov 2018 15:08

Tgt Ion: 43 Resp: 95998  
Ion Ratio Lower Upper  
43 100  
61 19.2 14.6 22.0  
87 11.8 9.6 14.4



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





#48

Methyl methacrylate

Concen: 2.571 ug/l

RT: 7.69 min Scan# 1072

Delta R.T. -0.09 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#07

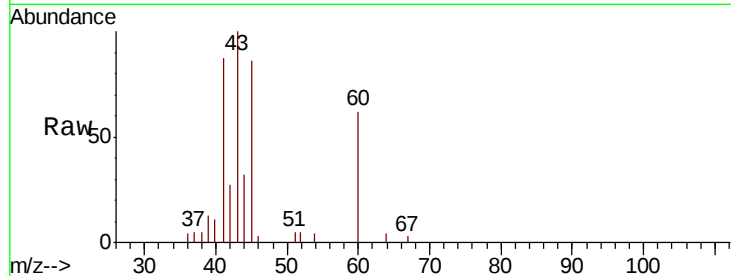
Tot Ion: 41 Resp: 4543

Ion Ratio Lower Upper

41 100

69 0.0 63.2 94.8#

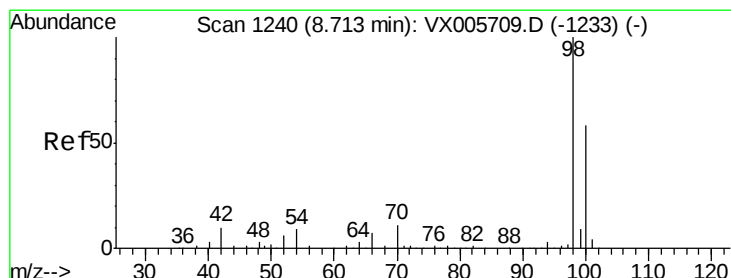
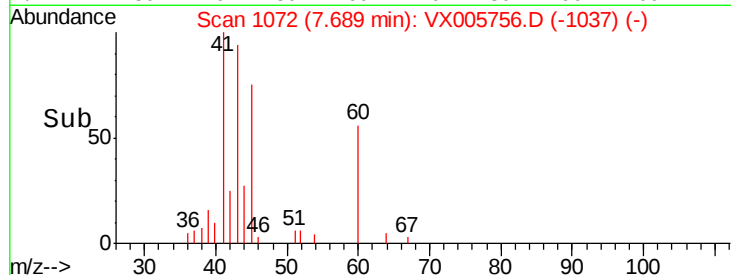
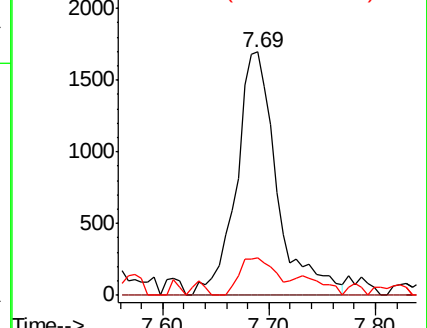
39 14.1 42.2 63.2#



Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0



#50

Toluene-d8

Concen: 52.281 ug/l

RT: 8.72 min Scan# 1241

Delta R.T. 0.01 min

Lab File: VX005756.D

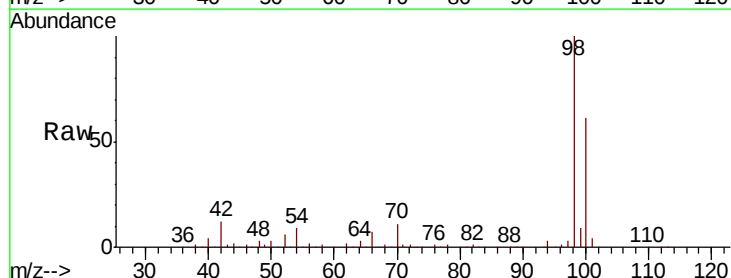
Acq: 02 Nov 2018 15:08

Tgt Ion: 98 Resp: 234966

Ion Ratio Lower Upper

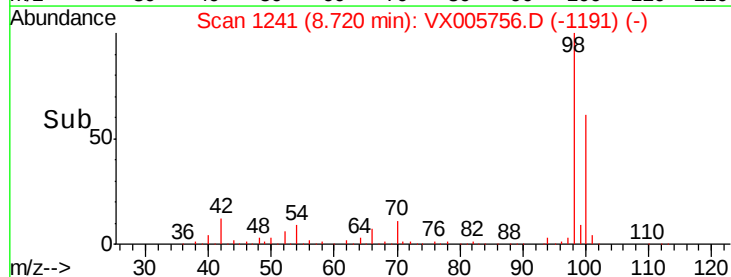
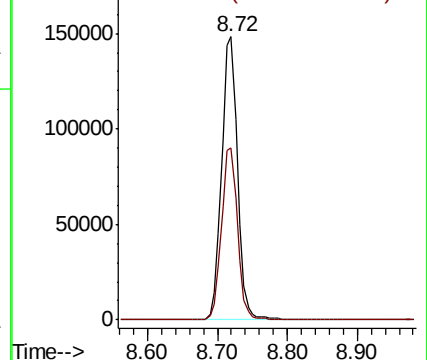
98 100

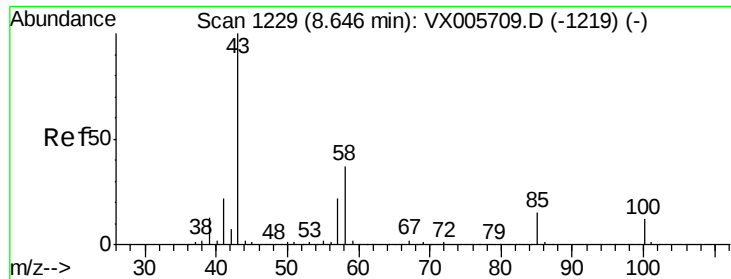
100 61.4 51.3 76.9



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0





#51

4-Methyl-2-Pentanone

Concen: 0.715 ug/l

RT: 8.62 min Scan# 1225

Delta R.T. -0.02 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

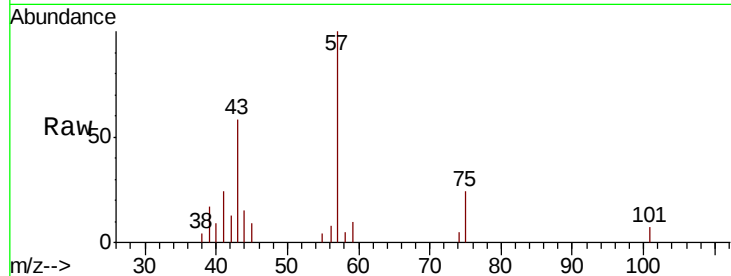
PB114401ZHE#07

Tot Ion: 43 Resp: 1780

Ion Ratio Lower Upper

43 100

58 6.9 29.7 44.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

1500

1000

500

0

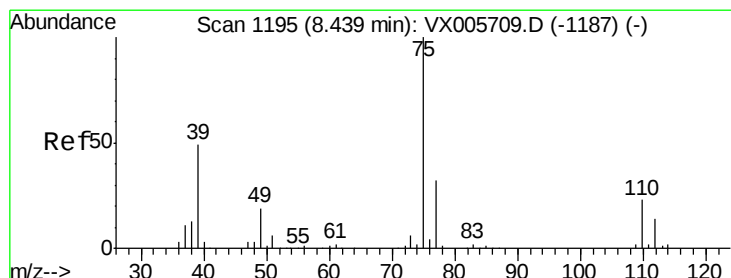
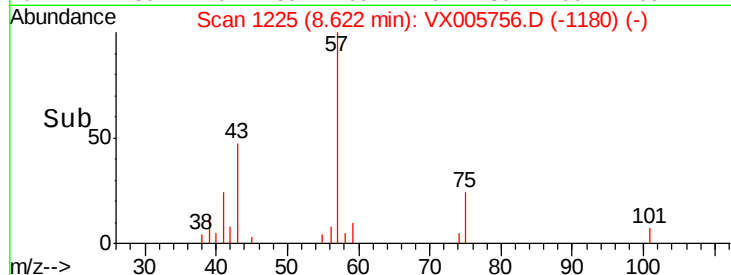
8.62

8.60

8.65

8.70

Time-->



#54

cis-1,3-Dichloropropene

Concen: 0.275 ug/l

RT: 8.62 min Scan# 1225

Delta R.T. 0.18 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

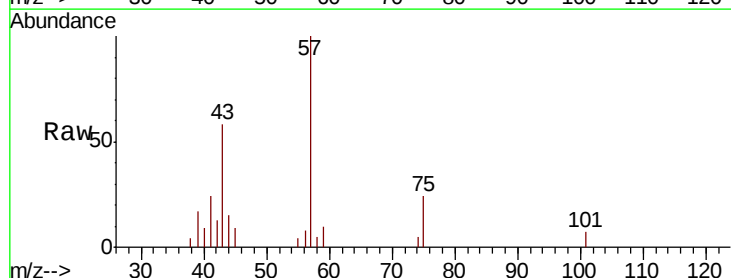
Tgt Ion: 75 Resp: 575

Ion Ratio Lower Upper

75 100

77 0.0 25.2 37.8#

39 68.6 38.2 57.2#



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

500

400

300

200

100

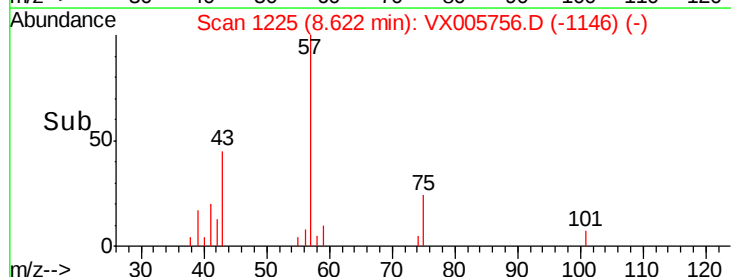
0

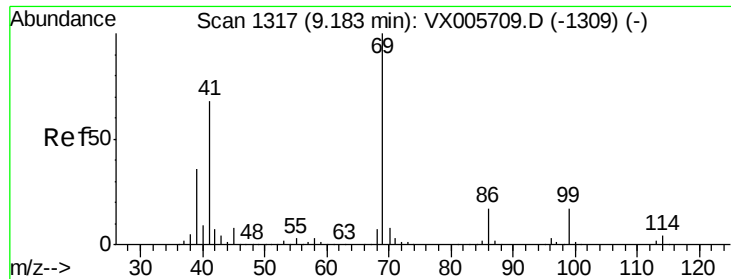
8.62

8.60

8.65

Time-->





#56

Ethyl methacrylate

Concen: 2.497 ug/l

RT: 9.02 min Scan# 1291

Delta R.T. -0.16 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#07

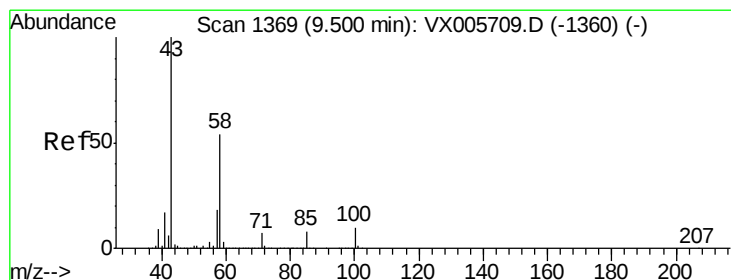
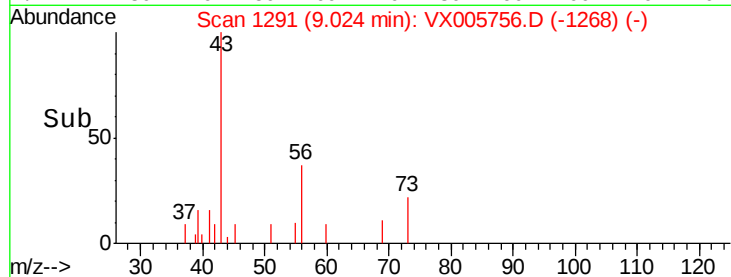
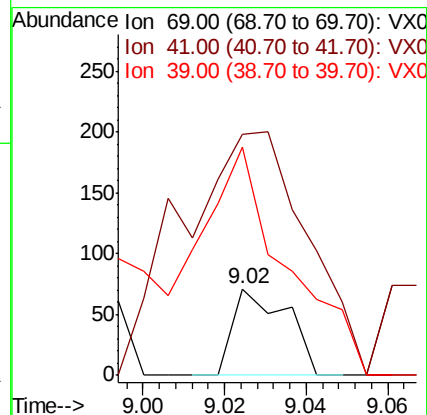
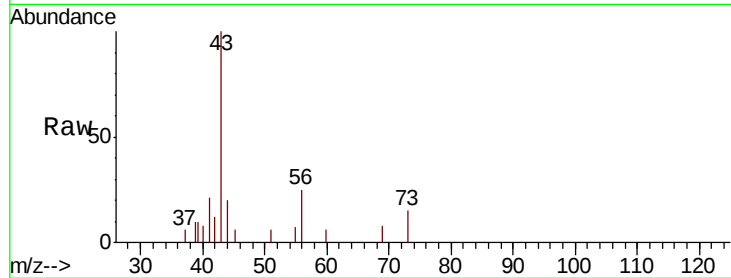
Tot Ion: 69 Resp: 65

Ion Ratio Lower Upper

69 100

41 663.1 57.0 85.6#

39 580.0 28.3 42.5#



#59

2-Hexanone

Concen: 2.687 ug/l

RT: 9.55 min Scan# 1377

Delta R.T. 0.05 min

Lab File: VX005756.D

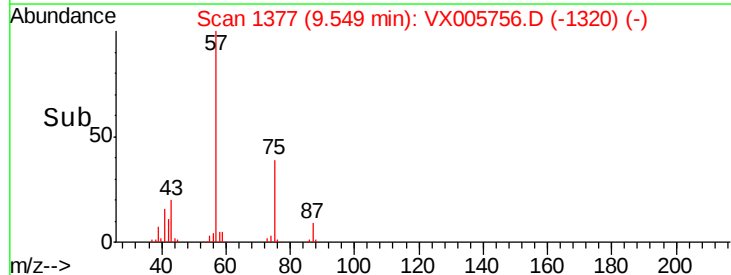
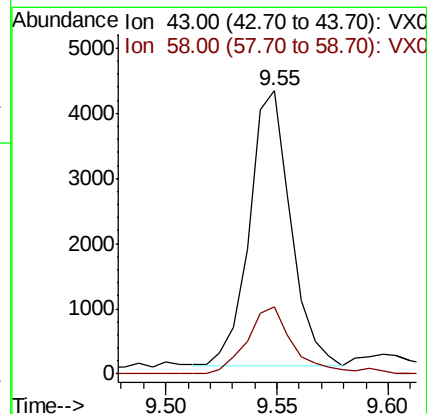
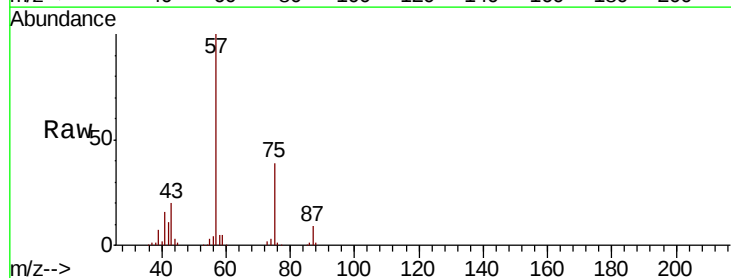
Acq: 02 Nov 2018 15:08

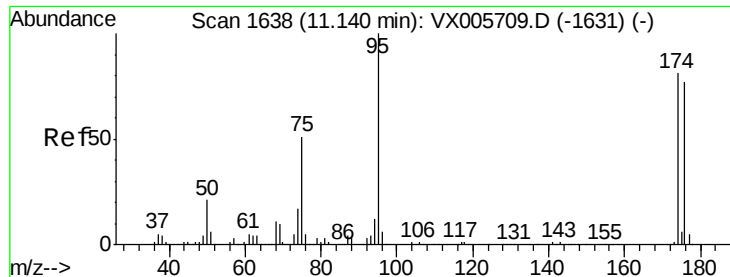
Tgt Ion: 43 Resp: 5443

Ion Ratio Lower Upper

43 100

58 28.1 25.9 77.8





#62

4-Bromofluorobenzene

Concen: 43.139 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.00 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#07

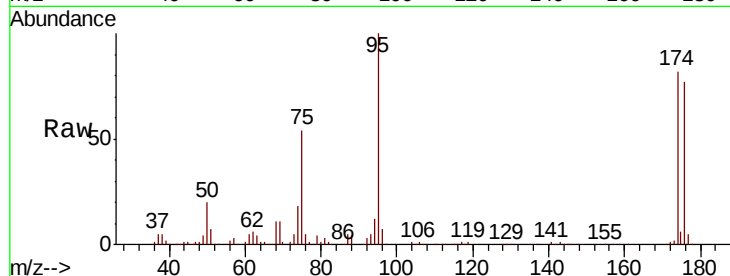
Tot Ion: 95 Resp: 71555

Ion Ratio Lower Upper

95 100

174 81.2 0.0 184.4

176 77.8 0.0 177.4

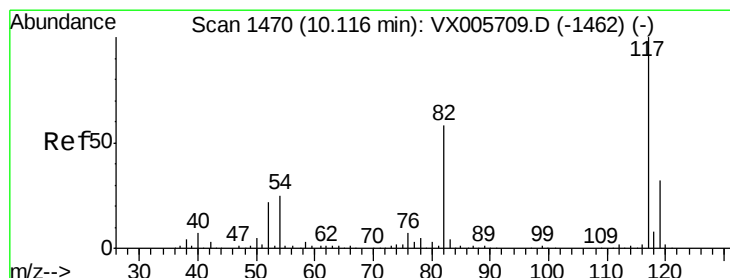
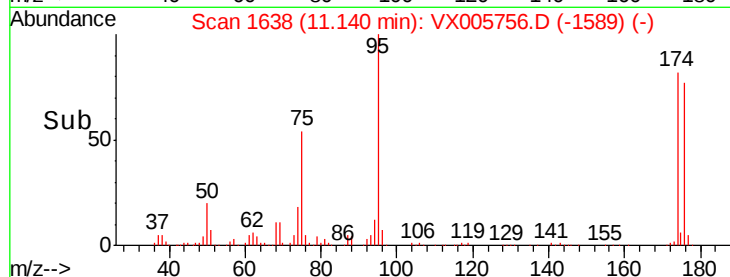


Abundance Ion 94.90 (94.60 to 95.60): VX005709.D (-1631) (-)

Ion 173.80 (173.50 to 174.50): VX005709.D (-1631) (-)

Ion 175.80 (175.50 to 176.50): VX005709.D (-1631) (-)

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.12 min Scan# 1470

Delta R.T. 0.00 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

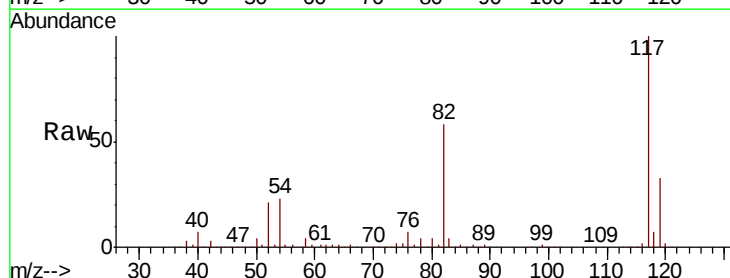
Tgt Ion: 117 Resp: 168624

Ion Ratio Lower Upper

117 100

82 58.1 44.1 66.1

119 33.0 26.2 39.2

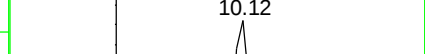
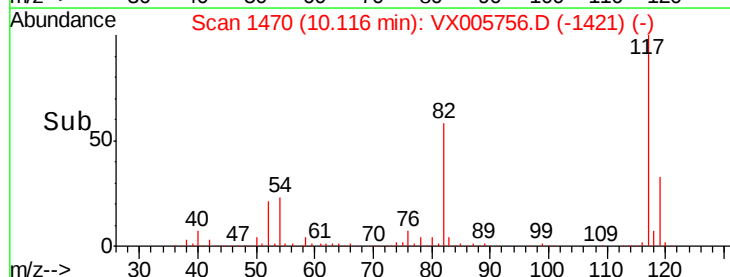


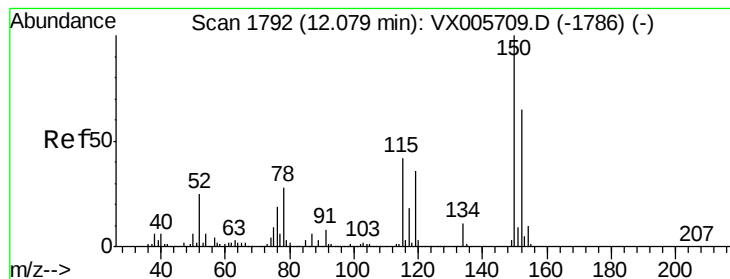
Abundance Ion 116.90 (116.60 to 117.60): VX005709.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX005709.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX005709.D (-1462) (-)

Time-->





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX005756.D

Acq: 02 Nov 2018 15:08

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#07

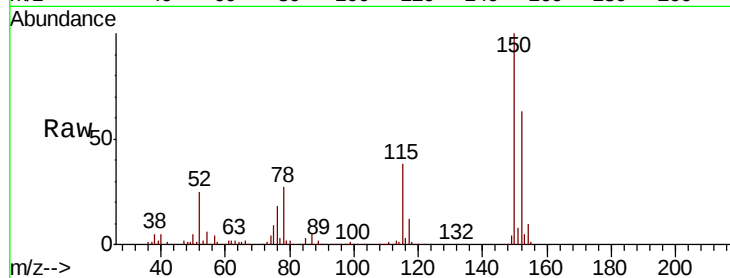
Tot Ion:152 Resp: 70391

Ion Ratio Lower Upper

152 100

115 59.9 39.4 118.1

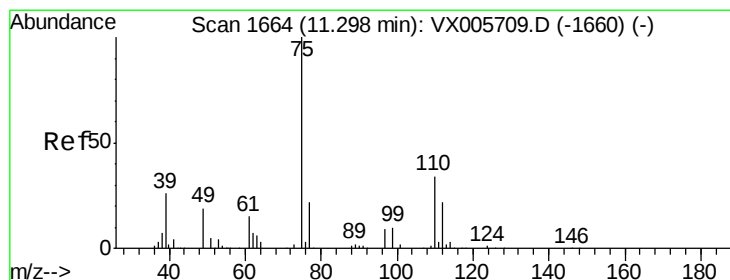
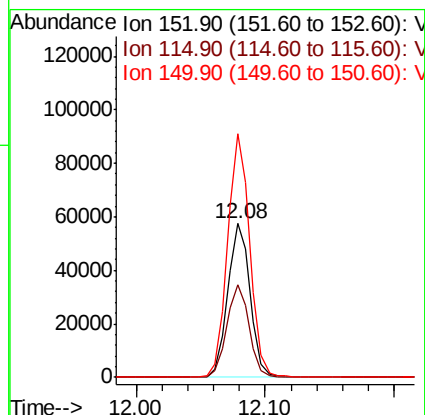
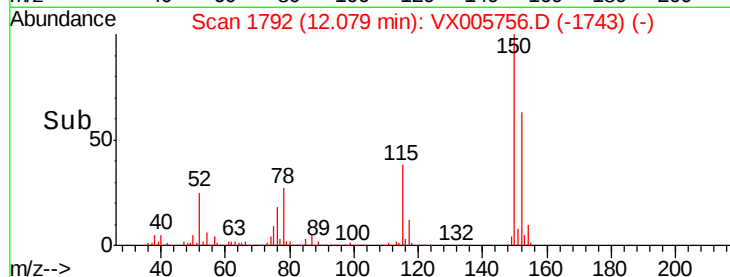
150 156.8 0.0 346.4



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: 22.211 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX005756.D

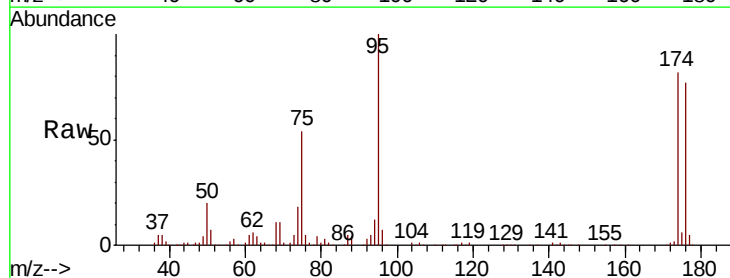
Acq: 02 Nov 2018 15:08

Tgt Ion: 75 Resp: 38940

Ion Ratio Lower Upper

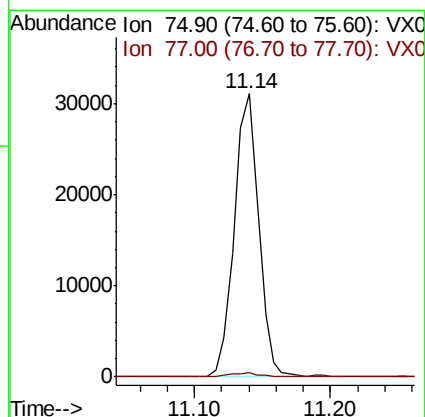
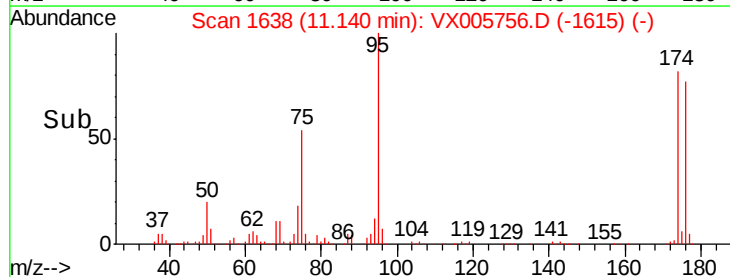
75 100

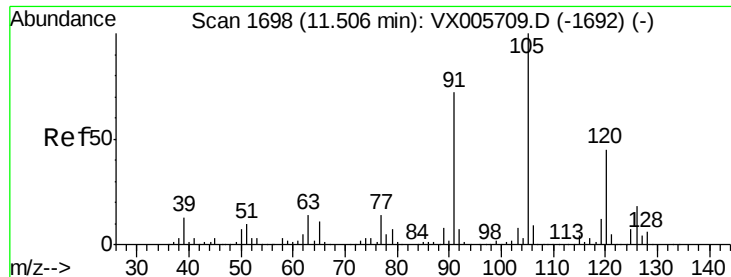
77 1.4 20.5 61.6#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

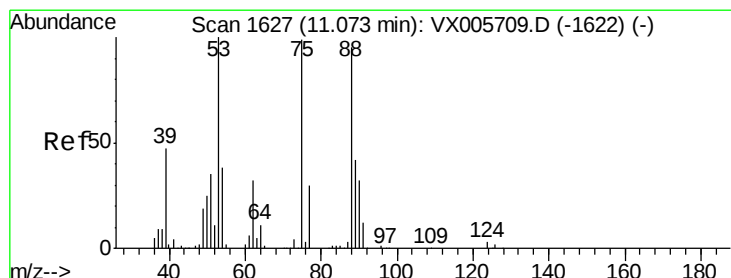
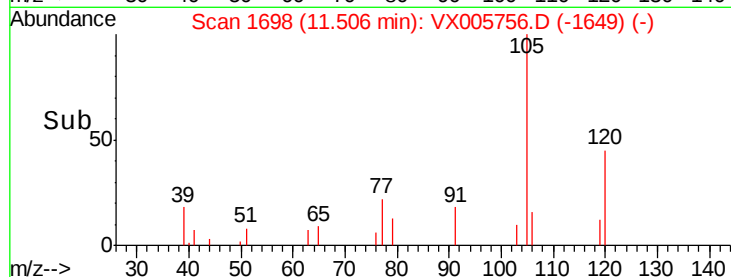
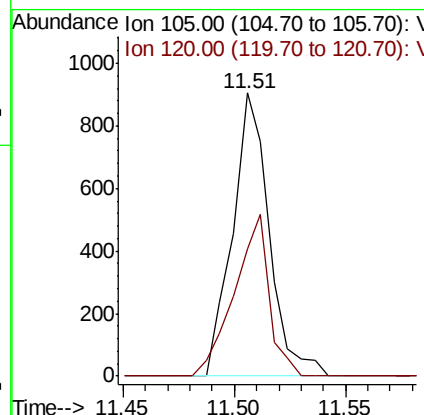
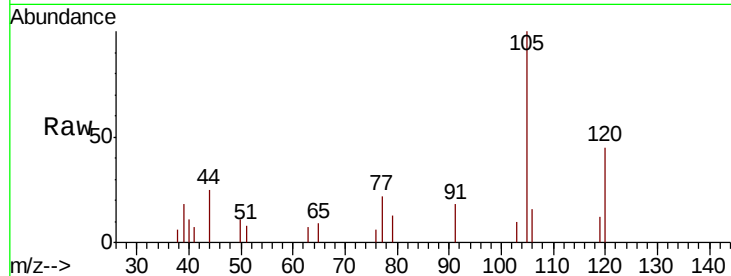




#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.264 ug/l  
 RT: 11.51 min Scan# 1698  
 Delta R.T. 0.00 min  
 Lab File: VX005756.D  
 Acq: 02 Nov 2018 15:08

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB114401ZHE#07

Tot Ion:105 Resp: 1040  
 Ion Ratio Lower Upper  
 105 100  
 120 53.8 24.1 72.2



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 71.763 ug/l  
 RT: 11.14 min Scan# 1638  
 Delta R.T. 0.07 min  
 Lab File: VX005756.D  
 Acq: 02 Nov 2018 15:08

Tgt Ion: 75 Resp: 38940  
 Ion Ratio Lower Upper  
 75 100  
 53 0.5 80.2 120.2#  
 89 0.0 39.8 59.8#

