

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX110218\  
 Data File : VX005755.D  
 Acq On : 02 Nov 2018 14:41  
 Operator : JC/MD  
 Sample : PB114401ZHE#06  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB114401ZHE#06

Quant Time: Nov 03 01:27:27 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      | 5.66  | 168  | 113068   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 189640   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 168616   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 71312    | 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   | 86296    | 52.20 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.40% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 67195    | 51.17 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.34% |          |
| 50) Toluene-d8              | 8.72  | 98   | 231997   | 50.37 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.74% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 72574    | 42.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.40%  |          |

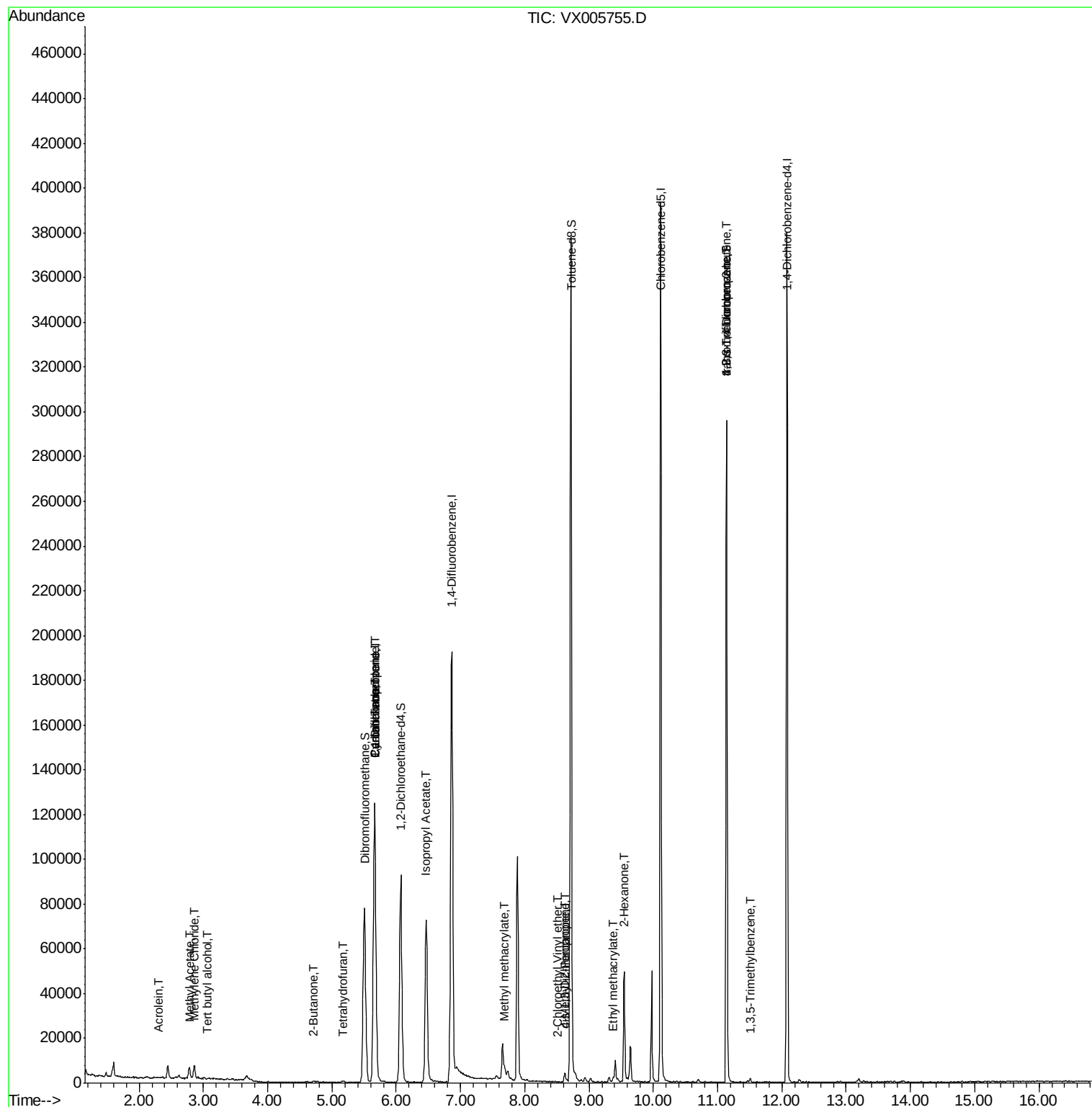
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 6) Chloroethane                | 1.70  | 64   | 92       | Below Cal | #      | 42     |
| 11) Tert butyl alcohol         | 3.06  | 59   | 164      | 0.365     | ug/l # | 72     |
| 13) Acrolein                   | 2.29  | 56   | 23       | 12.251    | ug/l # | 1      |
| 16) Acetone                    | 2.45  | 43   | 5853     | Below Cal | #      | 88     |
| 18) Methyl Acetate             | 2.78  | 43   | 6713     | 2.830     | ug/l   | 97     |
| 20) Methylene Chloride         | 2.85  | 84   | 2333     | 1.637     | ug/l   | 90     |
| 25) 2-Butanone                 | 4.71  | 43   | 1127     | 0.808     | ug/l   | 97     |
| 29) Tetrahydrofuran            | 5.16  | 42   | 364      | 0.428     | ug/l # | 80     |
| 31) Cyclohexane                | 5.66  | 56   | 2678     | 1.212     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 10031    | 4.965     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 11505    | 6.303     | ug/l # | 17     |
| 43) Isopropyl Acetate          | 6.46  | 43   | 94120    | 25.157    | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.69  | 41   | 3821     | 2.110     | ug/l # | 23     |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 1576     | 0.618     | ug/l # | 53     |
| 54) cis-1,3-Dichloropropene    | 8.63  | 75   | 537      | 0.250     | ug/l # | 56     |
| 56) Ethyl methacrylate         | 9.38  | 69   | 60       | 2.495     | ug/l # | 1      |
| 58) 2-Chloroethyl Vinyl ether  | 8.52  | 63   | 19       | 10.351    | ug/l # | 48     |
| 59) 2-Hexanone                 | 9.55  | 43   | 5294     | 2.550     | ug/l # | 63     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 38215    | 21.516    | ug/l # | 36     |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 852      | 0.213     | ug/l   | 97     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 38215    | 69.517    | ug/l # | 9      |

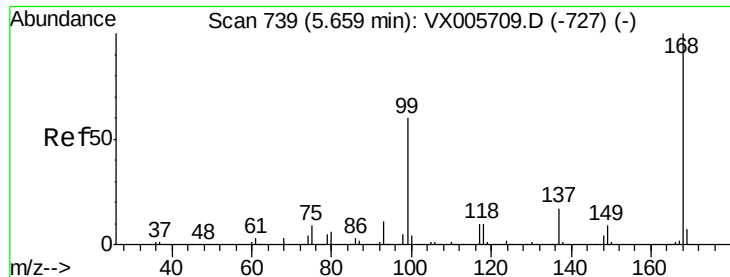
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Nov 03 01:27:27 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

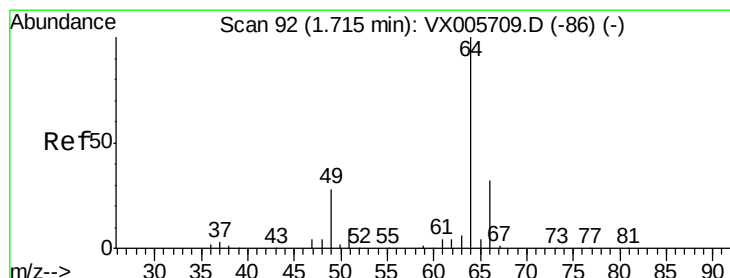
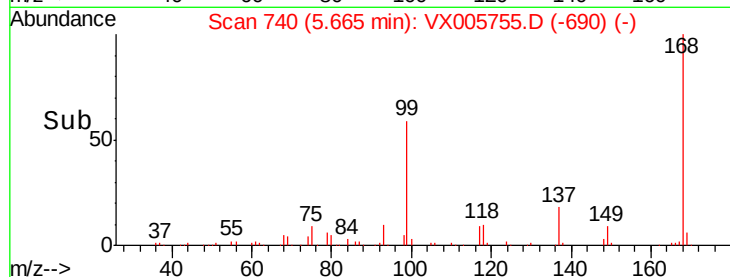
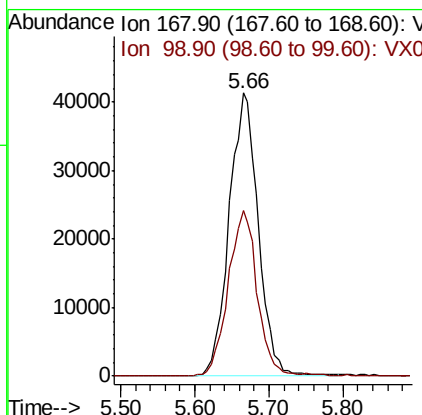
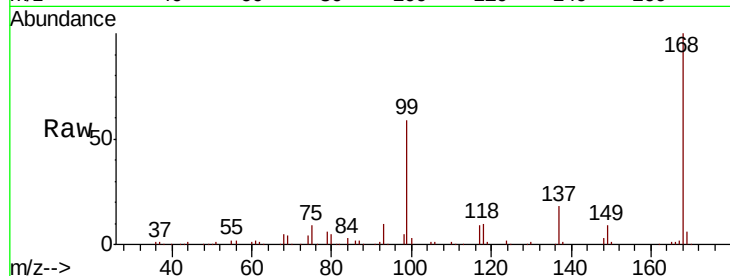




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.66 min Scan# 740  
Delta R.T. 0.01 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

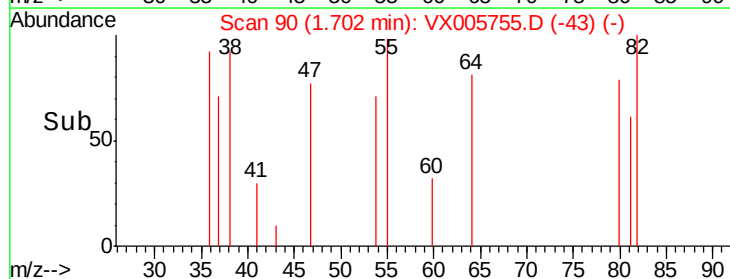
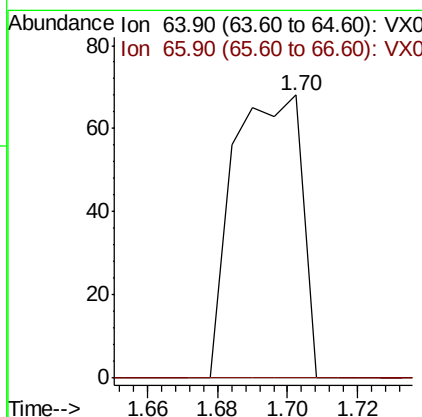
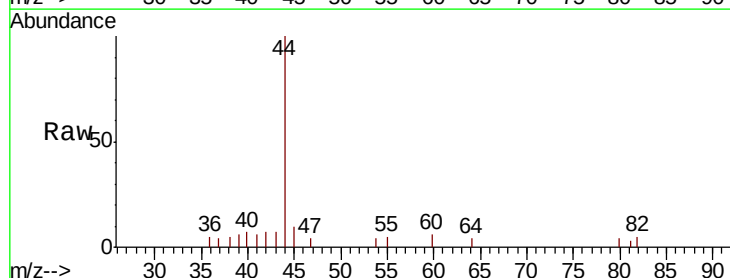
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#06

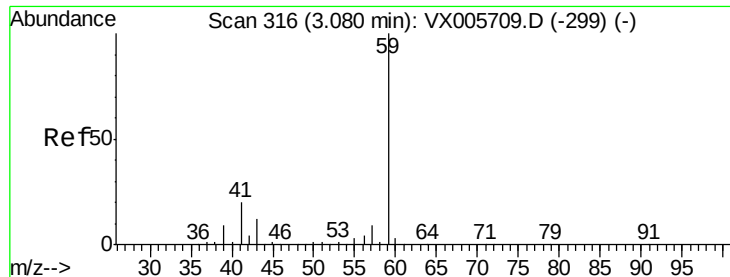
Tot Ion:168 Resp: 113068  
Ion Ratio Lower Upper  
168 100  
99 58.7 40.7 61.1



#6  
Chloroethane  
Concen: Below Cal  
RT: 1.70 min Scan# 90  
Delta R.T. -0.01 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion: 64 Resp: 92  
Ion Ratio Lower Upper  
64 100  
66 0.0 25.8 38.6#

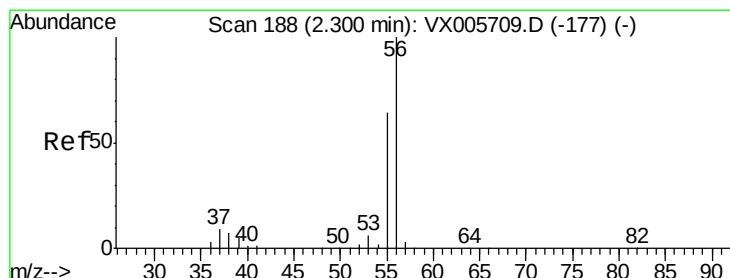
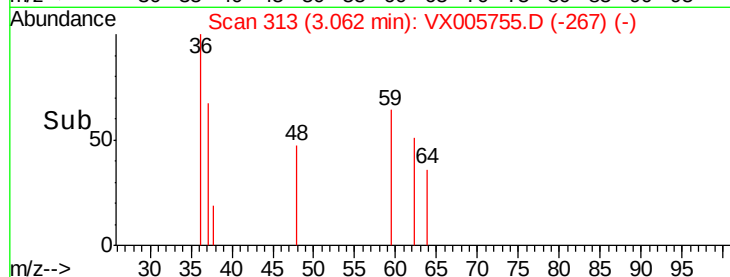
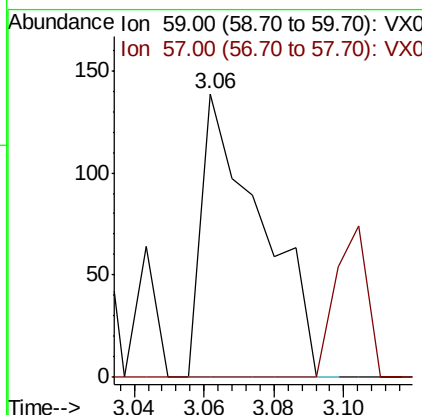
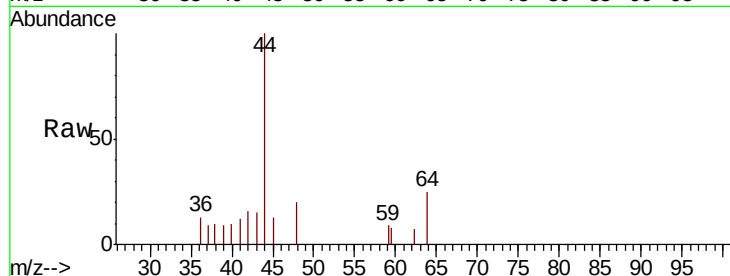




#11  
Tert butyl alcohol  
Concen: 0.365 ug/l  
RT: 3.06 min Scan# 313  
Delta R.T. -0.02 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

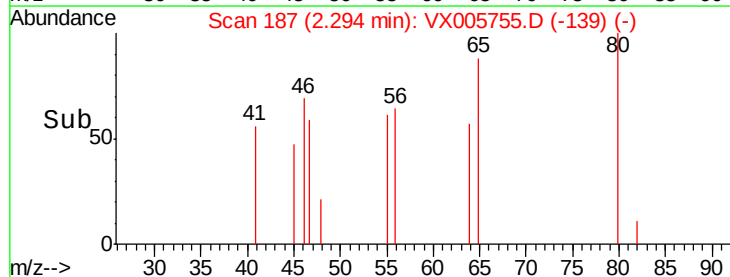
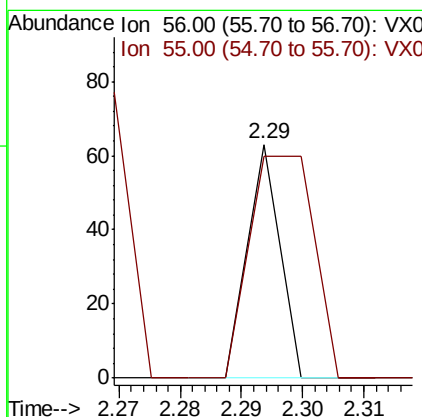
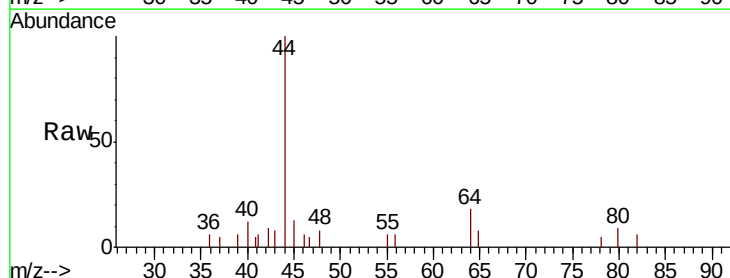
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#06

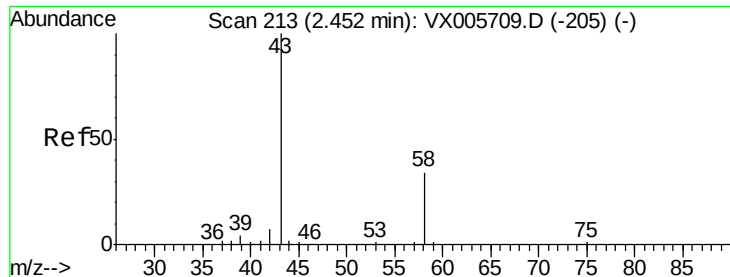
Tot Ion: 59 Resp: 164  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.5 12.7#



#13  
Acrolein  
Concen: 12.251 ug/l  
RT: 2.29 min Scan# 187  
Delta R.T. -0.01 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion: 56 Resp: 23  
Ion Ratio Lower Upper  
56 100  
55 191.3 57.3 85.9#





#16

Acetone

Concen: Below Cal

RT: 2.45 min Scan# 212

Delta R.T. -0.01 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

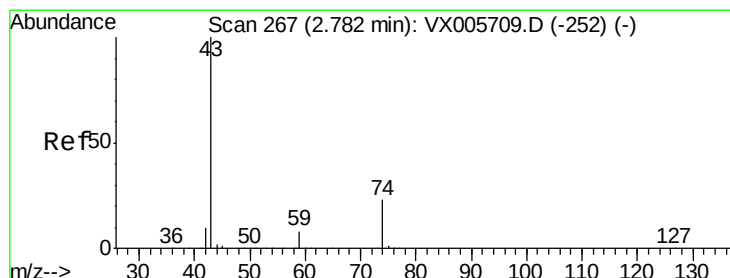
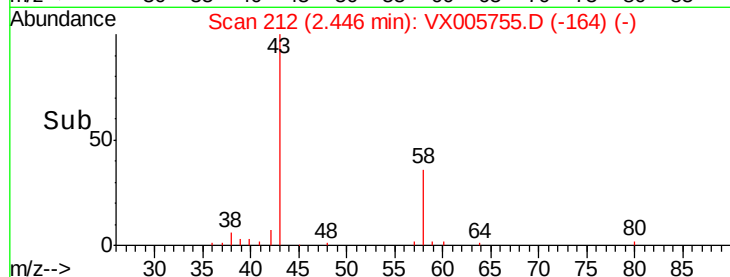
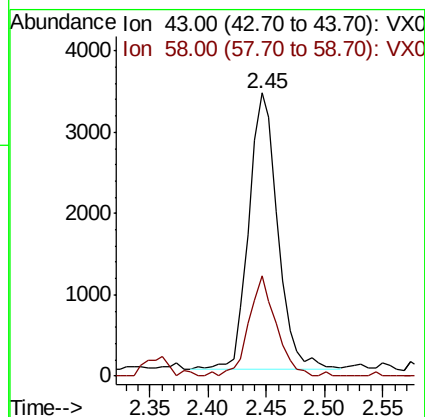
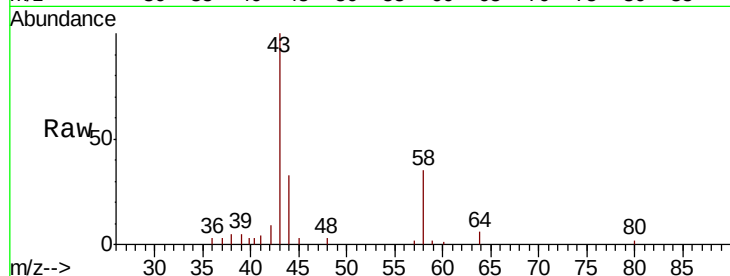
PB114401ZHE#06

Tot Ion: 43 Resp: 5853

Ion Ratio Lower Upper

43 100

58 36.4 23.8 35.6#



#18

Methyl Acetate

Concen: 2.830 ug/l

RT: 2.78 min Scan# 267

Delta R.T. -0.00 min

Lab File: VX005755.D

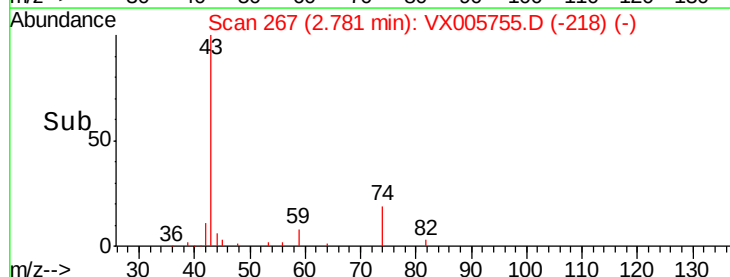
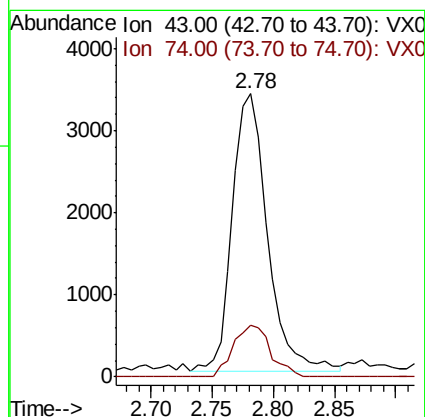
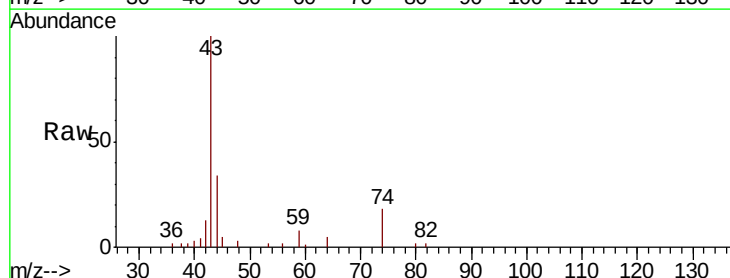
Acq: 02 Nov 2018 14:41

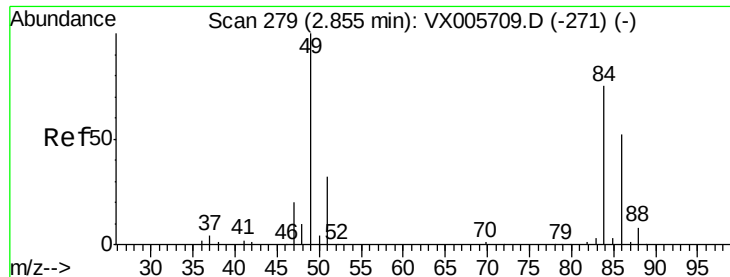
Tgt Ion: 43 Resp: 6713

Ion Ratio Lower Upper

43 100

74 19.6 16.8 25.2

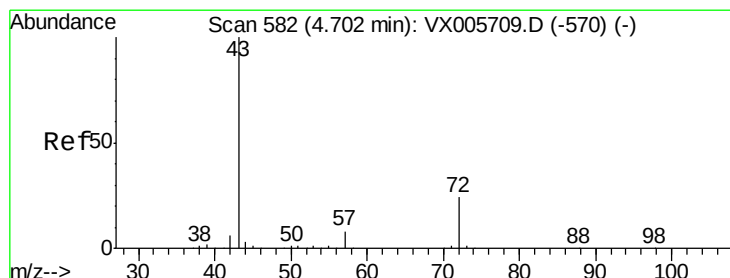
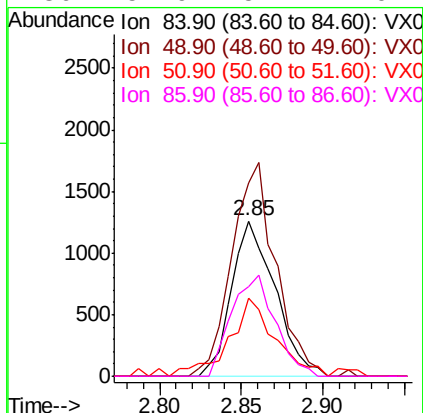
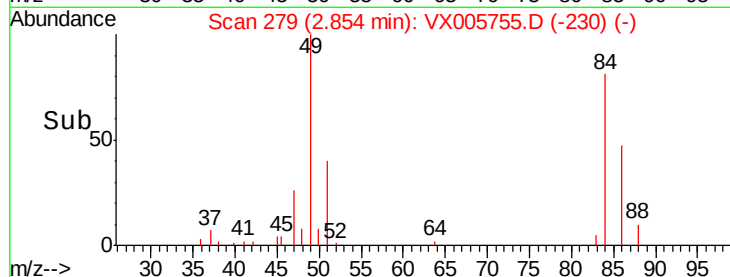
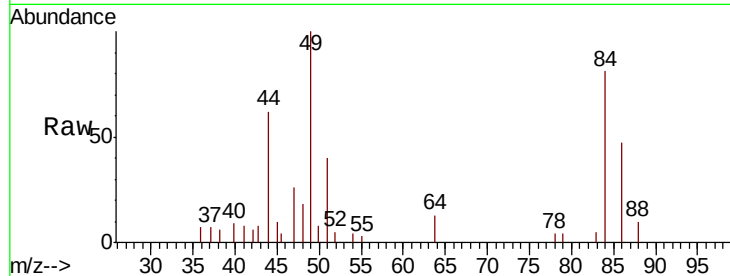




#20  
Methvlene Chloride  
Concen: 1.637 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. -0.00 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

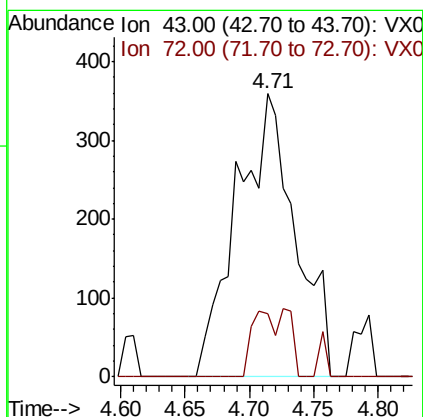
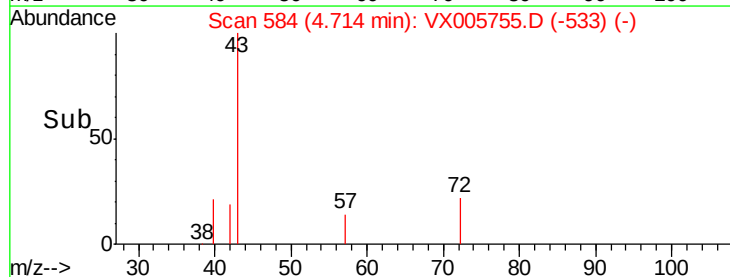
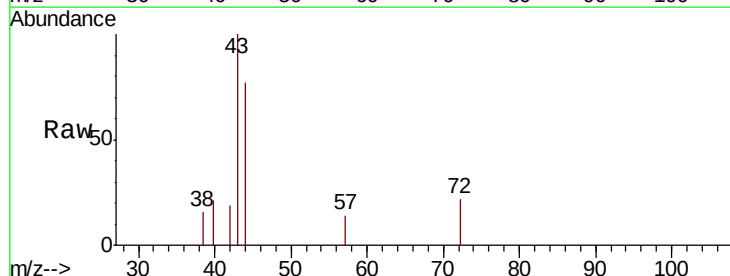
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#06

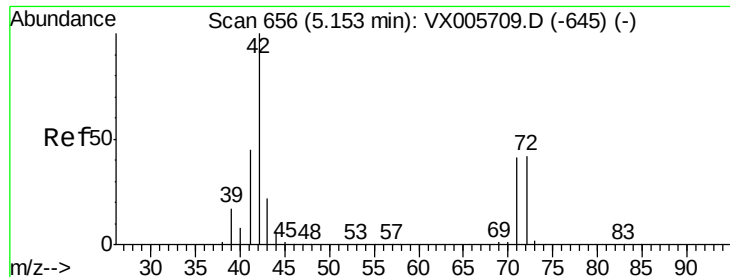
Tot Ion: 84 Resp: 2333  
Ion Ratio Lower Upper  
84 100  
49 124.2 109.5 164.3  
51 45.3 33.3 49.9  
86 57.9 52.7 79.1



#25  
2-Butanone  
Concen: 0.808 ug/l  
RT: 4.71 min Scan# 584  
Delta R.T. 0.01 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion: 43 Resp: 1127  
Ion Ratio Lower Upper  
43 100  
72 22.3 19.2 28.8

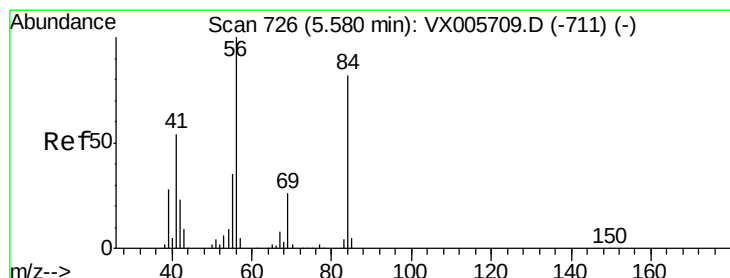
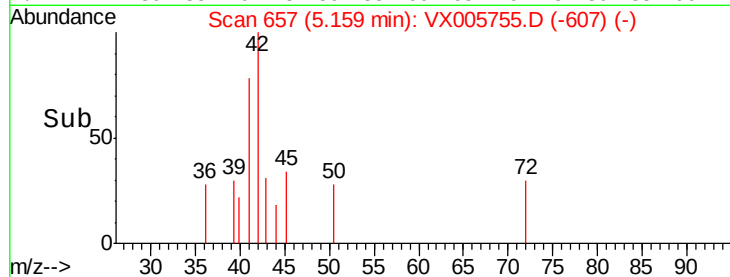
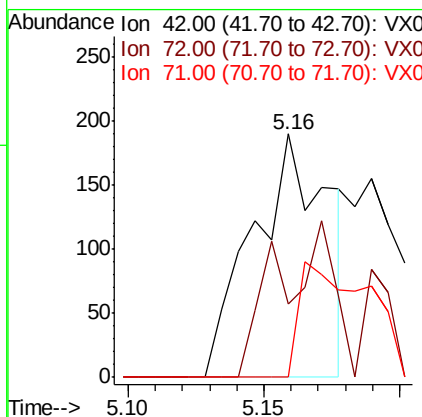
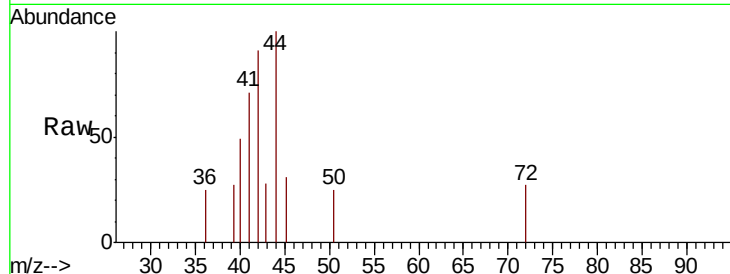




#29  
Tetrahydrofuran  
Concen: 0.428 ug/l  
RT: 5.16 min Scan# 657  
Delta R.T. 0.01 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

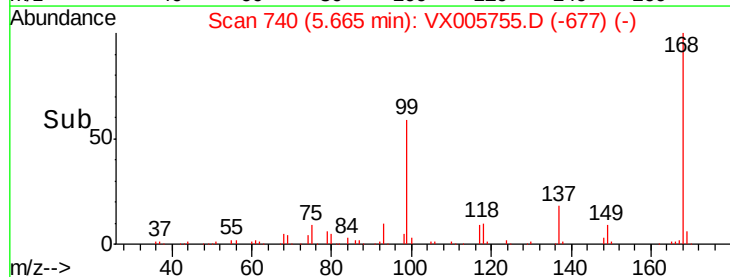
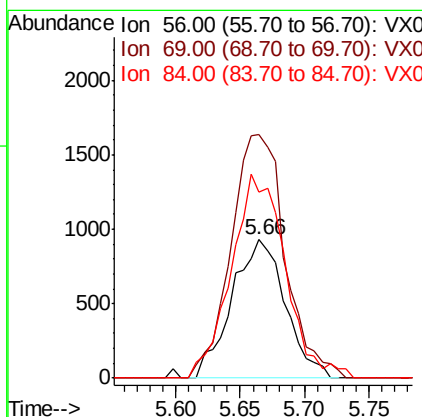
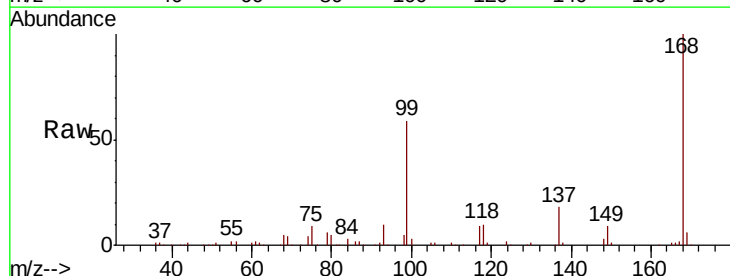
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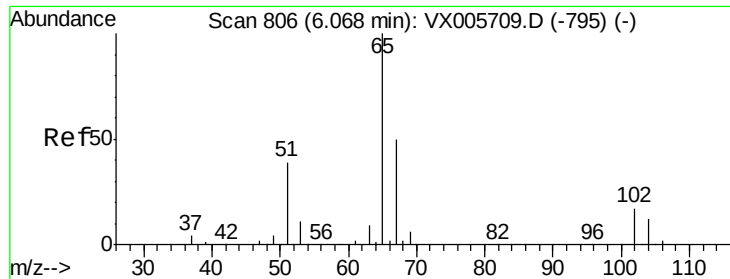
Tot Ion: 42 Resp: 364  
Ion Ratio Lower Upper  
42 100  
72 21.7 32.0 48.0#  
71 42.9 29.8 44.8



#31  
Cyclohexane  
Concen: 1.212 ug/l  
RT: 5.66 min Scan# 740  
Delta R.T. 0.09 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion: 56 Resp: 2678  
Ion Ratio Lower Upper  
56 100  
69 176.3 22.6 34.0#  
84 134.8 62.7 94.1#

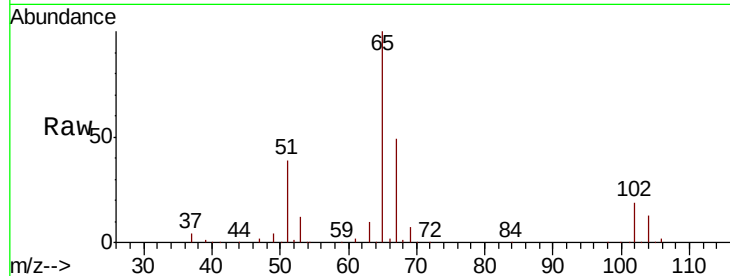




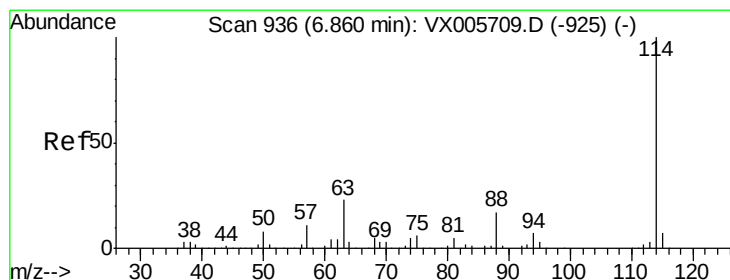
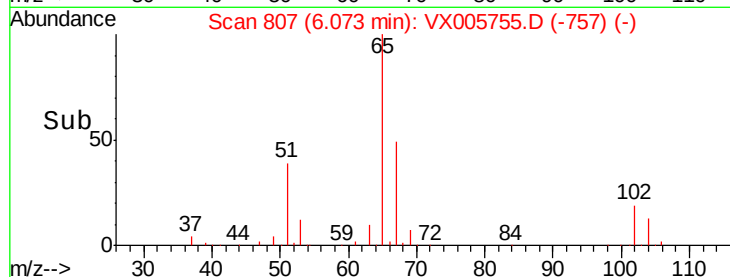
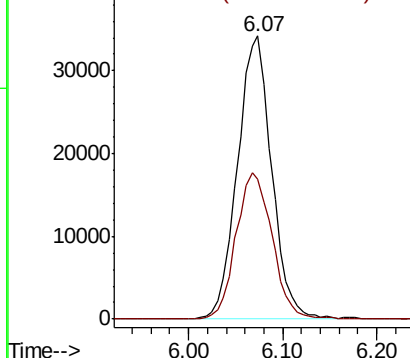
#33  
 1,2-Dichloroethane-d4  
 Concen: 52.203 ug/l  
 RT: 6.07 min Scan# 807  
 Delta R.T. 0.01 min  
 Lab File: VX005755.D  
 Acq: 02 Nov 2018 14:41

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB114401ZHE#06

Tot Ion: 65 Resp: 86296  
 Ion Ratio Lower Upper  
 65 100  
 67 54.6 0.0 105.0

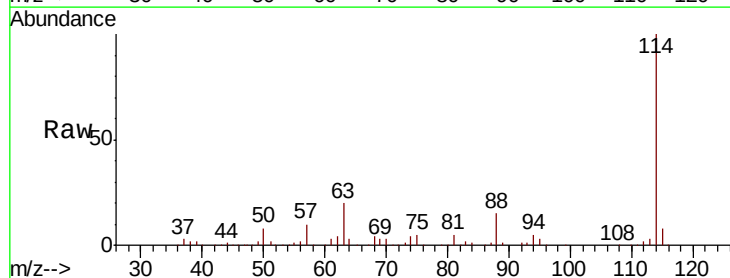


Abundance Ion 64.90 (64.60 to 65.60): VX0  
 Ion 66.90 (66.60 to 67.60): VX0

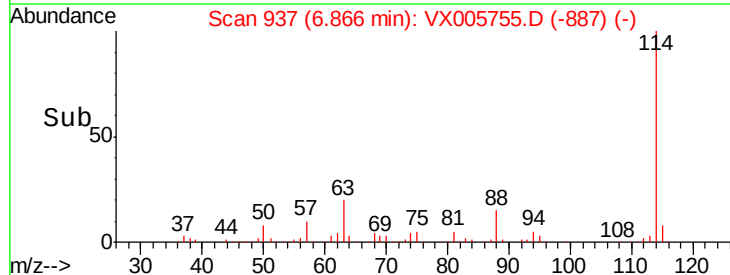
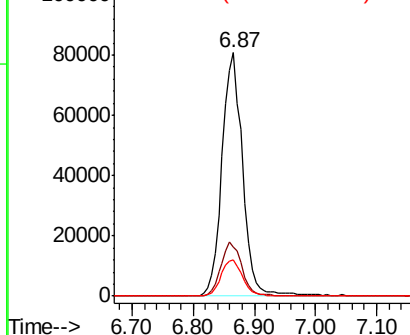


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.87 min Scan# 937  
 Delta R.T. 0.01 min  
 Lab File: VX005755.D  
 Acq: 02 Nov 2018 14:41

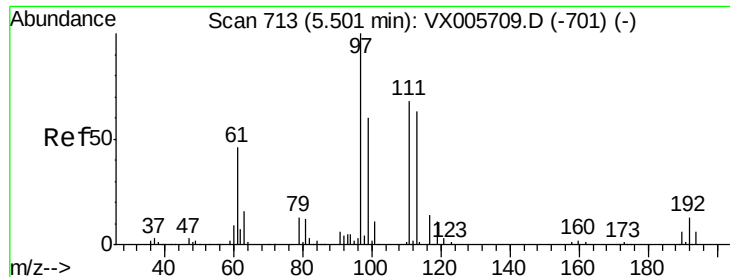
Tgt Ion: 114 Resp: 189640  
 Ion Ratio Lower Upper  
 114 100  
 63 20.3 0.0 42.8  
 88 14.8 0.0 31.2



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: 51.173 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#06

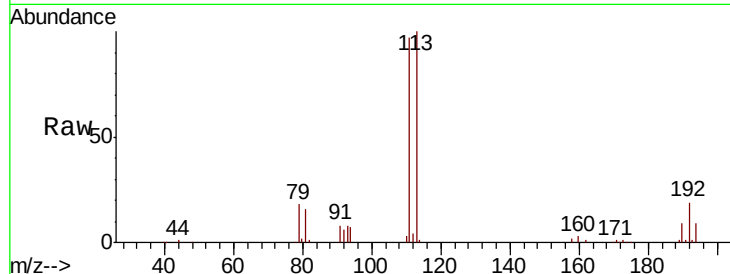
Tot Ion:113 Resp: 67195

Ion Ratio Lower Upper

113 100

111 102.8 82.3 123.5

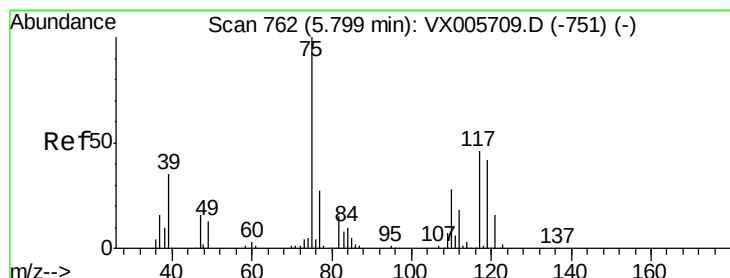
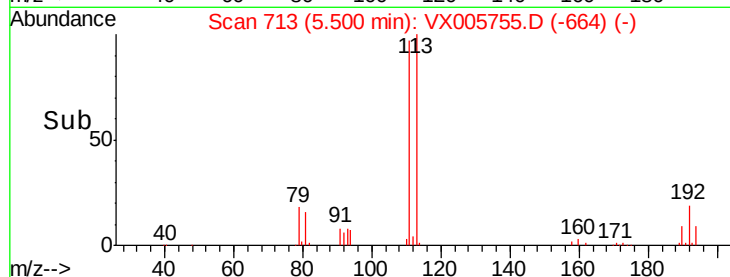
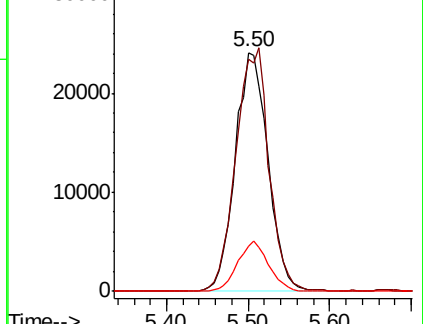
192 19.7 17.9 26.9



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: 4.965 ug/l

RT: 5.66 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

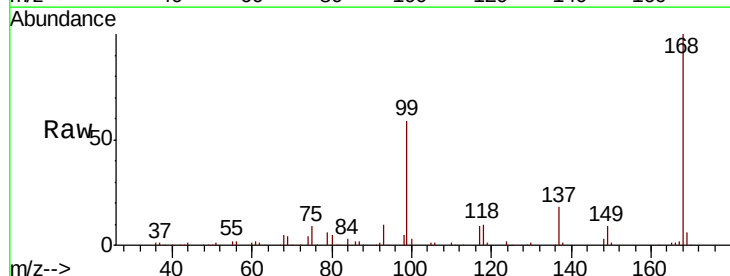
Tgt Ion: 75 Resp: 10031

Ion Ratio Lower Upper

75 100

110 8.0 17.4 52.2#

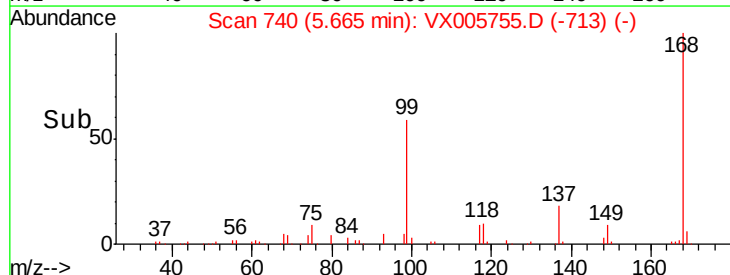
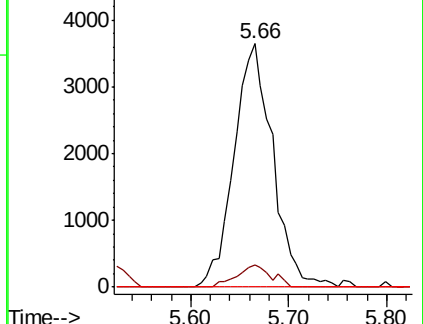
77 0.0 25.8 38.6#

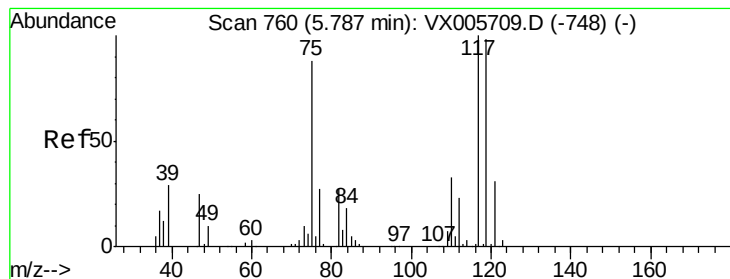


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.303 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.13 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#06

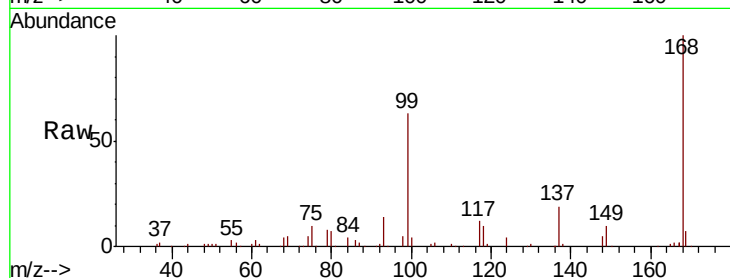
Tot Ion:117 Resp: 11505

Ion Ratio Lower Upper

117 100

119 7.3 78.1 117.1#

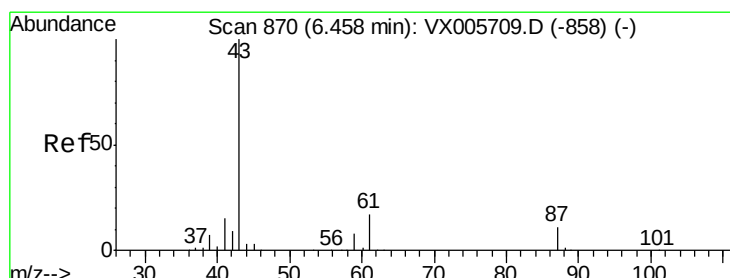
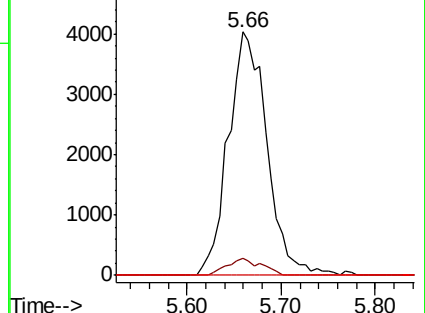
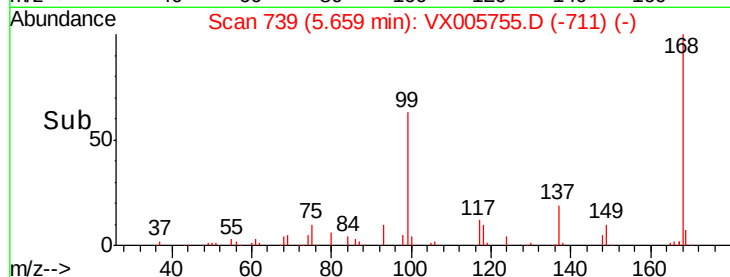
121 0.0 24.6 36.8#



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: 25.157 ug/l

RT: 6.46 min Scan# 871

Delta R.T. 0.01 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

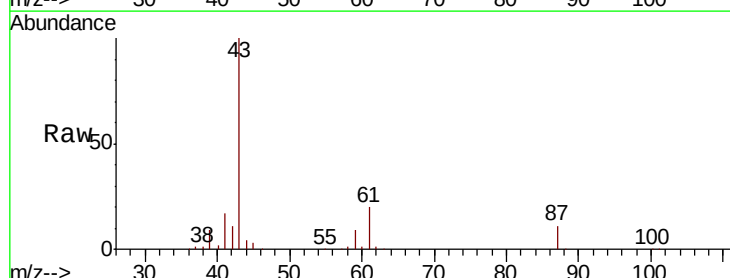
Tgt Ion: 43 Resp: 94120

Ion Ratio Lower Upper

43 100

61 19.4 14.6 22.0

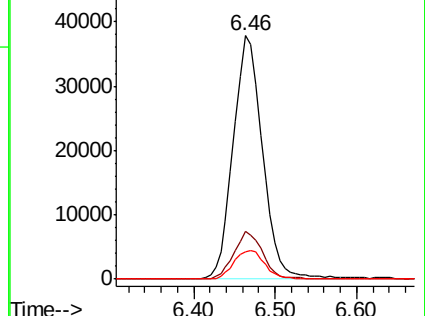
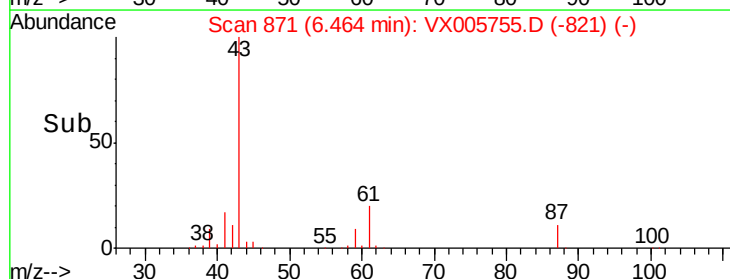
87 12.4 9.6 14.4

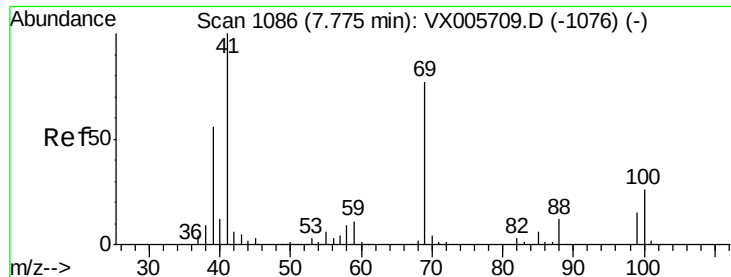


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

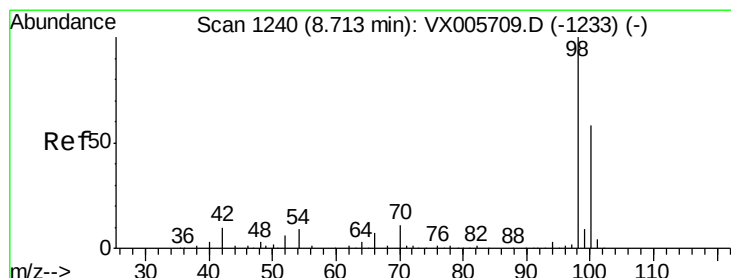
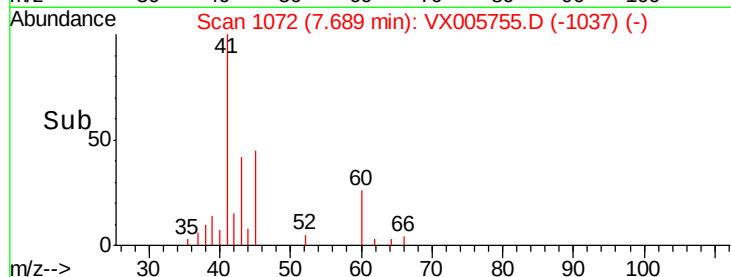
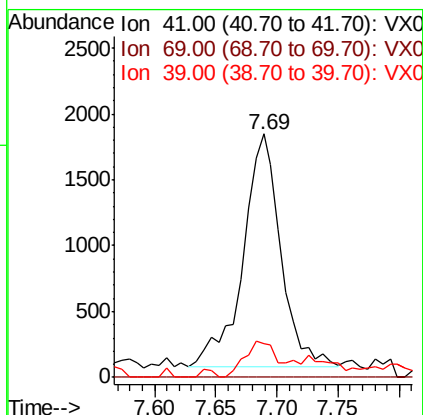
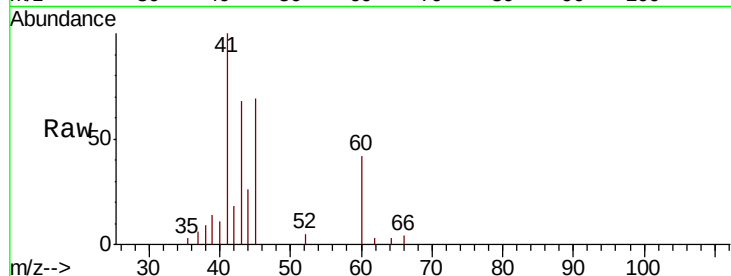




#48  
Methvl methacrylate  
Concen: 2.110 ug/l  
RT: 7.69 min Scan# 1072  
Delta R.T. -0.09 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

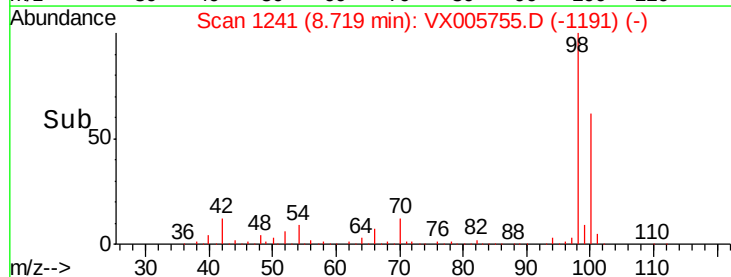
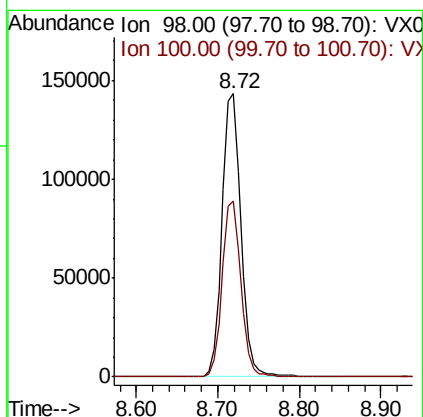
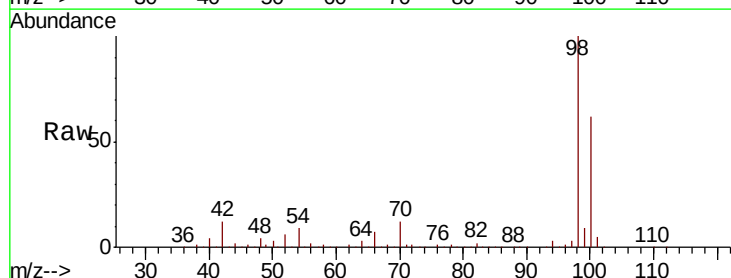
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#06

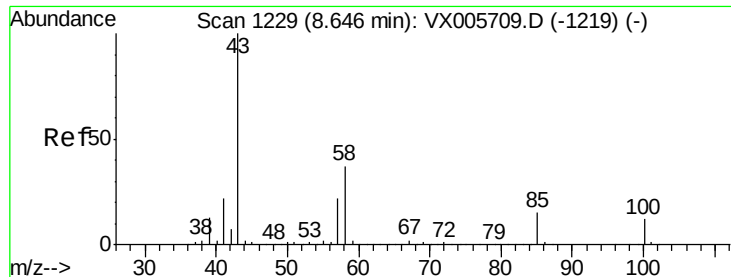
Tot Ion: 41 Resp: 3821  
Ion Ratio Lower Upper  
41 100  
69 0.0 63.2 94.8#  
39 12.9 42.2 63.2#



#50  
Toluene-d8  
Concen: 50.375 ug/l  
RT: 8.72 min Scan# 1241  
Delta R.T. 0.01 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion: 98 Resp: 231997  
Ion Ratio Lower Upper  
98 100  
100 61.4 51.3 76.9





#51

4-Methyl-2-Pentanone

Concen: 0.618 ug/l

RT: 8.62 min Scan# 1225

Delta R.T. -0.02 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

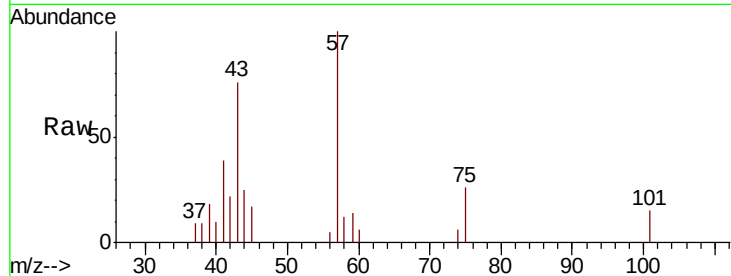
PB114401ZHE#06

Tot Ion: 43 Resp: 1576

Ion Ratio Lower Upper

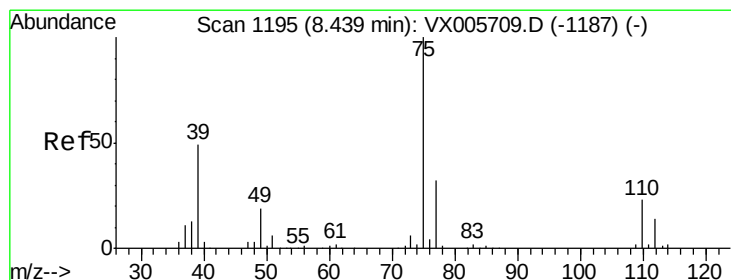
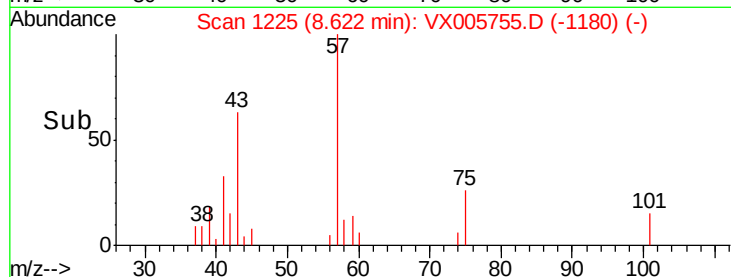
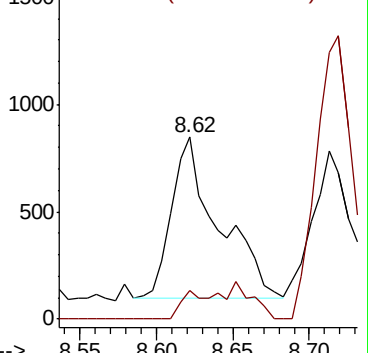
43 100

58 9.3 29.7 44.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#54

cis-1,3-Dichloropropene

Concen: 0.250 ug/l

RT: 8.63 min Scan# 1226

Delta R.T. 0.19 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

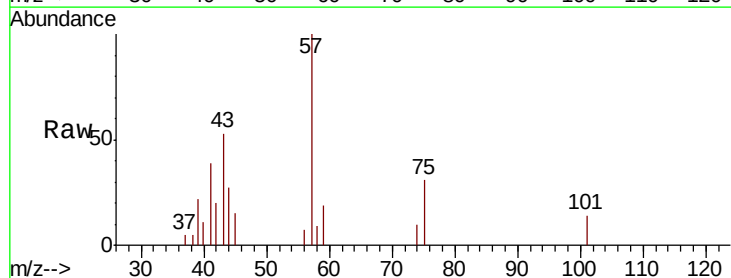
Tgt Ion: 75 Resp: 537

Ion Ratio Lower Upper

75 100

77 0.0 25.2 37.8#

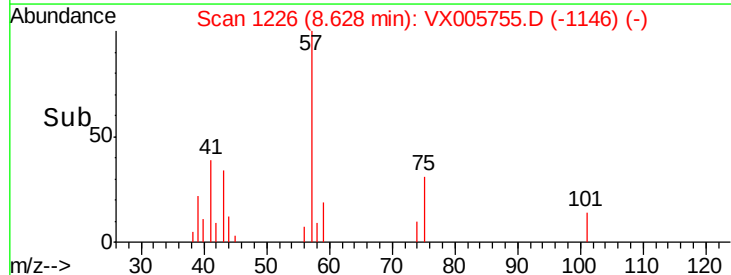
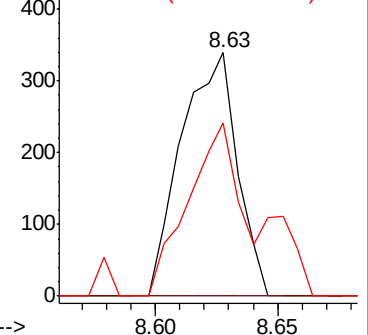
39 71.1 38.2 57.2#

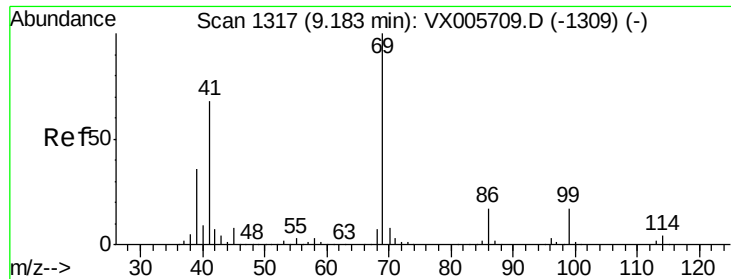


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0

Ion 39.00 (38.70 to 39.70): VX0





#56

Ethyl methacrylate

Concen: 2.495 ug/l

RT: 9.38 min Scan# 1349

Delta R.T. 0.20 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#06

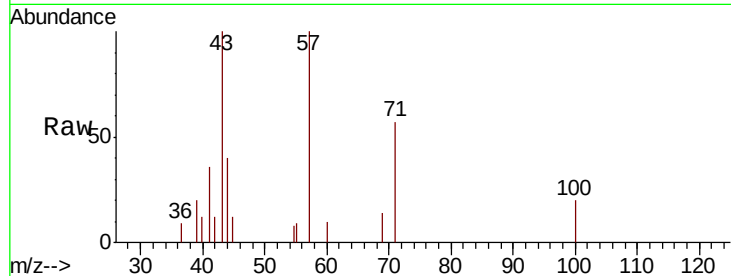
Tot Ion: 69 Resp: 60

Ion Ratio Lower Upper

69 100

41 0.0 57.0 85.6#

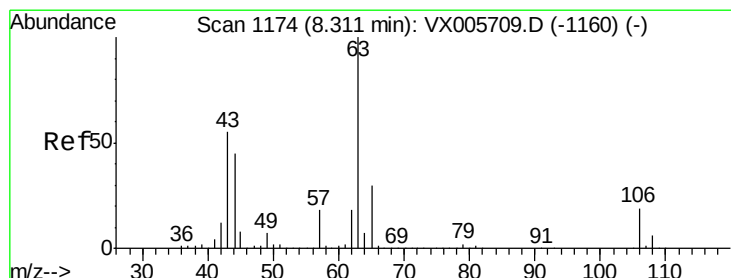
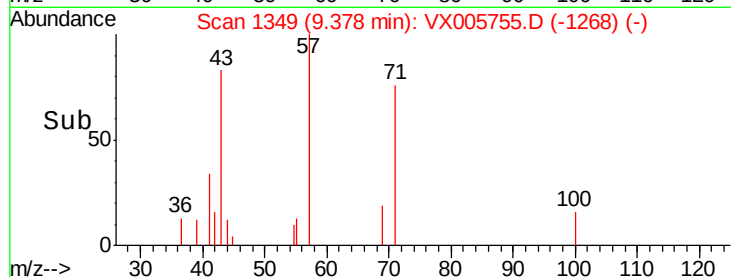
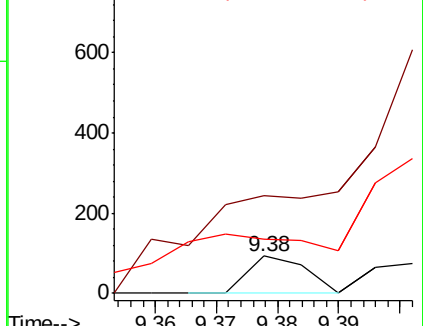
39 485.0 28.3 42.5#



Abundance Ion 69.00 (68.70 to 69.70): VX0

Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0



#58

2-Chloroethyl Vinyl ether

Concen: 10.351 ug/l

RT: 8.52 min Scan# 1208

Delta R.T. 0.21 min

Lab File: VX005755.D

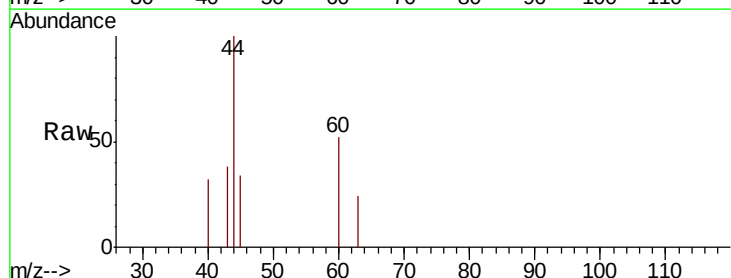
Acq: 02 Nov 2018 14:41

Tgt Ion: 63 Resp: 19

Ion Ratio Lower Upper

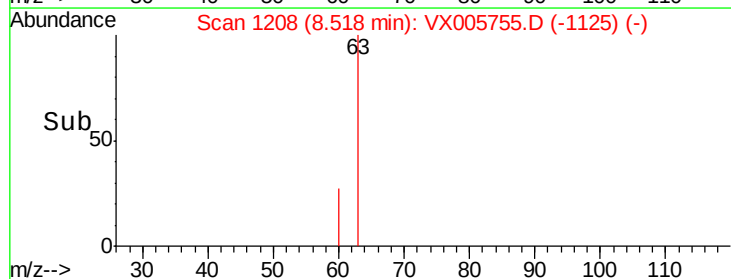
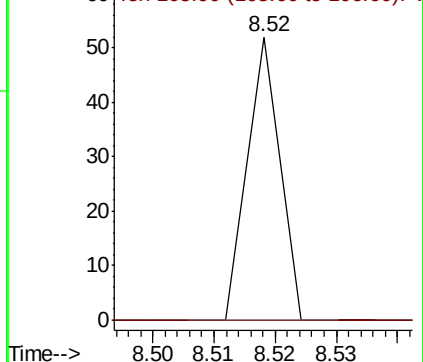
63 100

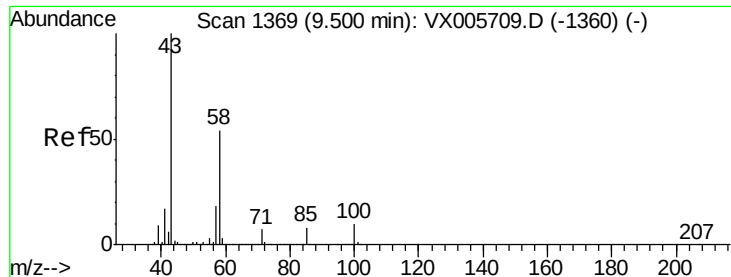
106 0.0 21.3 31.9#



Abundance Ion 62.90 (62.60 to 63.60): VX0

Ion 105.90 (105.60 to 106.60): V

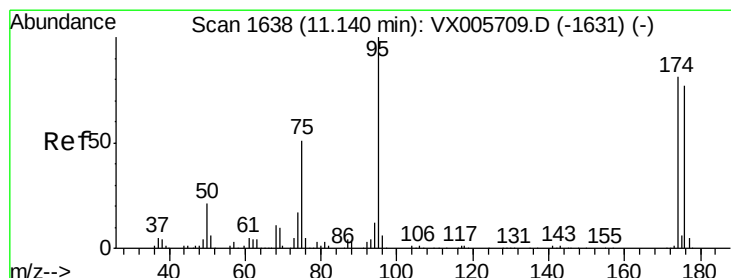
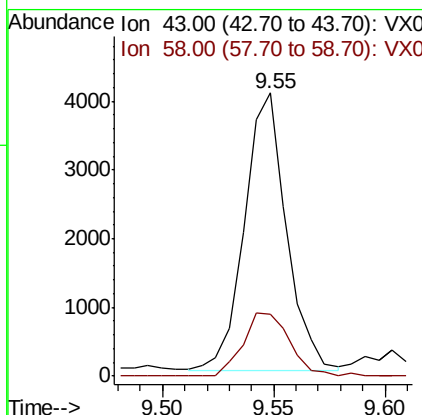
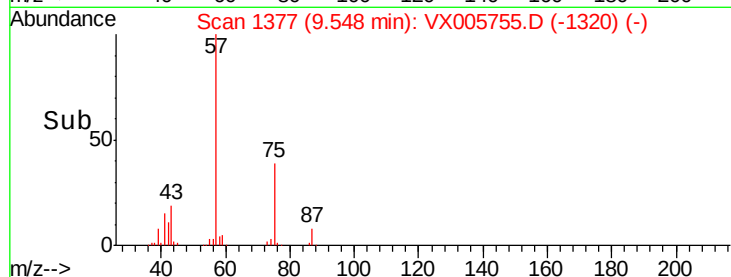
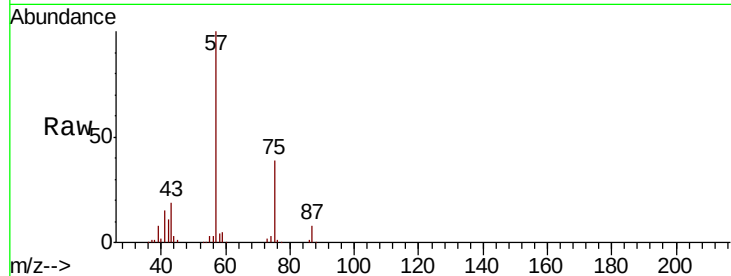




#59  
2-Hexanone  
Concen: 2.550 ug/l  
RT: 9.55 min Scan# 1377  
Delta R.T. 0.05 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

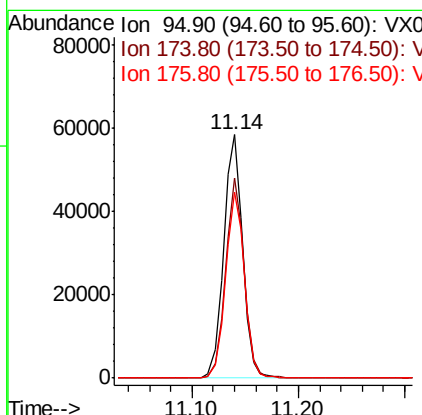
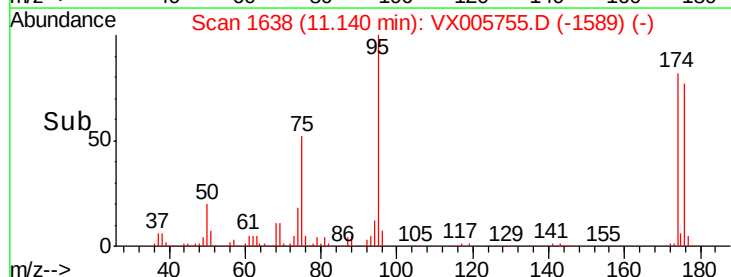
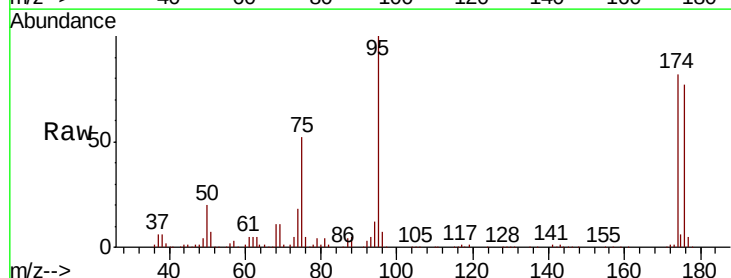
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#06

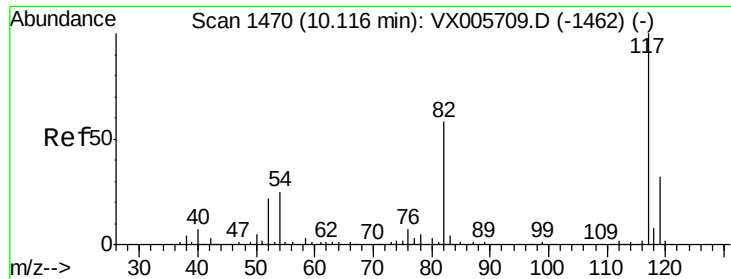
Tot Ion: 43 Resp: 5294  
Ion Ratio Lower Upper  
43 100  
58 25.6 25.9 77.8#



#62  
4-Bromofluorobenzene  
Concen: 42.698 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. -0.00 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion: 95 Resp: 72574  
Ion Ratio Lower Upper  
95 100  
174 80.6 0.0 184.4  
176 76.5 0.0 177.4

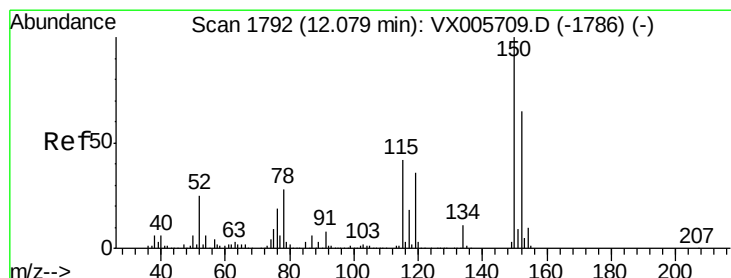
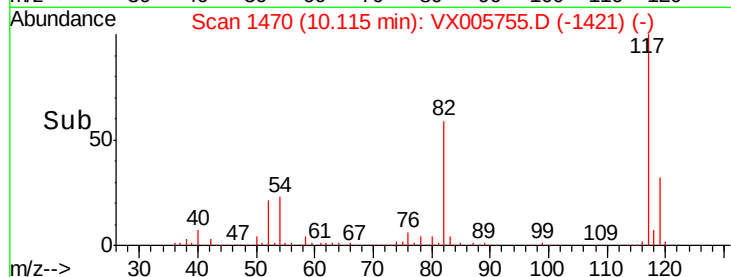
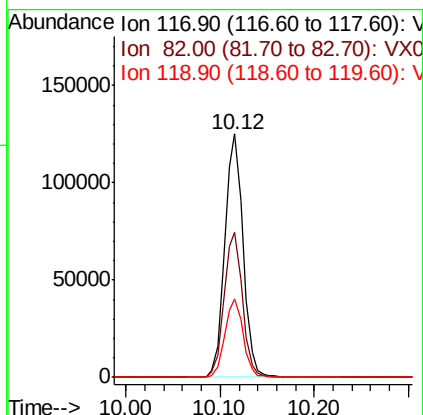
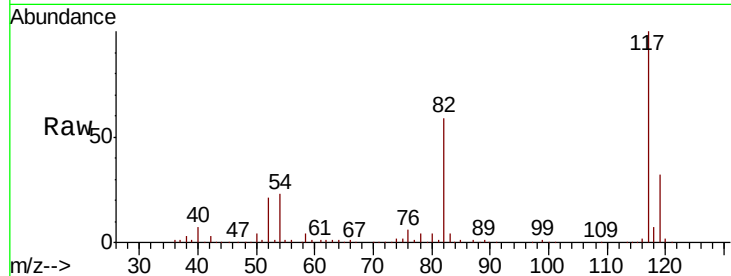




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. -0.00 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

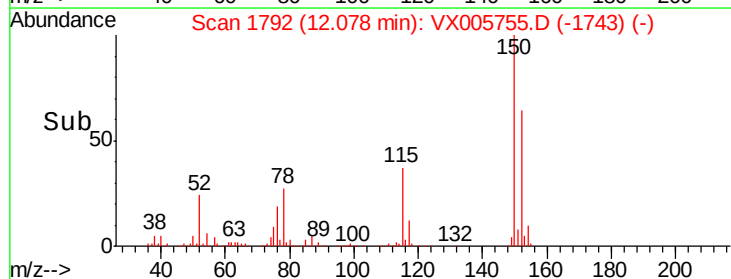
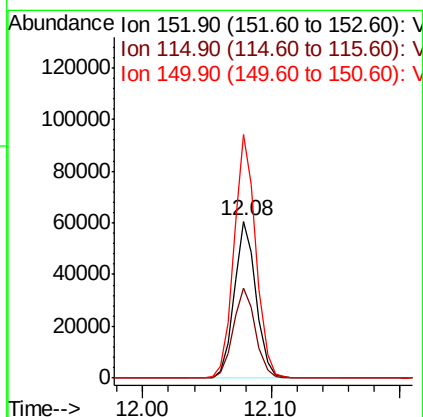
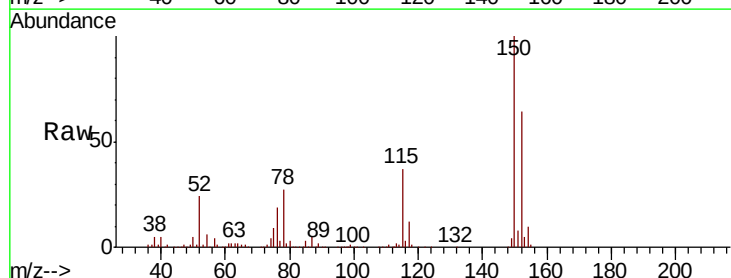
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB114401ZHE#06

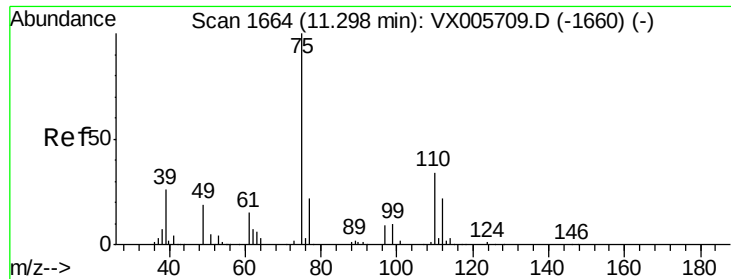
Tot Ion:117 Resp: 168616  
Ion Ratio Lower Upper  
117 100  
82 59.4 44.1 66.1  
119 32.4 26.2 39.2



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX005755.D  
Acq: 02 Nov 2018 14:41

Tgt Ion:152 Resp: 71312  
Ion Ratio Lower Upper  
152 100  
115 58.6 39.4 118.1  
150 155.8 0.0 346.4





#76

1,2,3-Trichloropropane

Concen: 21.516 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

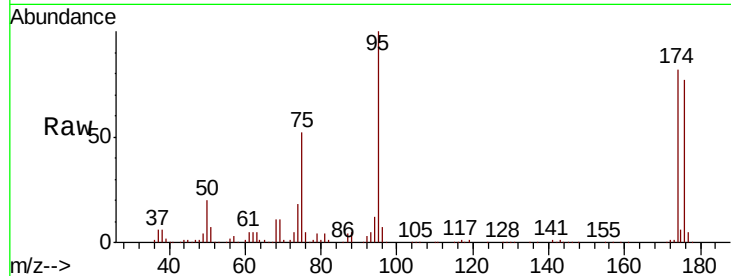
PB114401ZHE#06

Tot Ion: 75 Resp: 38215

Ion Ratio Lower Upper

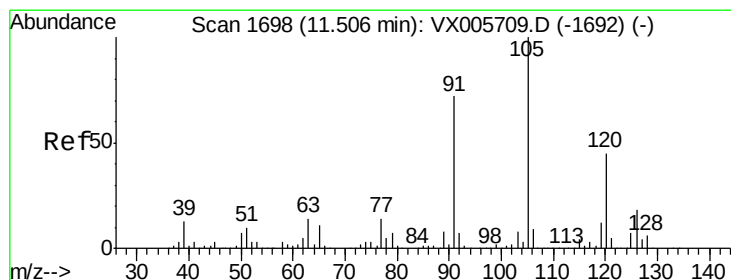
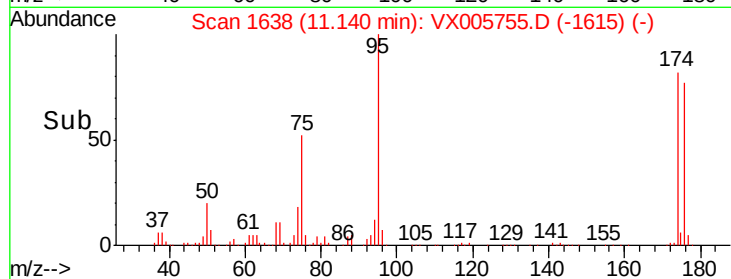
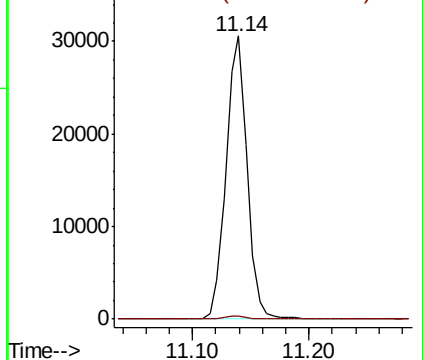
75 100

77 1.2 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: 0.213 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. -0.00 min

Lab File: VX005755.D

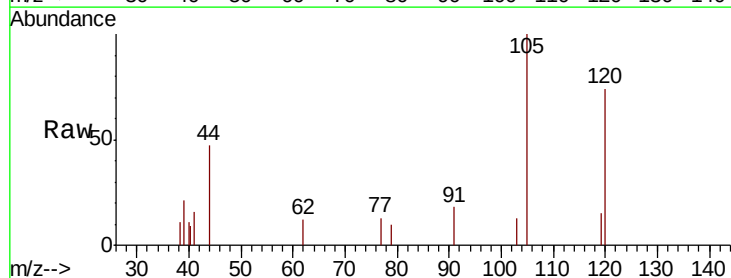
Acq: 02 Nov 2018 14:41

Tgt Ion: 105 Resp: 852

Ion Ratio Lower Upper

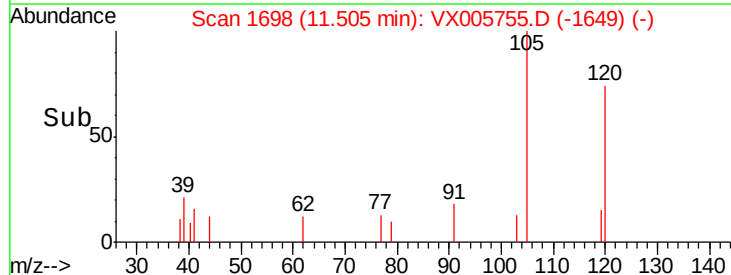
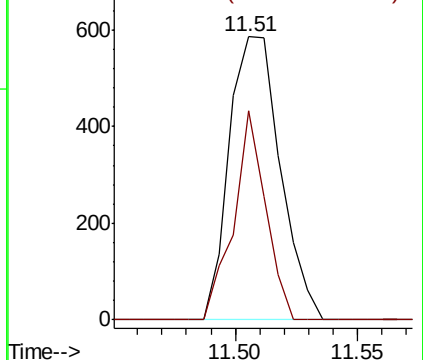
105 100

120 45.9 24.1 72.2

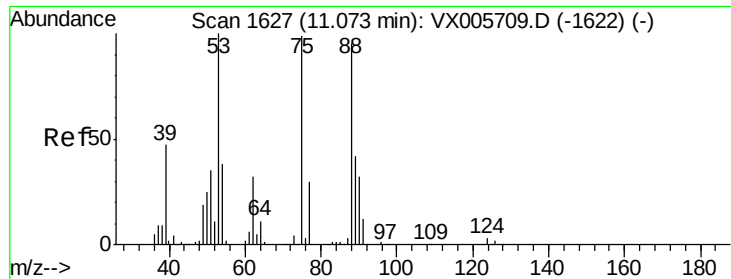


Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V







#81

trans-1,4-Dichloro-2-butene

Concen: 69.517 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.07 min

Lab File: VX005755.D

Acq: 02 Nov 2018 14:41

Instrument :

MSVOA\_X

ClientSampleId :

PB114401ZHE#06

Tot Ion: 75 Resp: 38215

Ion Ratio Lower Upper

75 100

53 0.4 80.2 120.2#

89 0.0 39.8 59.8#

