

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX090718\  
 Data File : VX004431.D  
 Acq On : 08 Sep 2018 02:45  
 Operator : JC/MD  
 Sample : PB112672ZHE#07  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB112672ZHE#07

Quant Time: Sep 08 04:59:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082218W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 23 05:39:44 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 293865   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 490699   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 451208   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 261782   | 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   | 210473   | 54.95 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.90% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 184922   | 50.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.32% |          |
| 50) Toluene-d8              | 8.72  | 98   | 693005   | 50.29 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.58% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 244554   | 47.57 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.14%  |          |

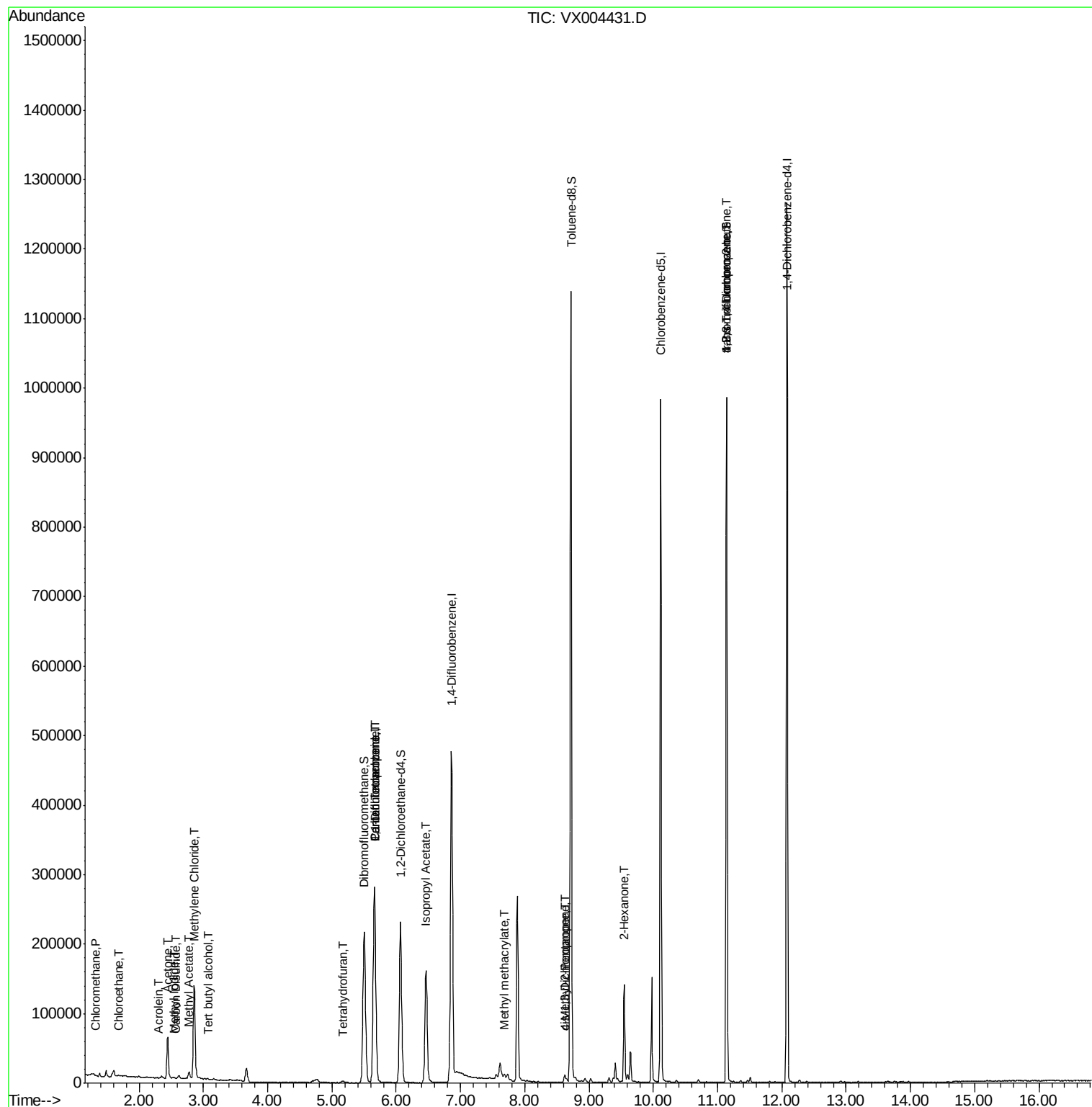
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 3) Chloromethane               | 1.32  | 50   | 637      | 0.46      | ug/l  | # 76   |
| 5) Bromomethane                | 1.65  | 94   | 297      | Below Cal |       | 97     |
| 6) Chloroethane                | 1.67  | 64   | 10358    | 4.31      | ug/l  | # 50   |
| 10) Methyl Iodide              | 2.53  | 142  | 342      | 4.35      | ug/l  | # 71   |
| 11) Tert butyl alcohol         | 3.07  | 59   | 1027     | 1.26      | ug/l  | # 94   |
| 13) Acrolein                   | 2.29  | 56   | 435      | 2.21      | ug/l  | # 16   |
| 16) Acetone                    | 2.45  | 43   | 64581    | 34.34     | ug/l  | 96     |
| 17) Carbon Disulfide           | 2.57  | 76   | 657      | 0.87      | ug/l  | # 2    |
| 18) Methyl Acetate             | 2.78  | 43   | 13528    | 2.38      | ug/l  | 97     |
| 20) Methylene Chloride         | 2.85  | 84   | 65600    | 17.79     | ug/l  | 95     |
| 25) 2-Butanone                 | 4.70  | 43   | 5992     | Below Cal |       | 94     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 2259     | 1.37      | ug/l  | # 82   |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 19189    | 3.48      | ug/l  | # 49   |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 25429    | 4.90      | ug/l  | # 16   |
| 43) Isopropyl Acetate          | 6.46  | 43   | 207948   | 24.94     | ug/l  | 100    |
| 48) Methyl methacrylate        | 7.68  | 41   | 8941     | 2.00      | ug/l  | # 21   |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 3021     | 0.50      | ug/l  | # 46   |
| 54) cis-1,3-Dichloropropene    | 8.62  | 75   | 1681     | 0.27      | ug/l  | # 69   |
| 59) 2-Hexanone                 | 9.55  | 43   | 14463    | 3.13      | ug/l  | # 56   |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 116946   | 21.97     | ug/l  | # 37   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 116946   | 71.27     | ug/l  | # 10   |
| 94) Hexachlorobutadiene        | 13.79 | 225  | 121      | Below Cal |       | # 46   |

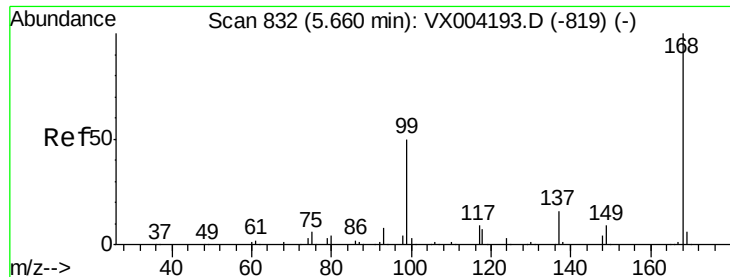
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Thu Aug 23 05:39:44 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.00 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

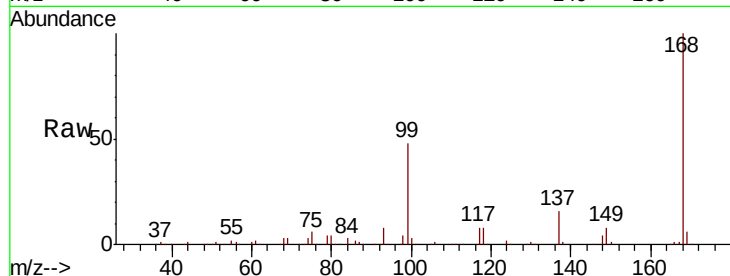
PB112672ZHE#07

Tot Ion:168 Resp: 293865

Ion Ratio Lower Upper

168 100

99 47.5 39.9 59.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

120000

100000

80000

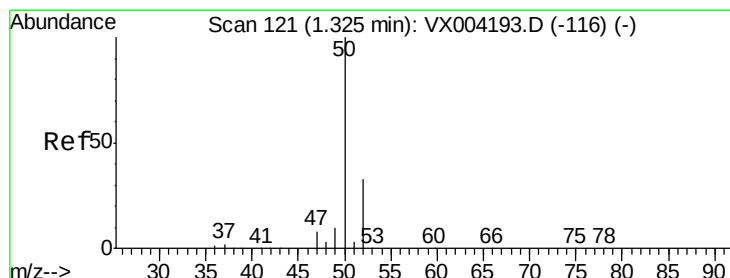
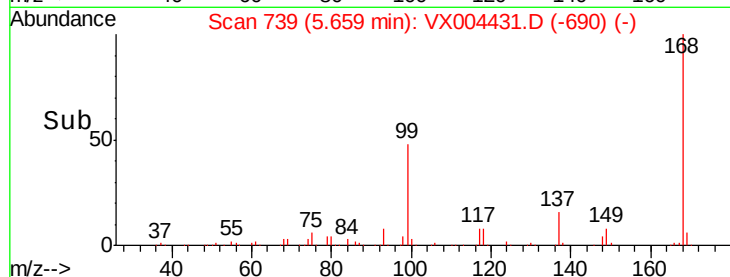
60000

40000

20000

0

Time-->



#3

Chloromethane

Concen: 0.46 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX004431.D

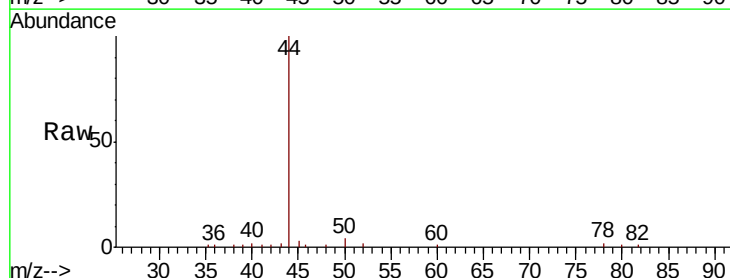
Acq: 08 Sep 2018 02:45

Tgt Ion: 50 Resp: 637

Ion Ratio Lower Upper

50 100

52 46.3 26.2 39.2#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

400

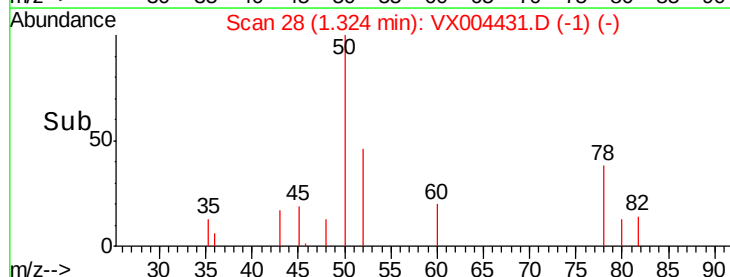
300

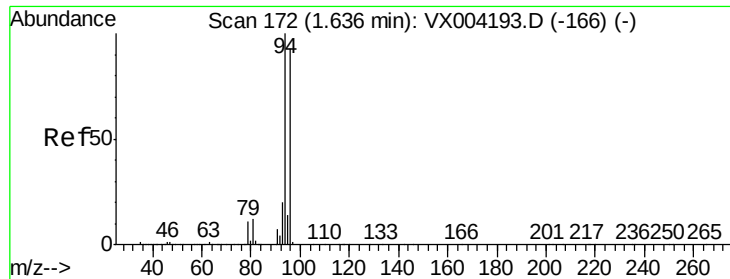
200

100

0

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

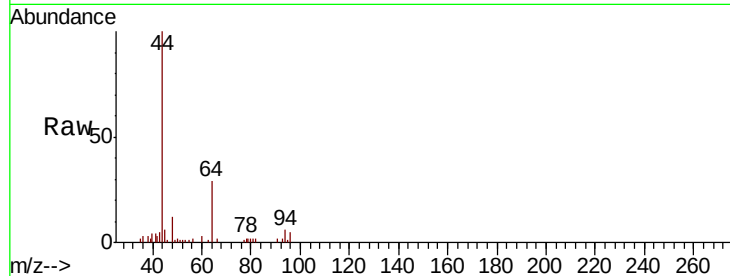
PB112672ZHE#07

Tot Ion: 94 Resp: 297

Ion Ratio Lower Upper

94 100

96 90.6 74.5 111.7



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.65

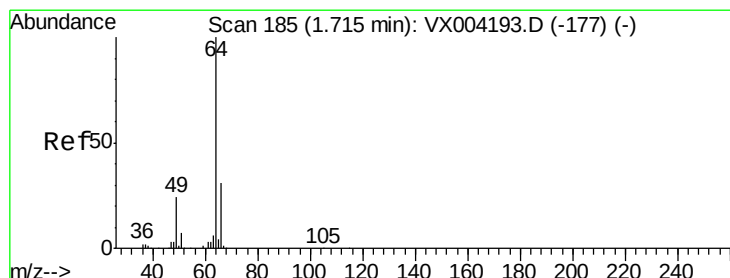
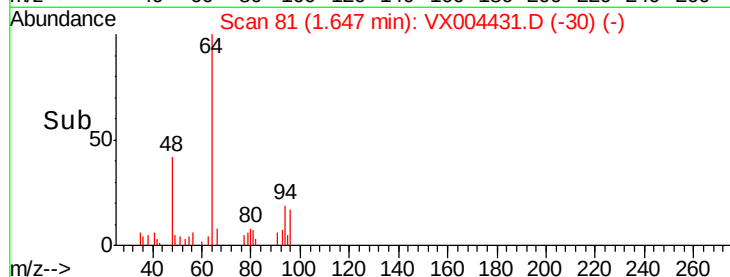
300

200

100

0

Time-->



#6

Chloroethane

Concen: 4.31 ug/l

RT: 1.67 min Scan# 85

Delta R.T. -0.04 min

Lab File: VX004431.D

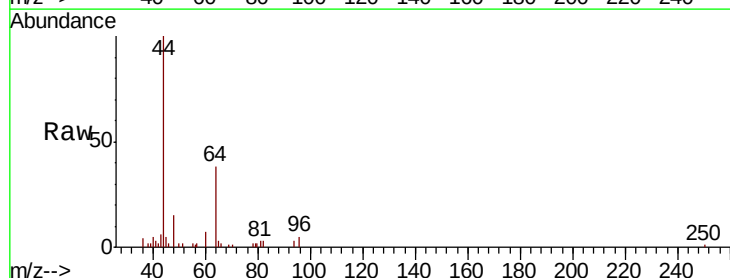
Acq: 08 Sep 2018 02:45

Tgt Ion: 64 Resp: 10358

Ion Ratio Lower Upper

64 100

66 3.2 24.6 36.8#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.67

2000

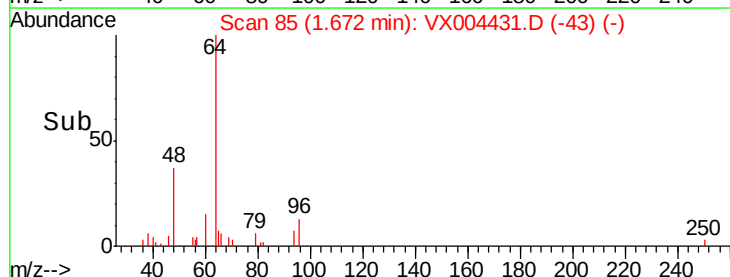
1500

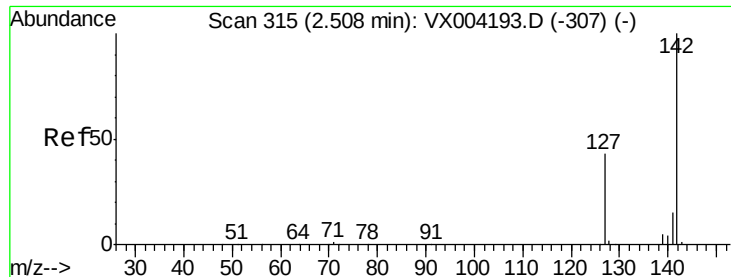
1000

500

0

Time-->

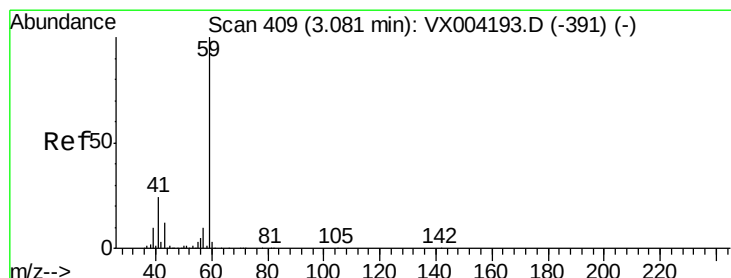
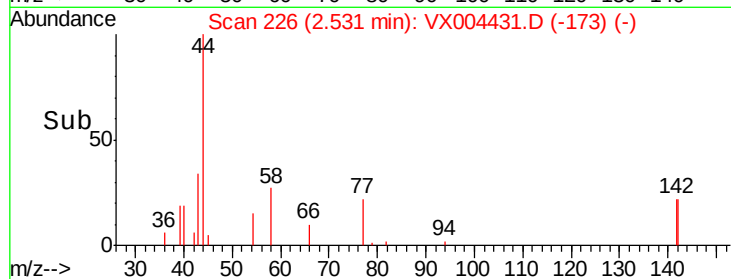
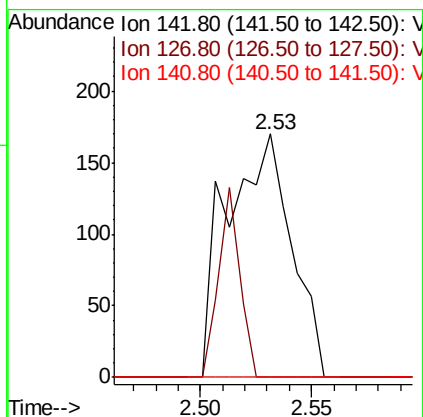
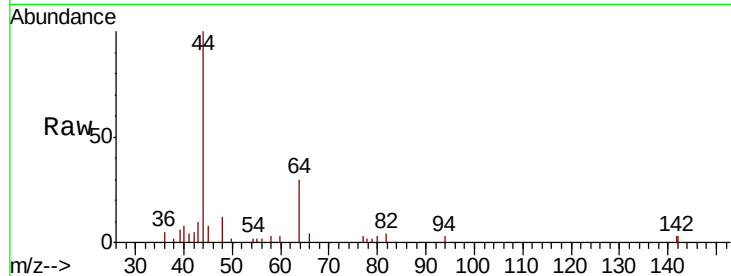




#10  
Methyl Iodide  
Concen: 4.35 ug/l  
RT: 2.53 min Scan# 226  
Delta R.T. 0.02 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

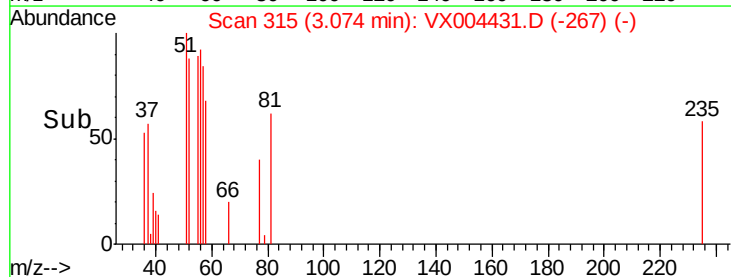
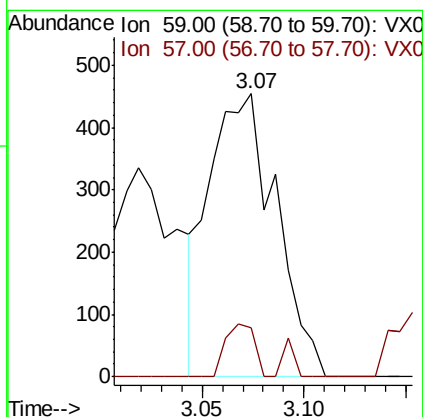
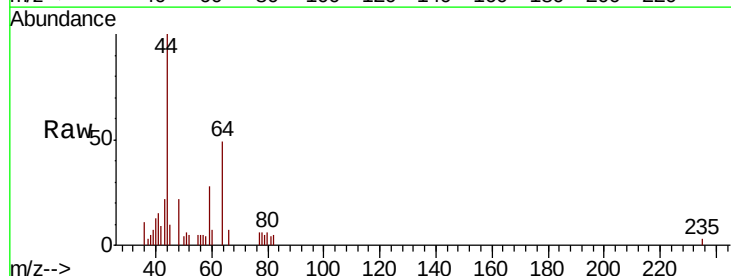
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB112672ZHE#07

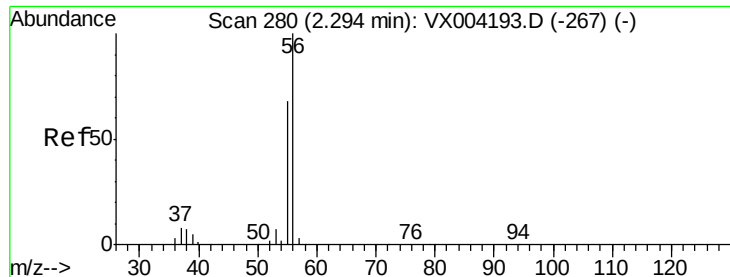
Tot Ion:142 Resp: 342  
Ion Ratio Lower Upper  
142 100  
127 25.4 33.8 50.6#  
141 0.0 11.4 17.0#



#11  
Tert butyl alcohol  
Concen: 1.26 ug/l  
RT: 3.07 min Scan# 315  
Delta R.T. -0.01 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

Tgt Ion: 59 Resp: 1027  
Ion Ratio Lower Upper  
59 100  
57 8.1 8.2 12.4#

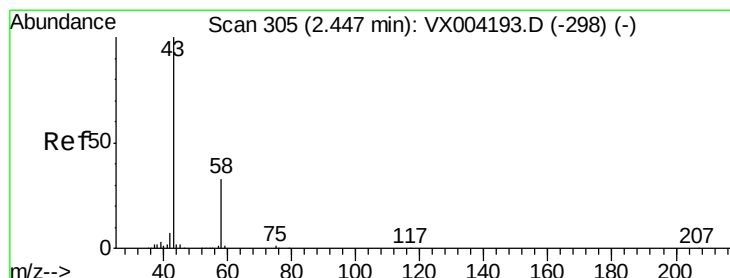
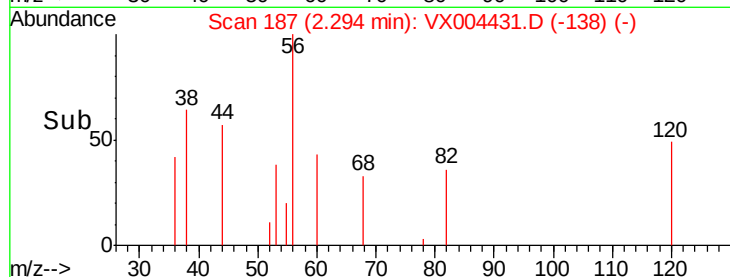
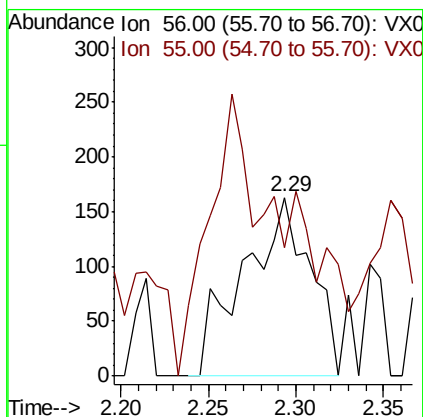
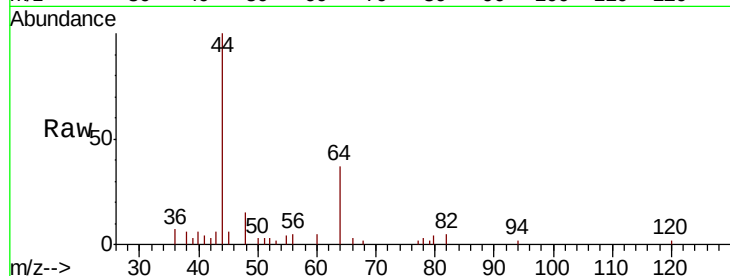




#13  
Acrolein  
Concen: 2.21 ug/l  
RT: 2.29 min Scan# 187  
Delta R.T. -0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

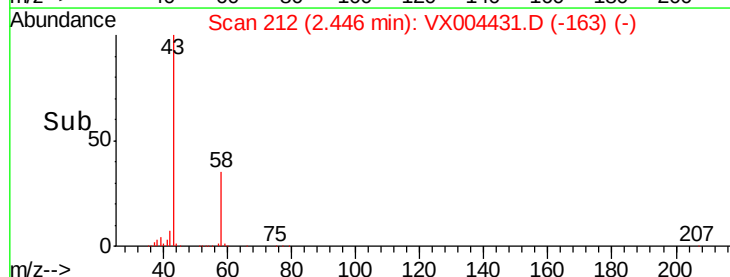
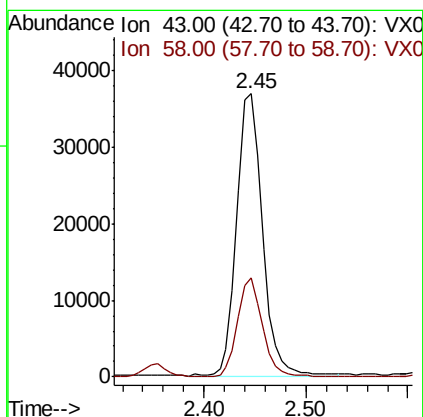
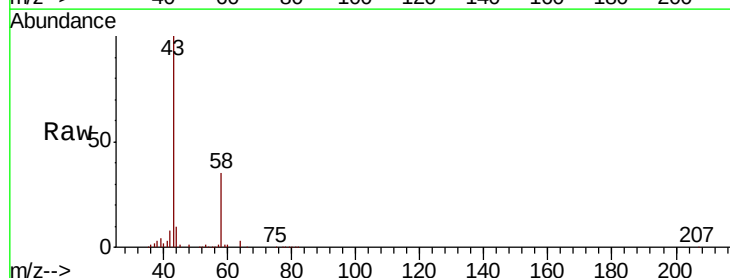
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB112672ZHE#07

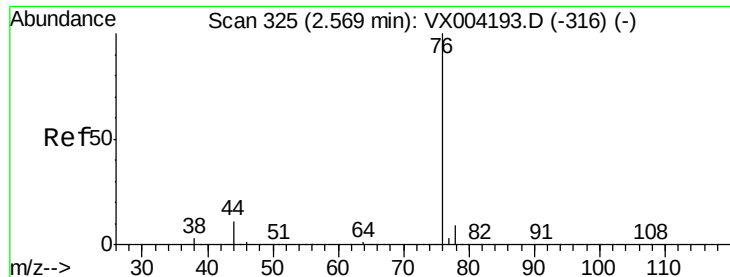
Tot Ion: 56 Resp: 435  
Ion Ratio Lower Upper  
56 100  
55 0.0 54.7 82.1#



#16  
Acetone  
Concen: 34.34 ug/l  
RT: 2.45 min Scan# 212  
Delta R.T. 0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

Tgt Ion: 43 Resp: 64581  
Ion Ratio Lower Upper  
43 100  
58 35.1 26.2 39.4





#17

Carbon Disulfide

Concen: 0.87 ug/l

RT: 2.57 min Scan# 232

Delta R.T. -0.00 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

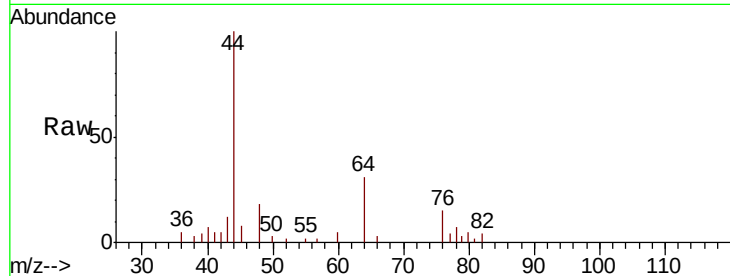
PB112672ZHE#07

Tot Ion: 76 Resp: 657

Ion Ratio Lower Upper

76 100

78 44.2 7.0 10.6#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

400

300

200

100

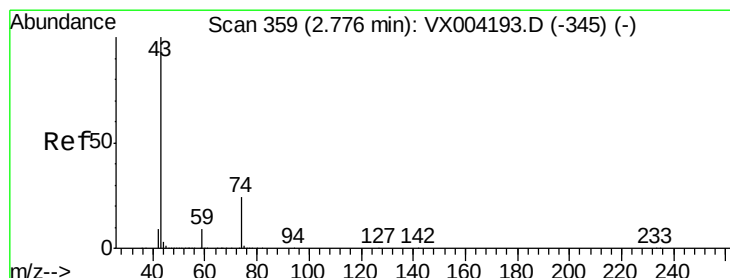
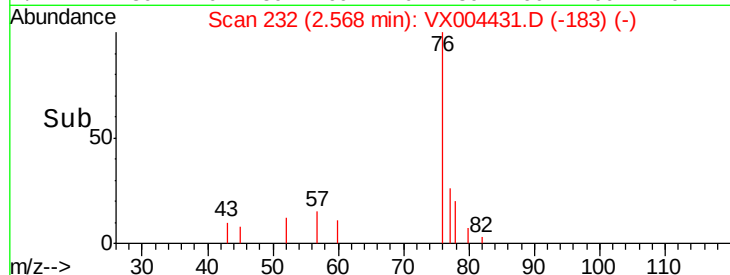
0

2.50

2.55

2.60

Time-->



#18

Methyl Acetate

Concen: 2.38 ug/l

RT: 2.78 min Scan# 266

Delta R.T. -0.00 min

Lab File: VX004431.D

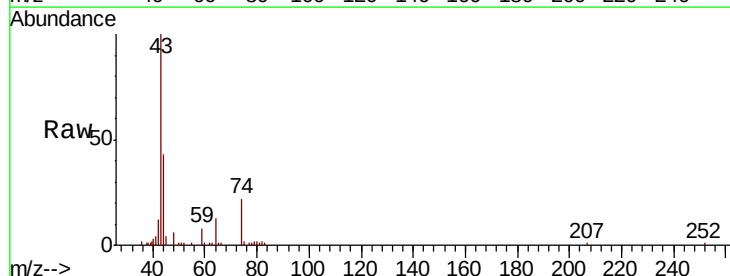
Acq: 08 Sep 2018 02:45

Tgt Ion: 43 Resp: 13528

Ion Ratio Lower Upper

43 100

74 23.0 19.4 29.2



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0

2.78

8000

6000

4000

2000

0

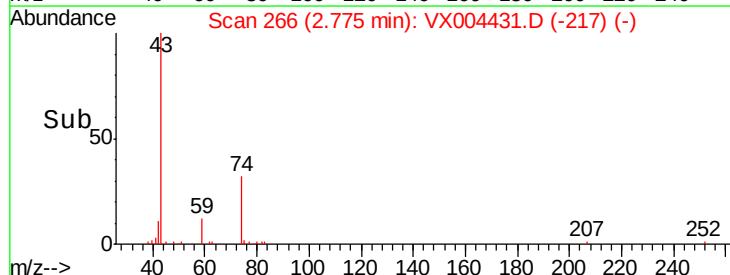
2.70

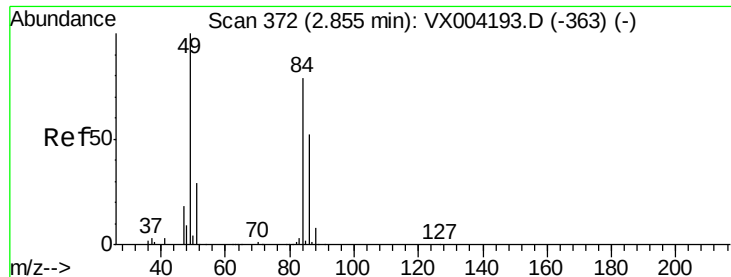
2.75

2.80

2.85

Time-->

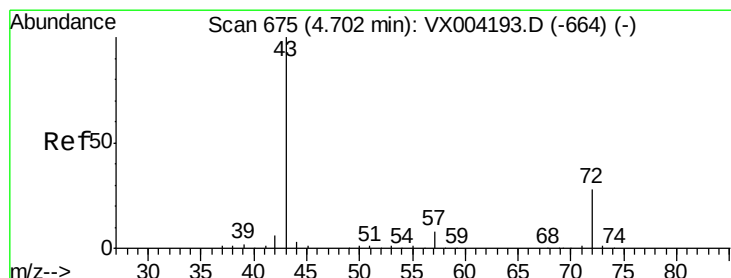
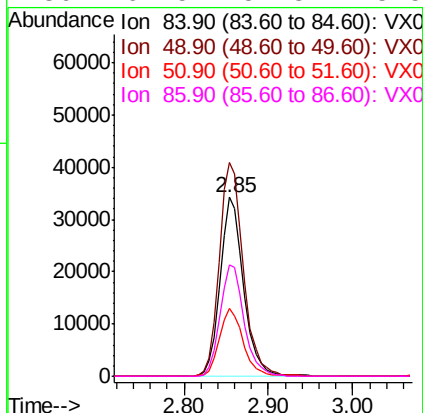
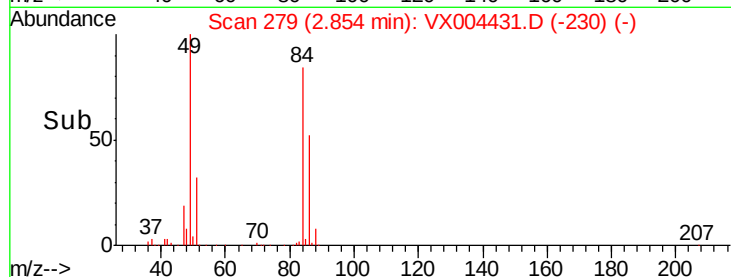
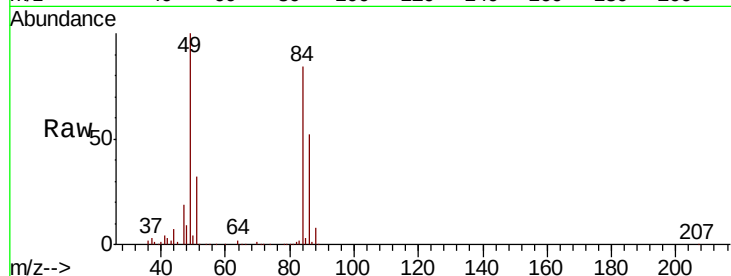




#20  
Methylene Chloride  
Concen: 17.79 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. -0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

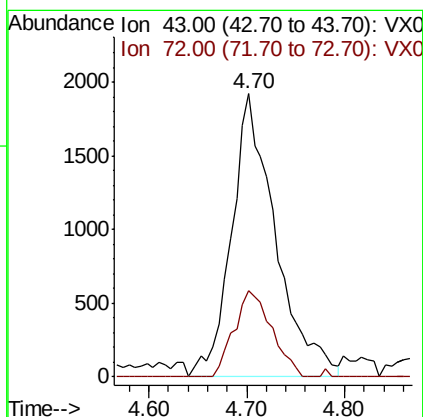
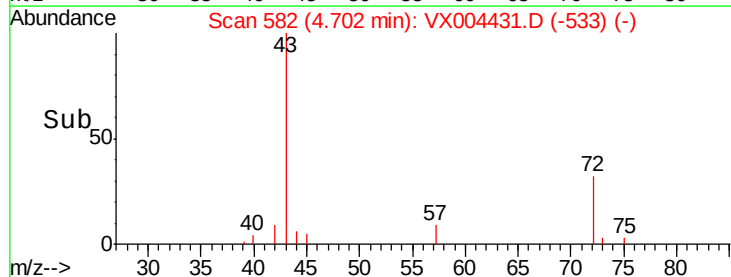
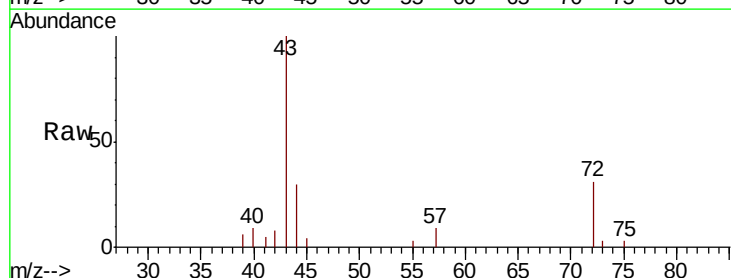
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Tot Ion: 84 Resp: 65600  
Ion Ratio Lower Upper  
84 100  
49 119.4 101.2 151.8  
51 37.9 29.5 44.3  
86 62.5 52.3 78.5

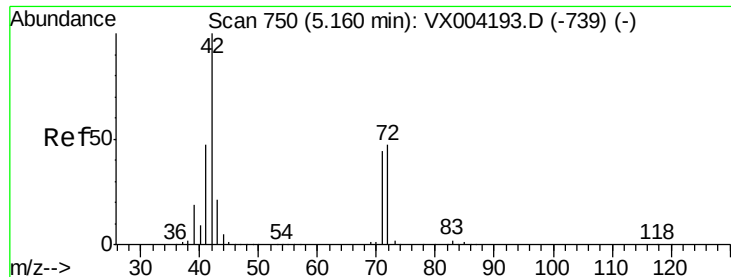


#25  
2-Butanone  
Concen: Below Cal  
RT: 4.70 min Scan# 582  
Delta R.T. -0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

Tgt Ion: 43 Resp: 5992  
Ion Ratio Lower Upper  
43 100  
72 30.6 22.0 33.0



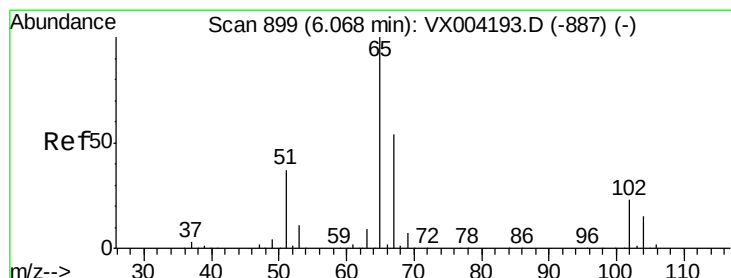
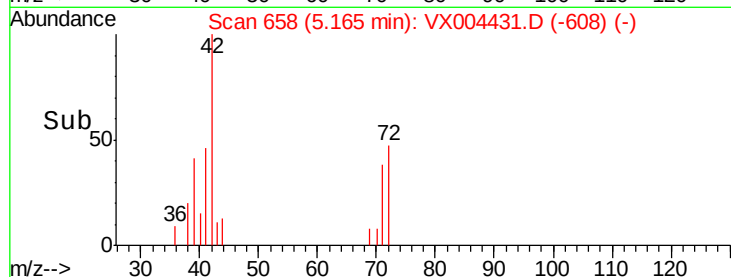
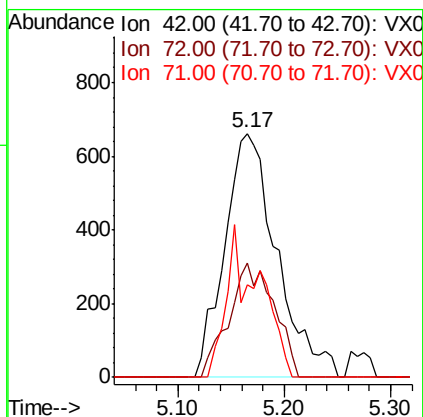
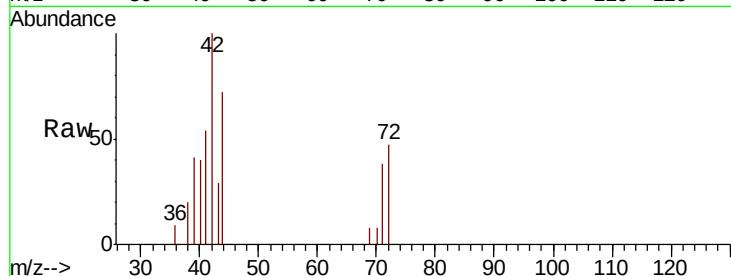




#29  
Tetrahydrofuran  
Concen: 1.37 ug/l  
RT: 5.17 min Scan# 658  
Delta R.T. 0.01 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

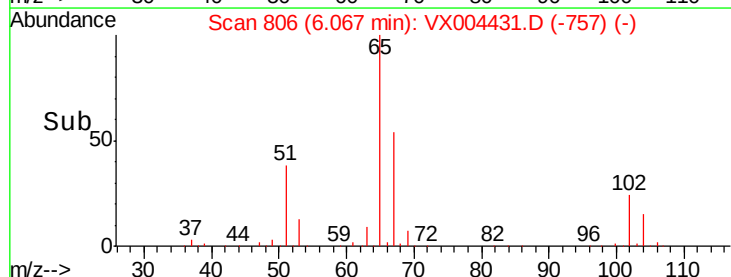
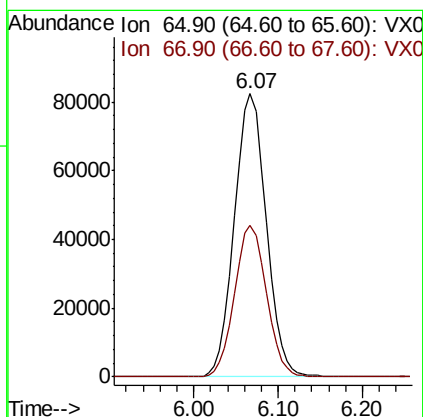
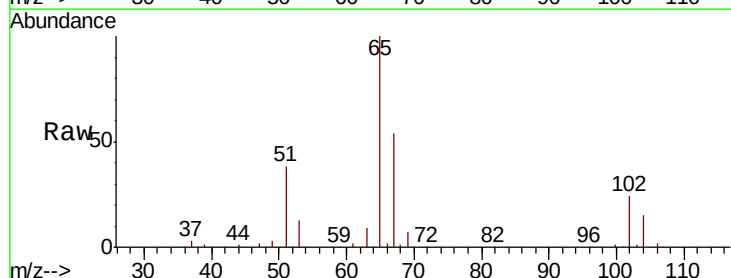
Instrument :  
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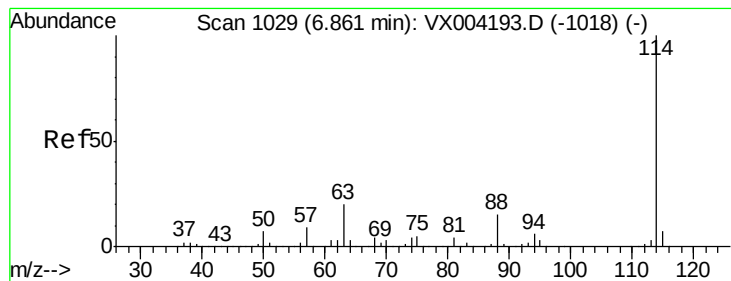
Tot Ion: 42 Resp: 2259  
Ion Ratio Lower Upper  
42 100  
72 41.0 37.4 56.0  
71 25.2 34.5 51.7#



#33  
1,2-Dichloroethane-d4  
Concen: 54.95 ug/l  
RT: 6.07 min Scan# 806  
Delta R.T. -0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

Tgt Ion: 65 Resp: 210473  
Ion Ratio Lower Upper  
65 100  
67 53.6 0.0 106.8





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.86 min Scan# 936

Delta R.T. -0.00 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

PB112672ZHE#07

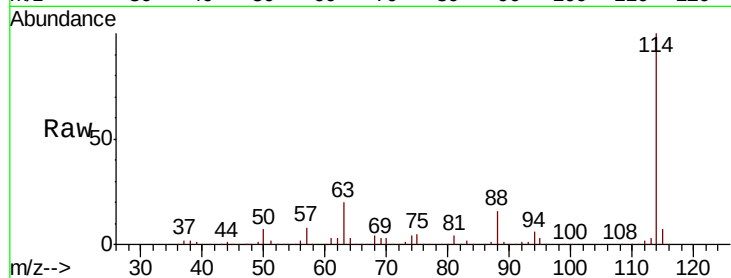
Tot Ion:114 Resp: 490699

Ion Ratio Lower Upper

114 100

63 19.5 0.0 39.0

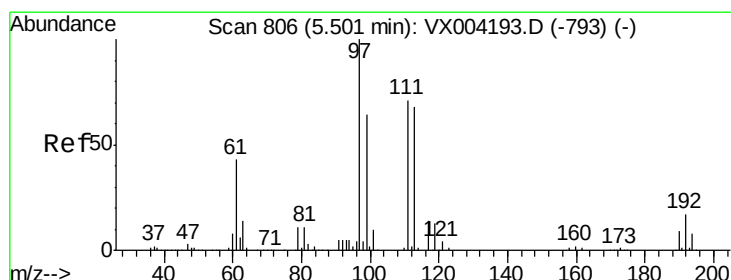
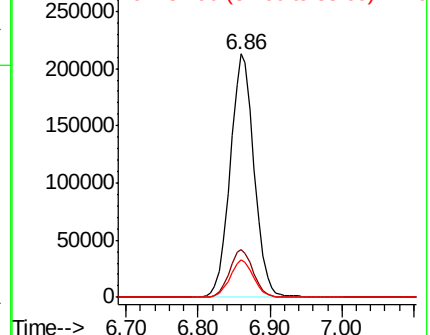
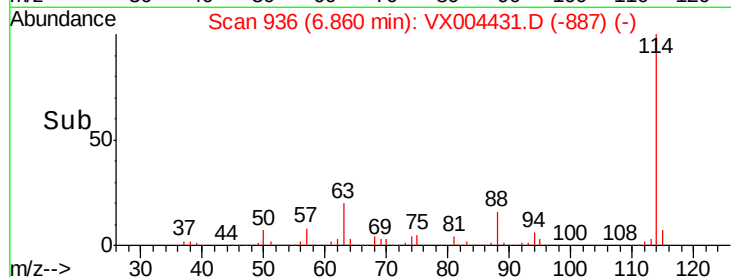
88 15.6 0.0 30.4



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: 50.66 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

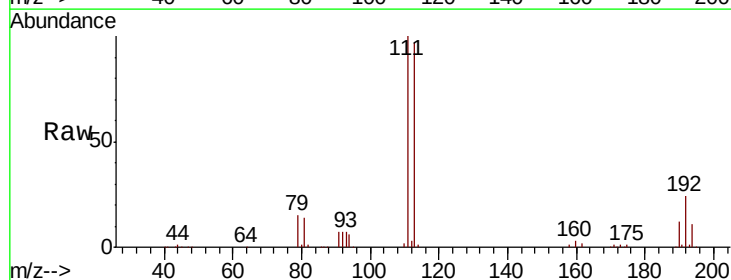
Tgt Ion:113 Resp: 184922

Ion Ratio Lower Upper

113 100

111 103.4 82.4 123.6

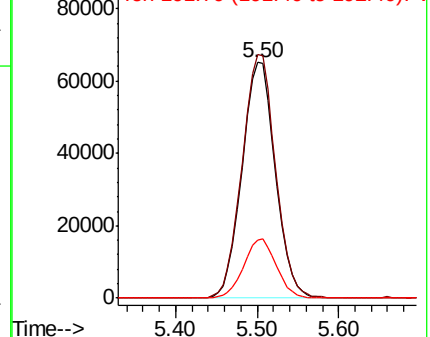
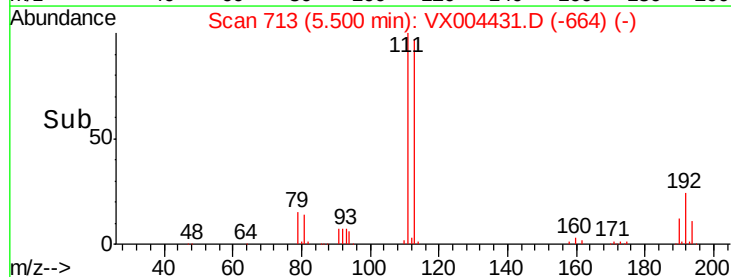
192 24.6 19.4 29.2

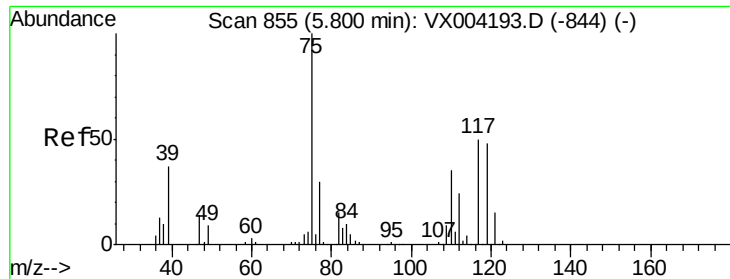


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

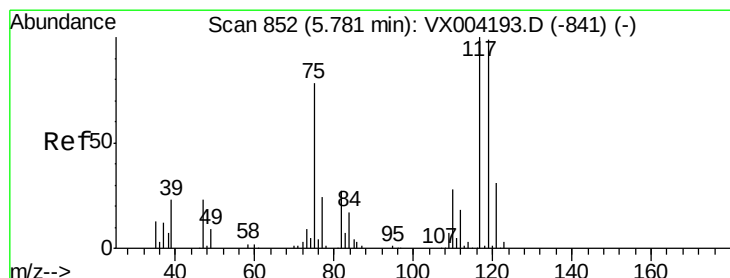
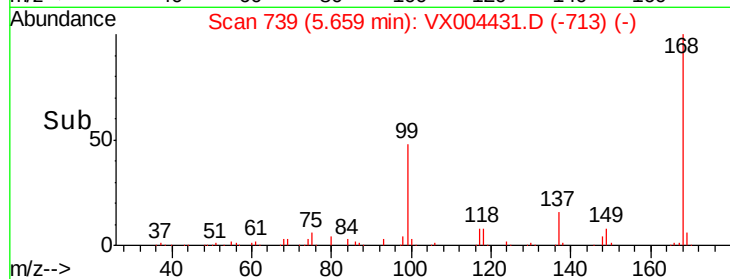
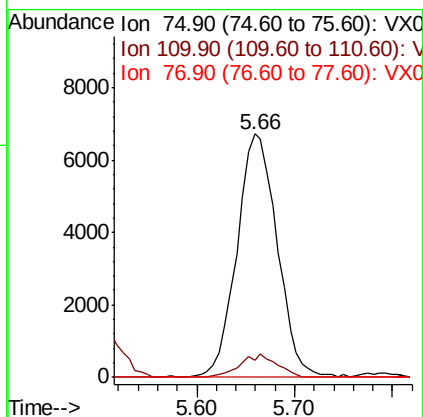
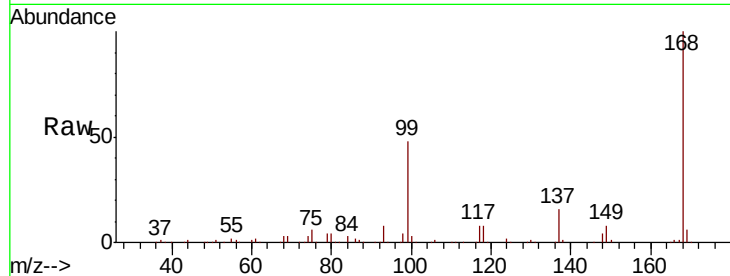




#36  
 1,1-Dichloropropene  
 Concen: 3.48 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX004431.D  
 Acq: 08 Sep 2018 02:45

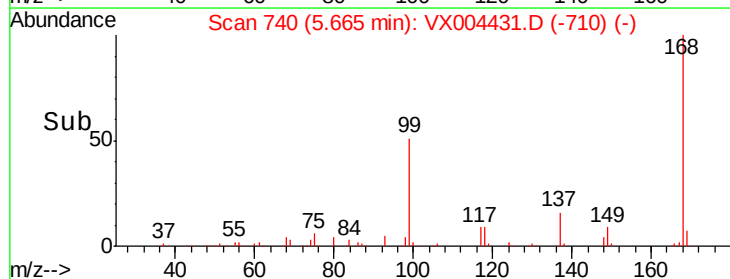
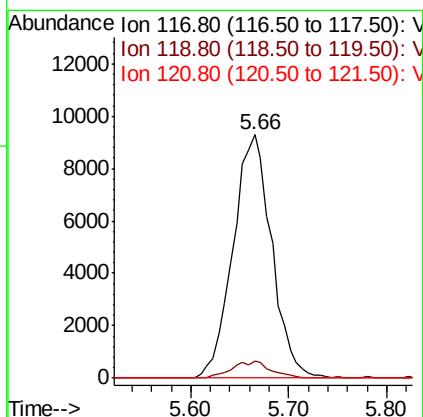
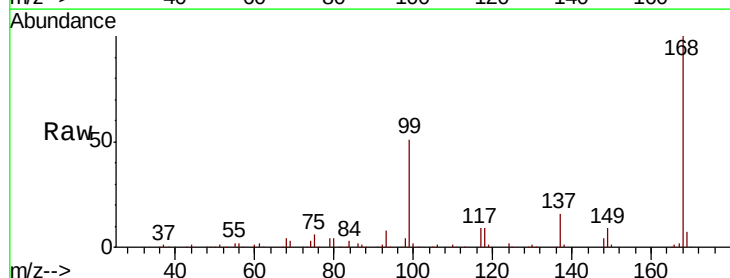
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB112672ZHE#07

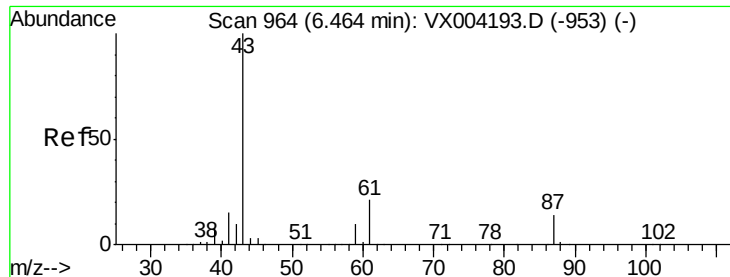
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.7   | 18.0  | 54.0# |
| 77      | 0.0   | 24.6  | 36.8# |



#38  
 Carbon Tetrachloride  
 Concen: 4.90 ug/l  
 RT: 5.66 min Scan# 740  
 Delta R.T. -0.12 min  
 Lab File: VX004431.D  
 Acq: 08 Sep 2018 02:45

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.9   | 78.8  | 118.2# |
| 121     | 0.0   | 24.9  | 37.3#  |





#43

Isopropyl Acetate

Concen: 24.94 ug/l

RT: 6.46 min Scan# 871

Delta R.T. -0.00 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

PB112672ZHE#07

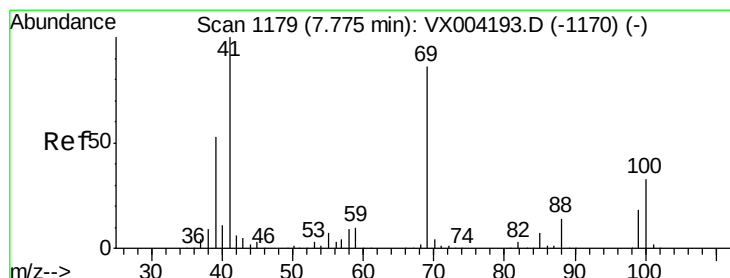
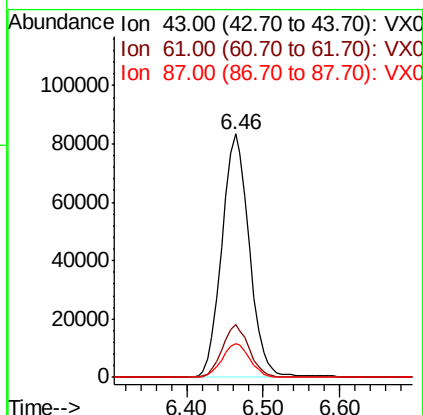
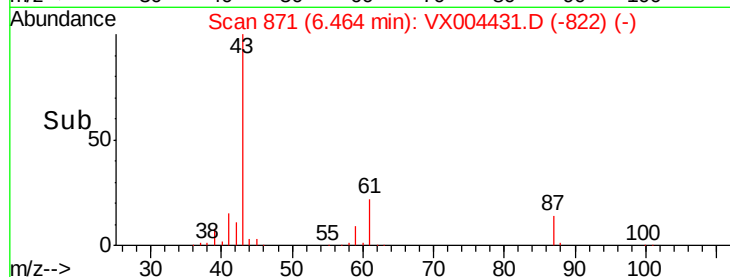
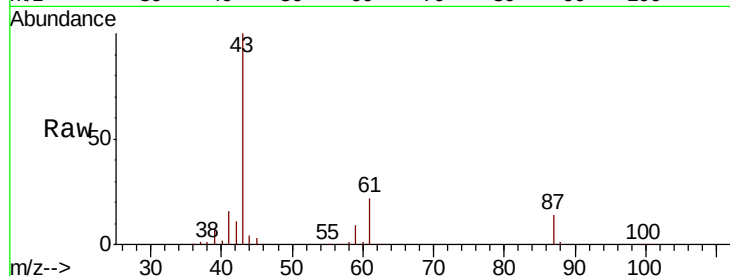
Tot Ion: 43 Resp: 207948

Ion Ratio Lower Upper

43 100

61 21.2 17.0 25.4

87 14.1 11.4 17.2



#48

Methyl methacrylate

Concen: 2.00 ug/l

RT: 7.68 min Scan# 1071

Delta R.T. -0.09 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

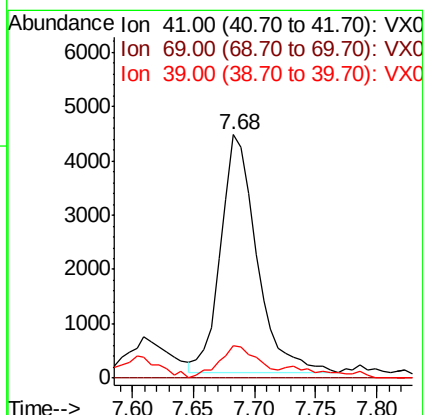
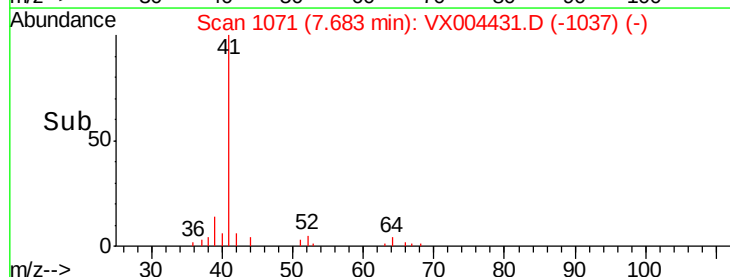
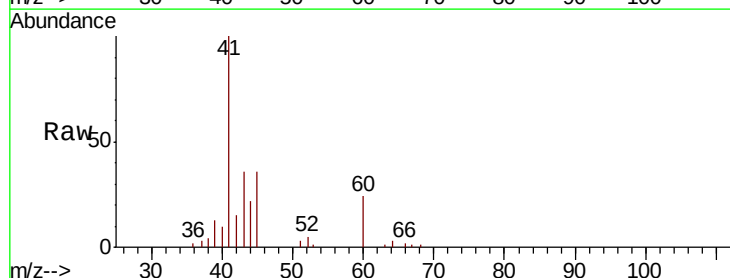
Tgt Ion: 41 Resp: 8941

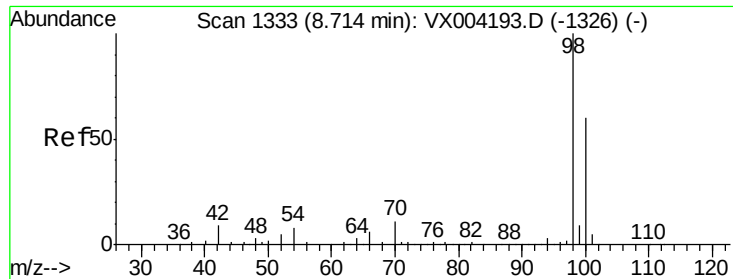
Ion Ratio Lower Upper

41 100

69 0.0 70.2 105.4#

39 15.0 42.7 64.1#

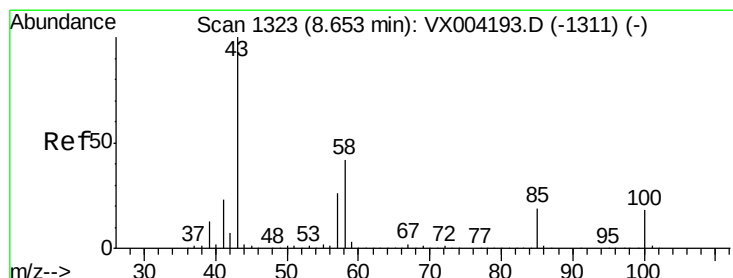
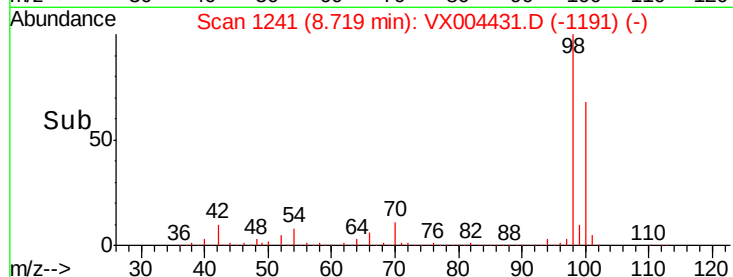
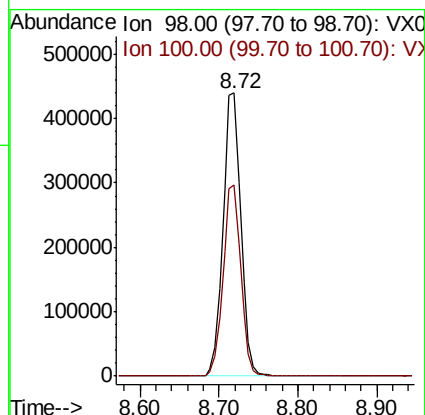
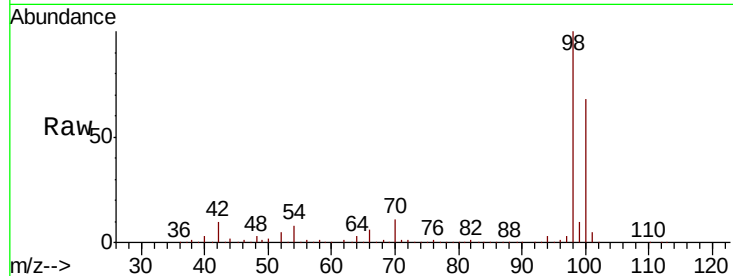




#50  
Toluene-d8  
Concen: 50.29 ug/l  
RT: 8.72 min Scan# 1241  
Delta R.T. 0.01 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

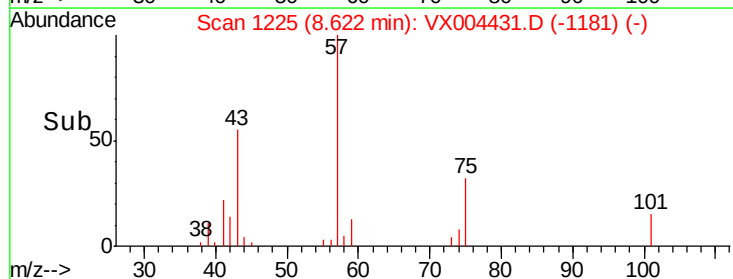
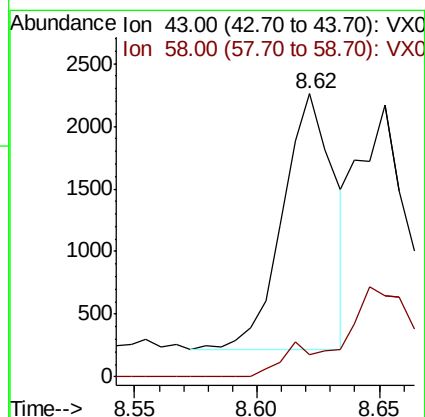
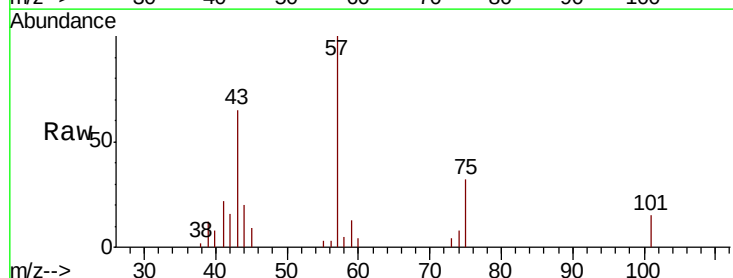
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB112672ZHE#07

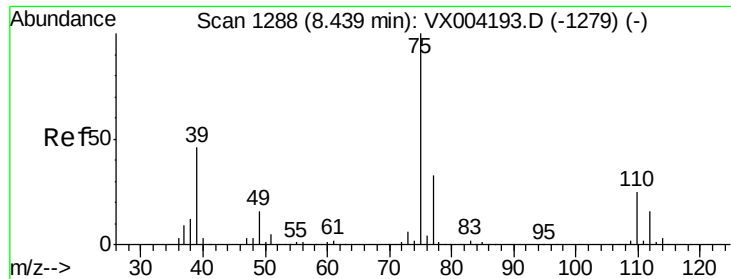
Tot Ion: 98 Resp: 693005  
Ion Ratio Lower Upper  
98 100  
100 67.0 52.9 79.3



#51  
4-Methyl-2-Pentanone  
Concen: 0.50 ug/l  
RT: 8.62 min Scan# 1225  
Delta R.T. -0.03 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

Tgt Ion: 43 Resp: 3021  
Ion Ratio Lower Upper  
43 100  
58 7.7 33.1 49.7#





#54

cis-1,3-Dichloropropene

Concen: 0.27 ug/l

RT: 8.62 min Scan# 1225

Delta R.T. 0.18 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

PB112672ZHE#07

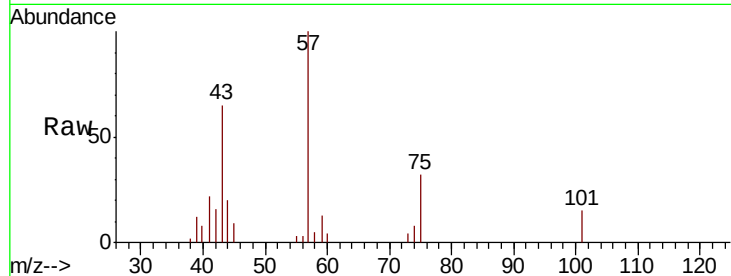
Tot Ion: 75 Resp: 1681

Ion Ratio Lower Upper

75 100

77 0.0 26.2 39.2#

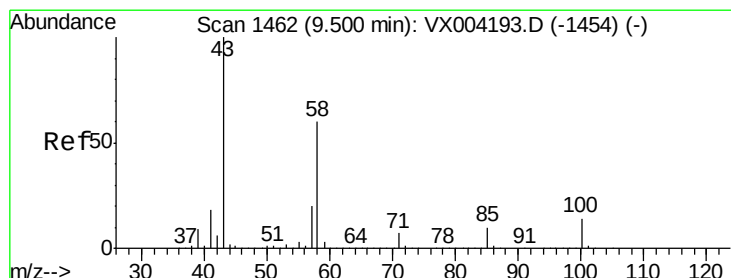
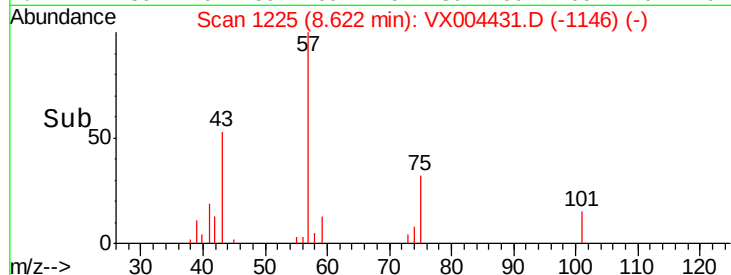
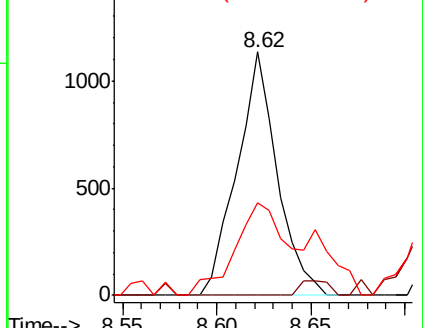
39 38.1 36.4 54.6



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



#59

2-Hexanone

Concen: 3.13 ug/l

RT: 9.55 min Scan# 1377

Delta R.T. 0.05 min

Lab File: VX004431.D

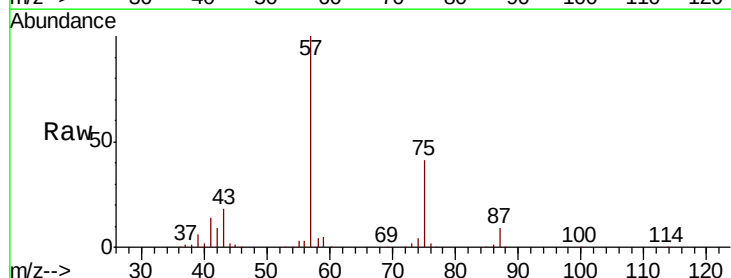
Acq: 08 Sep 2018 02:45

Tgt Ion: 43 Resp: 14463

Ion Ratio Lower Upper

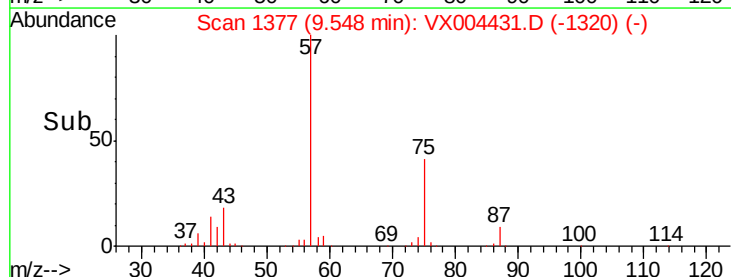
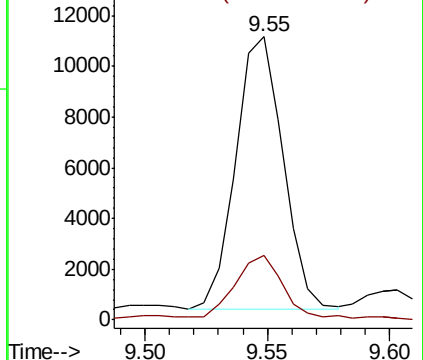
43 100

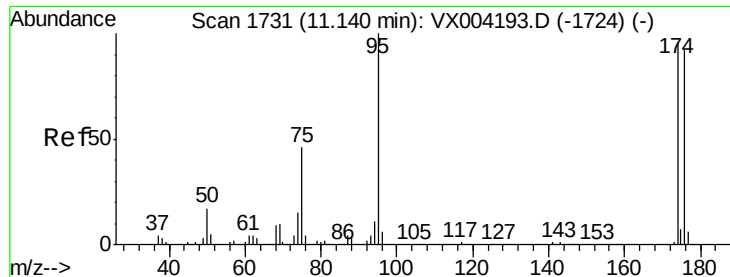
58 25.5 29.0 87.0#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

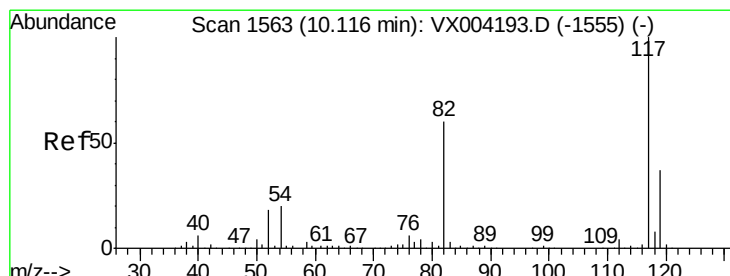
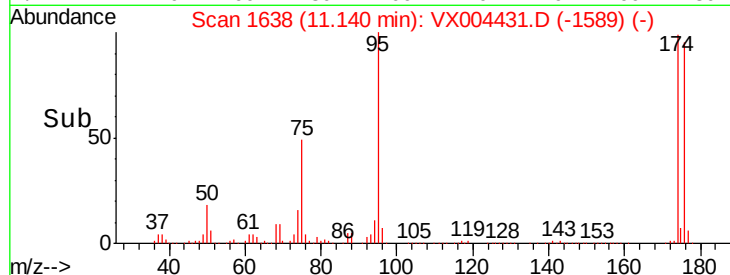
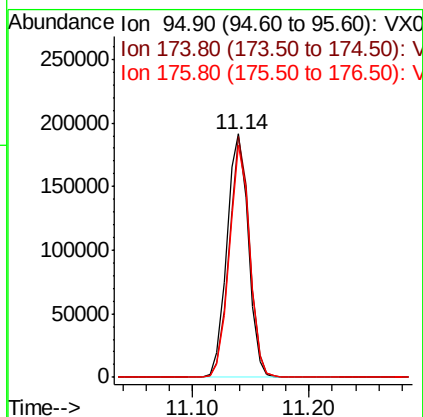
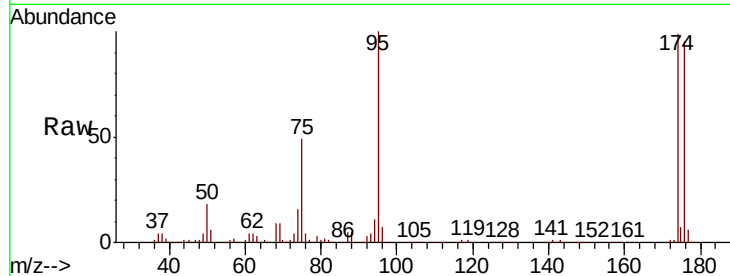




#62  
4-Bromofluorobenzene  
Concen: 47.57 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. -0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

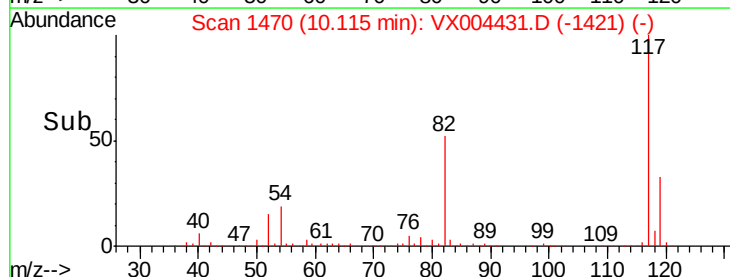
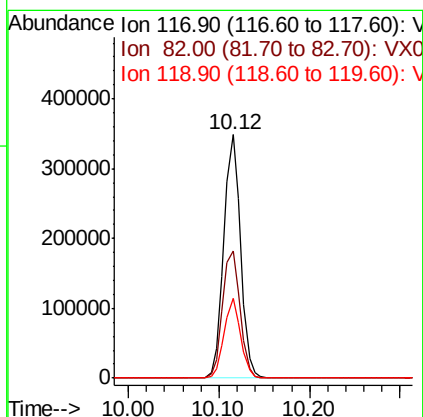
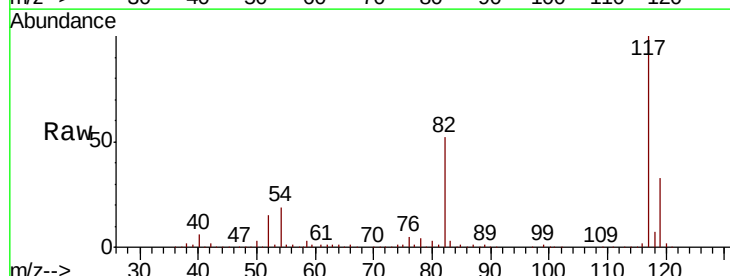
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB112672ZHE#07

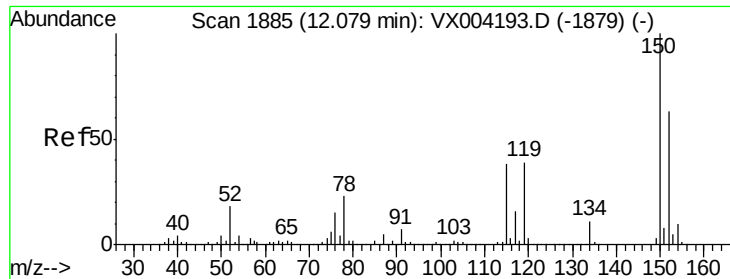
Tot Ion: 95 Resp: 244554  
Ion Ratio Lower Upper  
95 100  
174 94.3 0.0 185.2  
176 90.9 0.0 178.6



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. -0.00 min  
Lab File: VX004431.D  
Acq: 08 Sep 2018 02:45

Tgt Ion: 117 Resp: 451208  
Ion Ratio Lower Upper  
117 100  
82 52.4 47.8 71.6  
119 33.0 29.3 43.9





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

PB112672ZHE#07

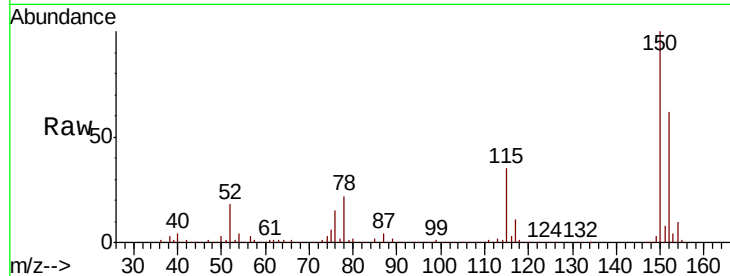
Tot Ion:152 Resp: 261782

Ion Ratio Lower Upper

152 100

115 54.6 39.0 117.0

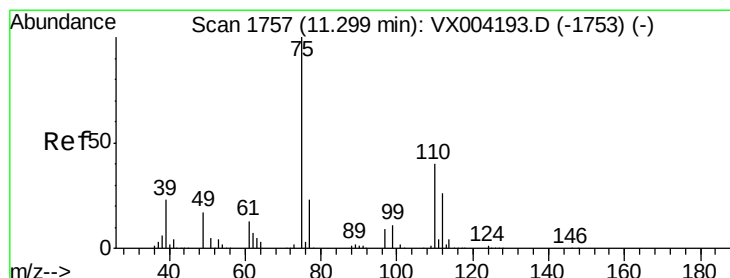
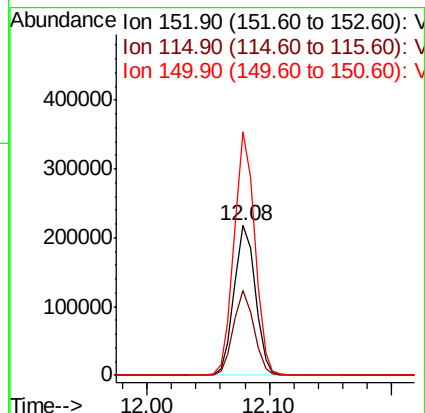
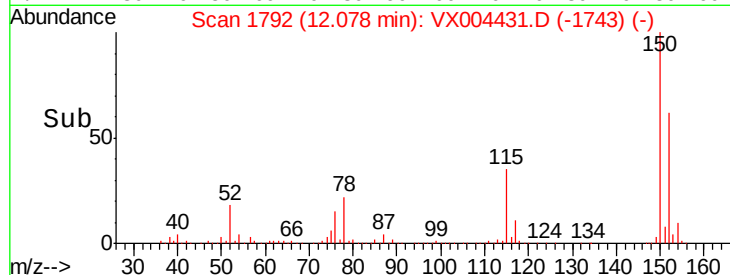
150 157.4 0.0 351.0



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: 21.97 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX004431.D

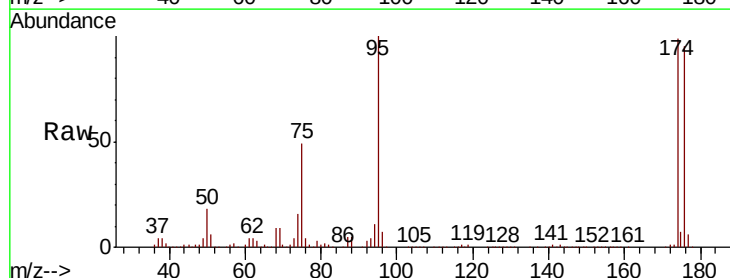
Acq: 08 Sep 2018 02:45

Tgt Ion: 75 Resp: 116946

Ion Ratio Lower Upper

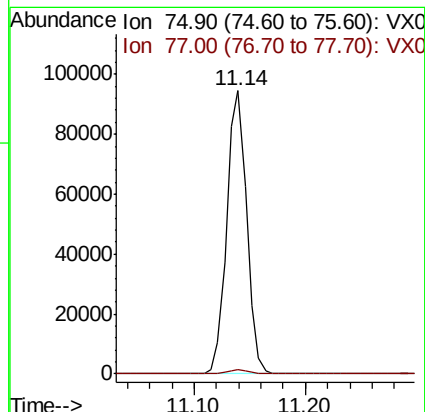
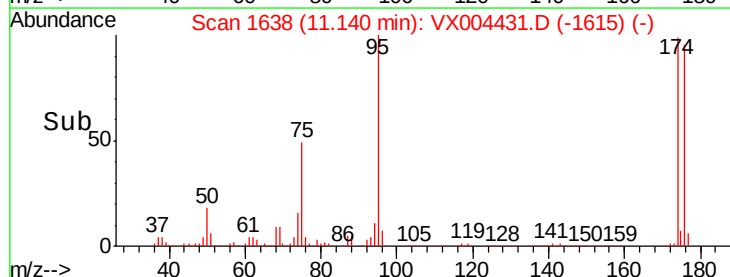
75 100

77 1.4 20.2 60.6#

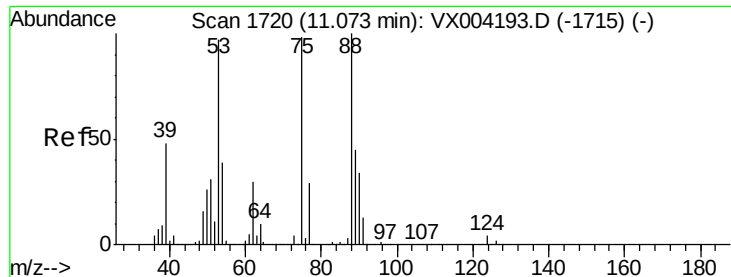


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0







#81

trans-1,4-Dichloro-2-butene

Concen: 71.27 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.07 min

Lab File: VX004431.D

Acq: 08 Sep 2018 02:45

Instrument :

MSVOA\_X

ClientSampleId :

PB112672ZHE#07

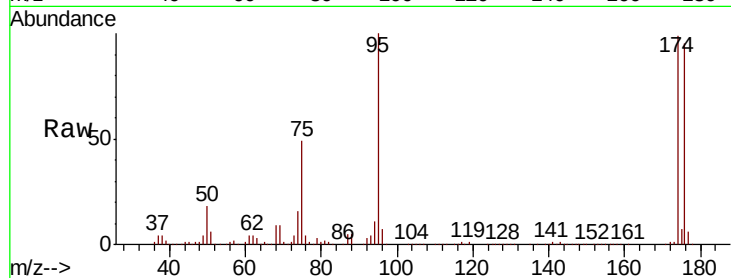
Tot Ion: 75 Resp: 116946

Ion Ratio Lower Upper

75 100

53 0.2 80.1 120.1#

89 0.0 37.2 55.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

