

Data File : VW008291.D  
Acq On : 15 Jan 2019 19:35  
Operator : SY/VA  
Sample : K1147-19  
Misc : 7.15G/5ML/MSVOA\_W/SOIL  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
TP-7

Quant Time: Jan 16 00:54:32 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010819S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 09 04:40:48 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 9985     | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 15325    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 13790    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 4938     | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.31   | 65  | 6363     | 56.70 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 113.40% |      |
| 35) Dibromofluoromethane    | 7.88   | 113 | 5457     | 61.05 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 122.10% |      |
| 50) Toluene-d8              | 10.32  | 98  | 18753    | 50.00 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.00% |      |
| 62) 4-Bromofluorobenzene    | 12.62  | 95  | 5515     | 41.01 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 82.02%  |      |

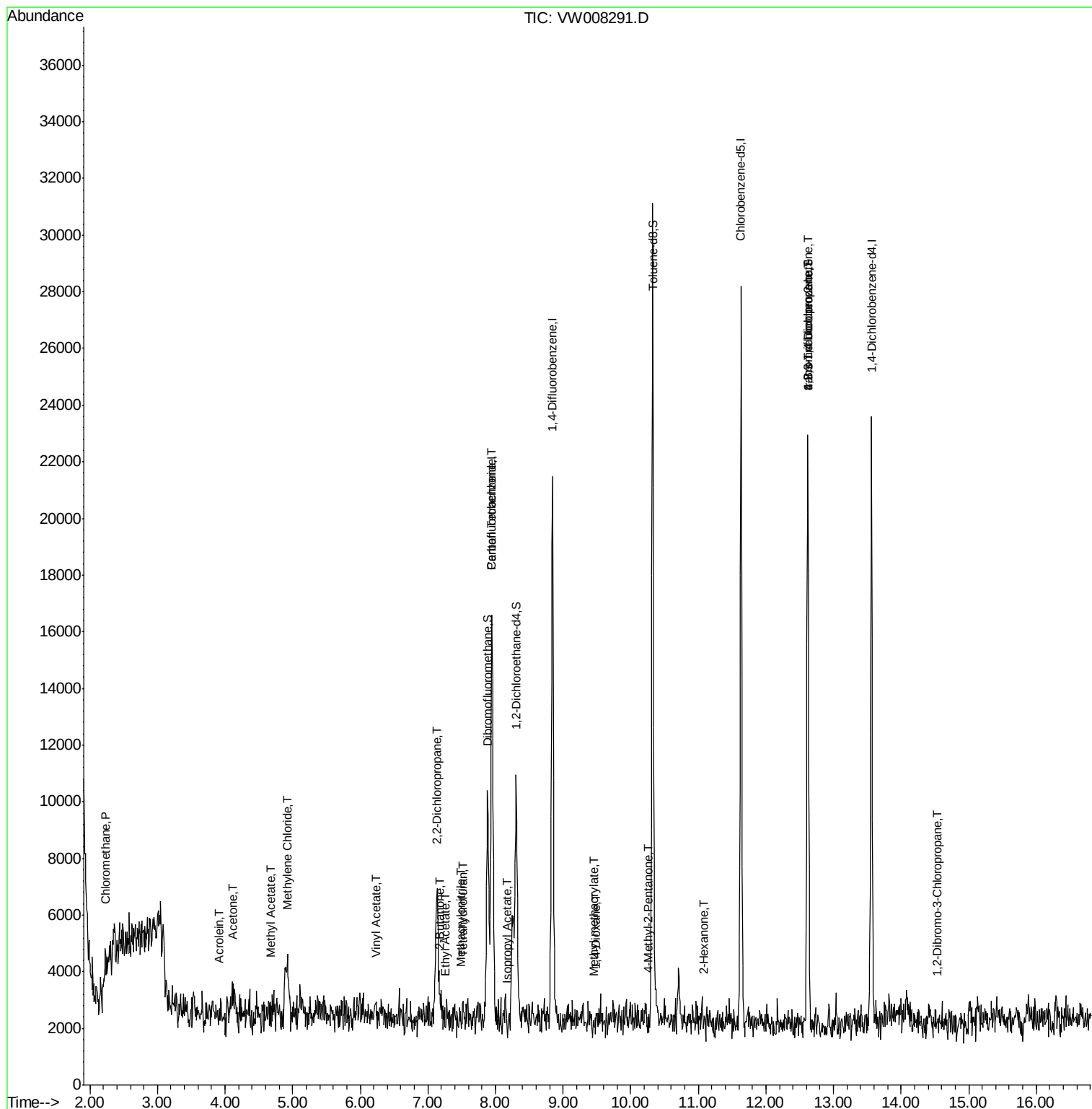
|                                |       |     |        |           |        |     |
|--------------------------------|-------|-----|--------|-----------|--------|-----|
| Target Compounds               |       |     | Qvalue |           |        |     |
| 3) Chloromethane               | 2.22  | 50  | 270    | 2.554     | ug/l # | 41  |
| 11) Tert butyl alcohol         | 5.23  | 59  | 43     | Below Cal | #      | 100 |
| 13) Acrolein                   | 3.91  | 56  | 95     | 11.286    | ug/l # | 17  |
| 16) Acetone                    | 4.12  | 43  | 1496   | 57.912    | ug/l # | 83  |
| 18) Methyl Acetate             | 4.67  | 43  | 89     | 1.255     | ug/l # | 43  |
| 20) Methylene Chloride         | 4.92  | 84  | 1775   | 12.454    | ug/l # | 81  |
| 23) Vinyl Acetate              | 6.23  | 43  | 219    | 1.101     | ug/l # | 74  |
| 25) 2-Butanone                 | 7.18  | 43  | 322    | 10.313    | ug/l # | 49  |
| 26) 2,2-Dichloropropane        | 7.14  | 77  | 178    | 1.191     | ug/l # | 53  |
| 29) Tetrahydrofuran            | 7.52  | 42  | 185    | 8.870     | ug/l # | 71  |
| 37) Ethyl Acetate              | 7.26  | 43  | 137    | 2.166     | ug/l # | 74  |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 1301   | 9.004     | ug/l # | 12  |
| 41) Methacrylonitrile          | 7.48  | 41  | 199    | 4.981     | ug/l # | 30  |
| 43) Isopropyl Acetate          | 8.18  | 43  | 207    | 1.637     | ug/l   | 94  |
| 48) Methyl methacrylate        | 9.46  | 41  | 127    | 2.128     | ug/l # | 1   |
| 49) 1,4-Dioxane                | 9.49  | 88  | 48     | 57.245    | ug/l # | 11  |
| 51) 4-Methyl-2-Pentanone       | 10.26 | 43  | 89     | 1.454     | ug/l   | 91  |
| 59) 2-Hexanone                 | 11.08 | 43  | 170    | 4.107     | ug/l   | 65  |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 2951   | 65.556    | ug/l # | 1   |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 2951   | 152.659   | ug/l # | 12  |
| 92) 1,2-Dibromo-3-Chloropropan | 14.53 | 75  | 63     | 6.309     | ug/l # | 6   |

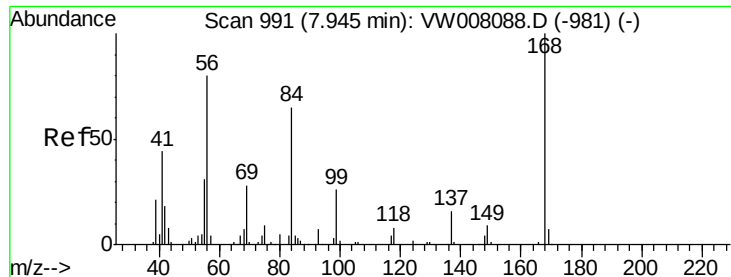
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampleId :

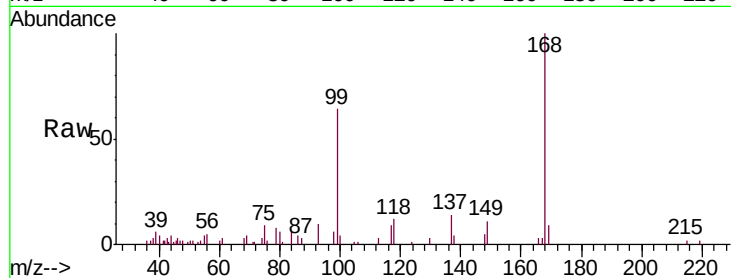
TP-7

Tgt Ion:168 Resp: 9985

Ion Ratio Lower Upper

168 100

99 62.5 52.6 78.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

4000

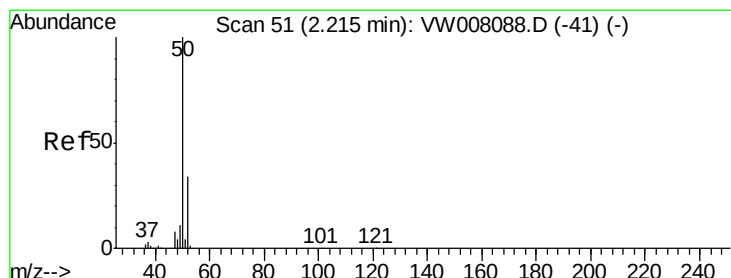
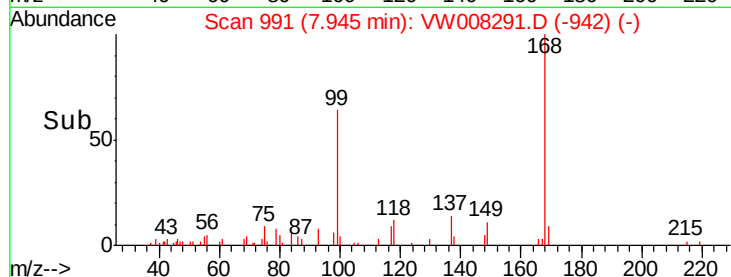
3000

2000

1000

0

Time-->



#3

Chloromethane

Concen: 2.554 ug/l

RT: 2.22 min Scan# 52

Delta R.T. 0.01 min

Lab File: VW008291.D

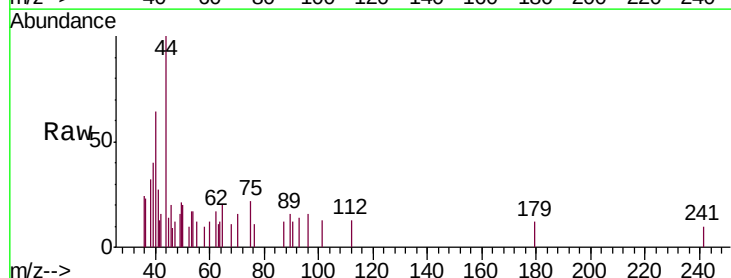
Acq: 15 Jan 2019 19:35

Tgt Ion: 50 Resp: 270

Ion Ratio Lower Upper

50 100

52 0.0 26.8 40.2#



Abundance Ion 49.90 (49.60 to 50.60): VW

Ion 51.90 (51.60 to 52.60): VW

2.22

250

200

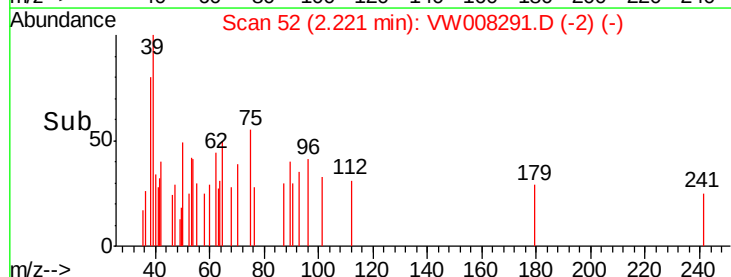
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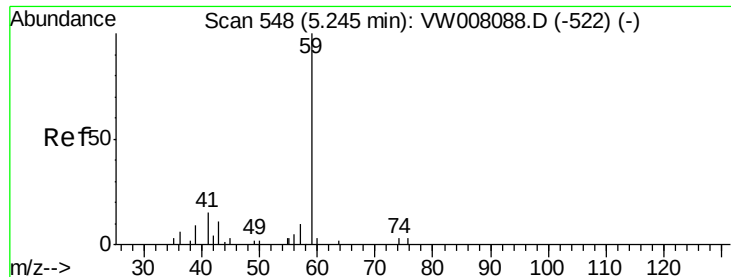
100

50

0

Time-->

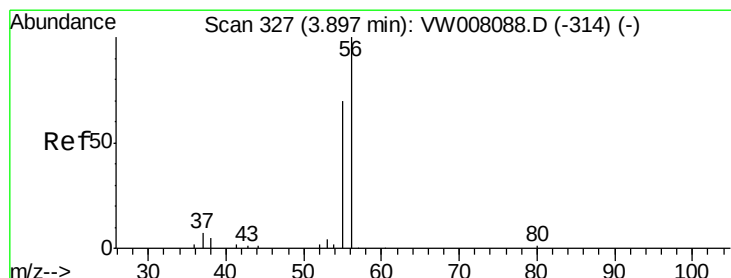
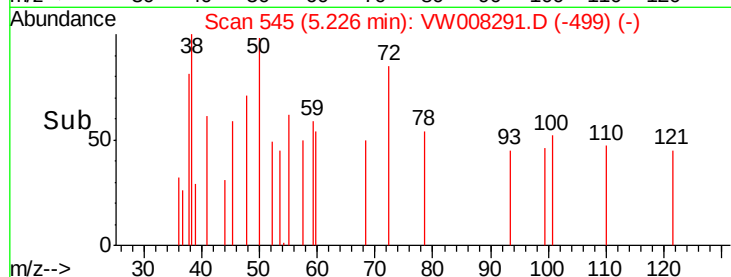
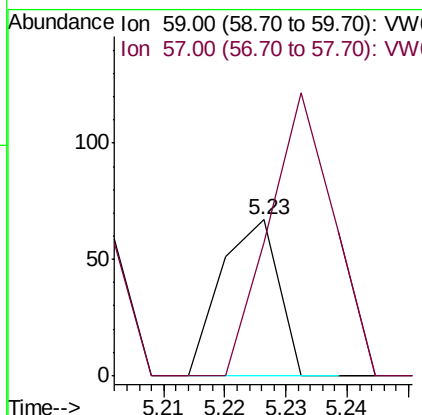
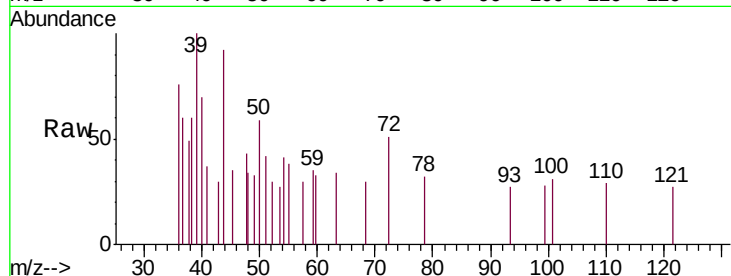




#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 5.23 min Scan# 545  
Delta R.T. -0.02 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

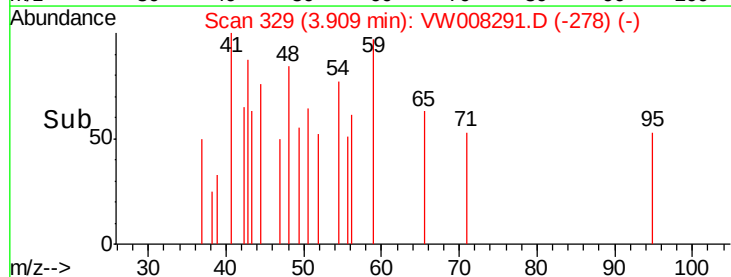
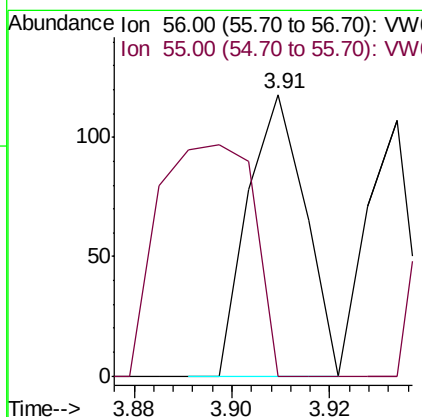
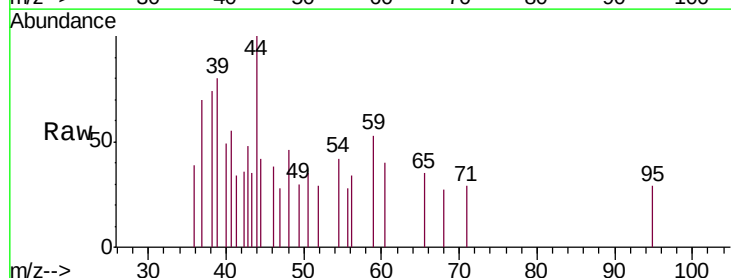
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-7

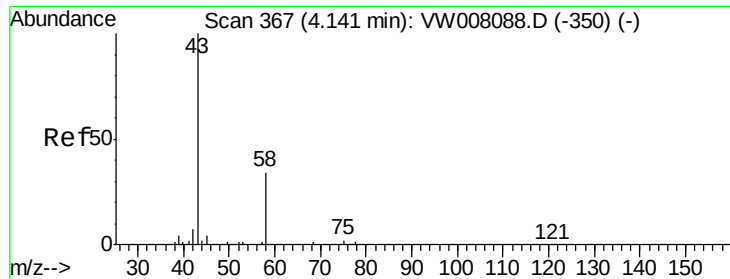
Tgt Ion: 59 Resp: 43  
Ion Ratio Lower Upper  
59 100  
57 204.7 0.0 0.0#



#13  
Acrolein  
Concen: 11.286 ug/l  
RT: 3.91 min Scan# 329  
Delta R.T. 0.01 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

Tgt Ion: 56 Resp: 95  
Ion Ratio Lower Upper  
56 100  
55 138.9 56.6 84.8#

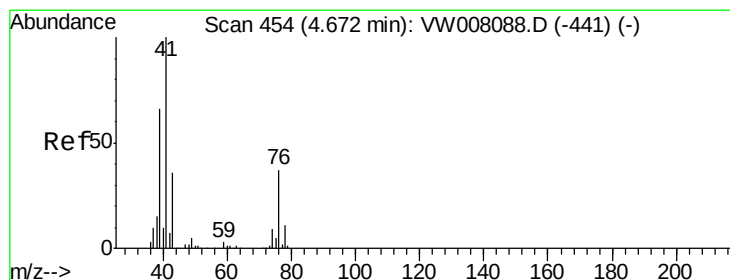
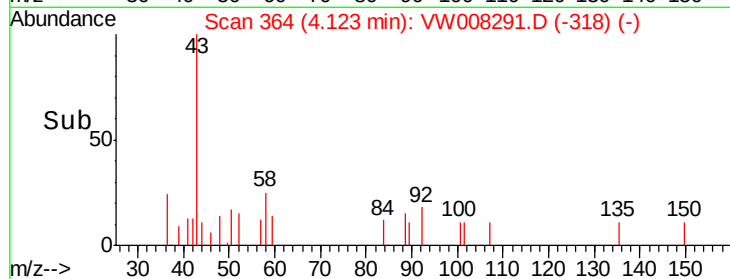
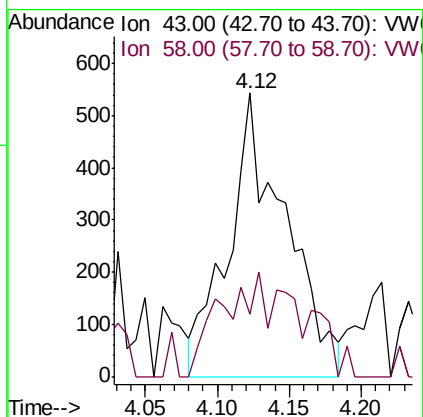
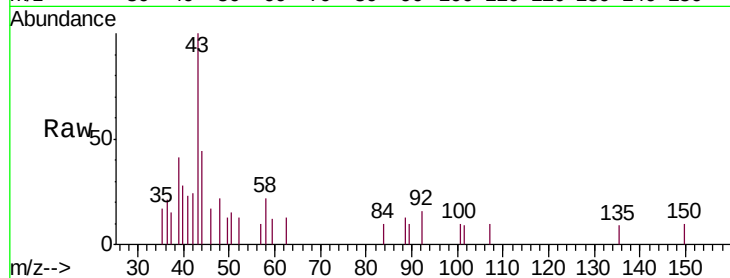




#16  
Acetone  
Concen: 57.912 ug/l  
RT: 4.12 min Scan# 364  
Delta R.T. -0.02 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

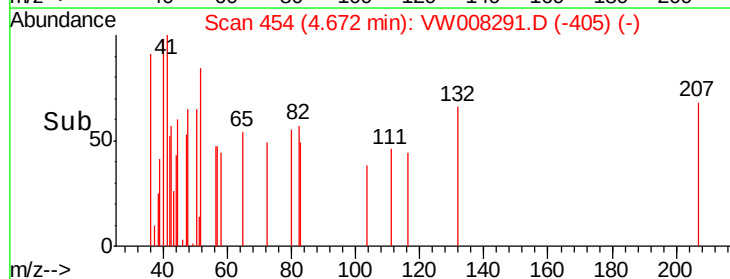
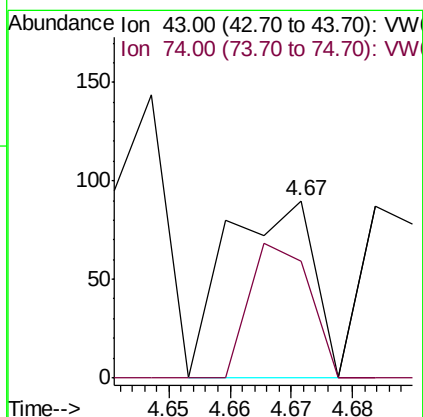
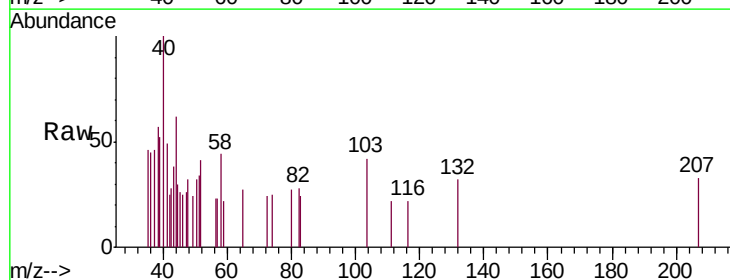
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-7

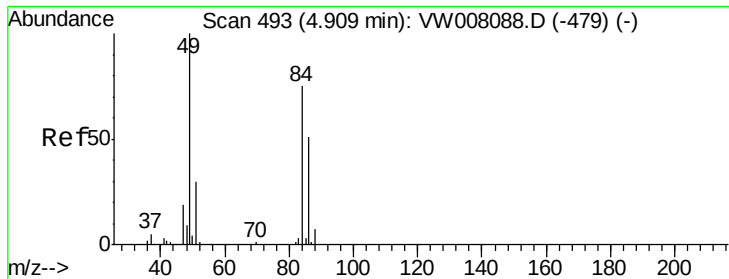
Tgt Ion: 43 Resp: 1496  
Ion Ratio Lower Upper  
43 100  
58 24.7 27.5 41.3#



#18  
Methyl Acetate  
Concen: 1.255 ug/l  
RT: 4.67 min Scan# 454  
Delta R.T. -0.00 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

Tgt Ion: 43 Resp: 89  
Ion Ratio Lower Upper  
43 100  
74 51.7 19.0 28.4#

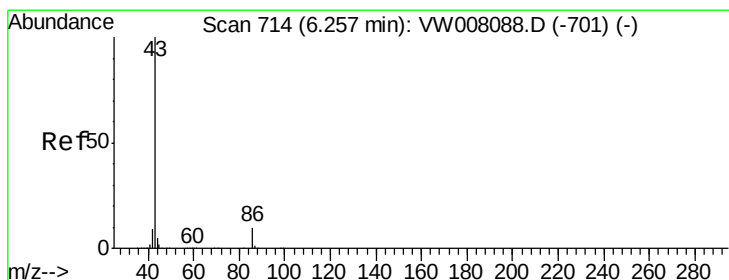
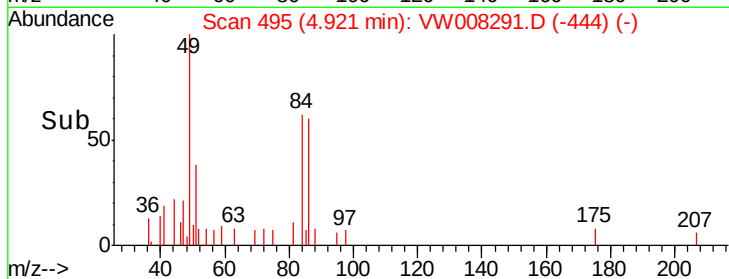
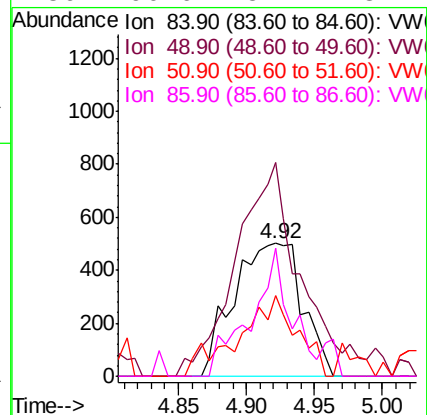
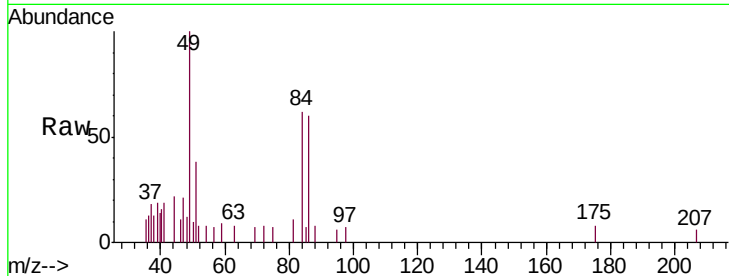




#20  
Methylene Chloride  
Concen: 12.454 ug/l  
RT: 4.92 min Scan# 495  
Delta R.T. 0.01 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

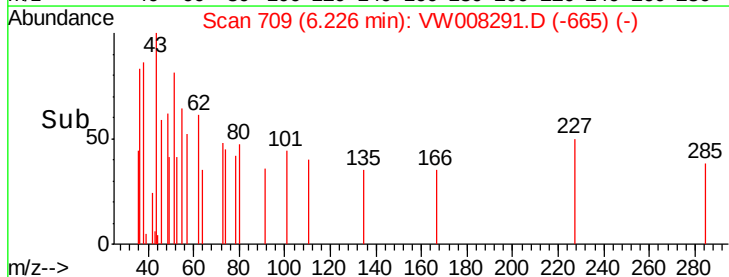
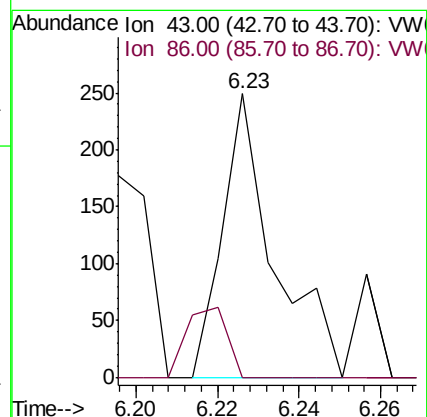
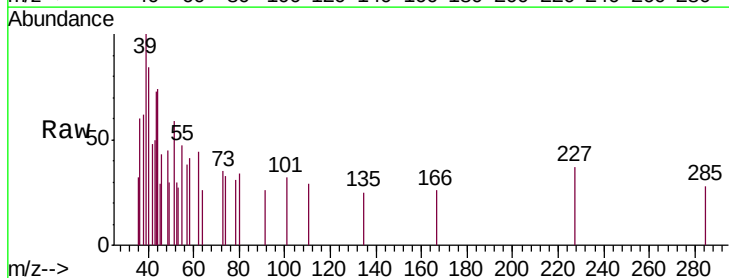
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-7

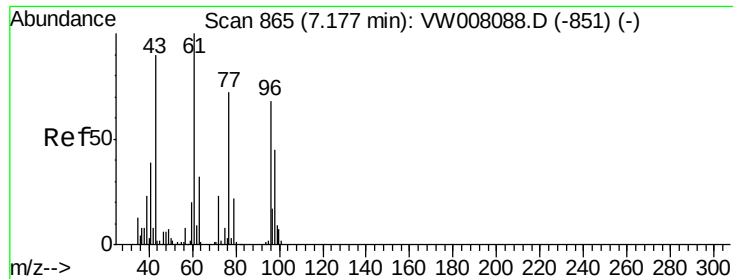
Tgt Ion: 84 Resp: 1775  
Ion Ratio Lower Upper  
84 100  
49 150.2 107.1 160.7  
51 47.0 32.4 48.6  
86 96.6 54.2 81.4#



#23  
Vinyl Acetate  
Concen: 1.101 ug/l  
RT: 6.23 min Scan# 709  
Delta R.T. -0.03 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

Tgt Ion: 43 Resp: 219  
Ion Ratio Lower Upper  
43 100  
86 0.0 7.7 11.5#





#25

2-Butanone

Concen: 10.313 ug/l

RT: 7.18 min Scan# 865

Delta R.T. -0.00 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampled :

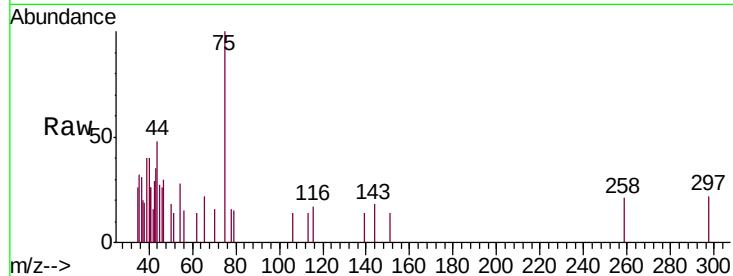
TP-7

Tgt Ion: 43 Resp: 322

Ion Ratio Lower Upper

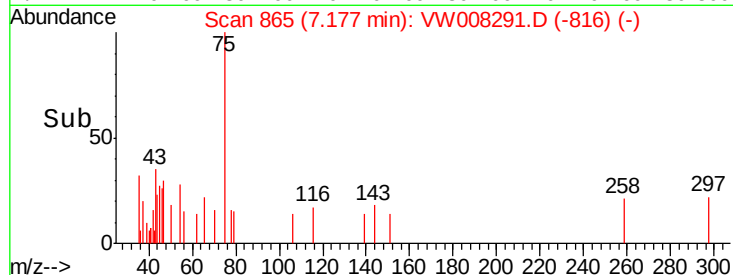
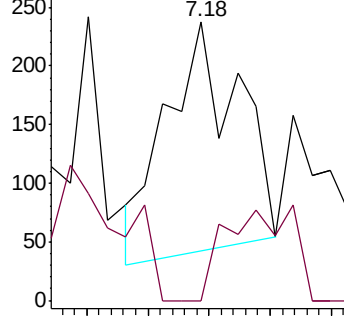
43 100

72 0.0 20.5 30.7#

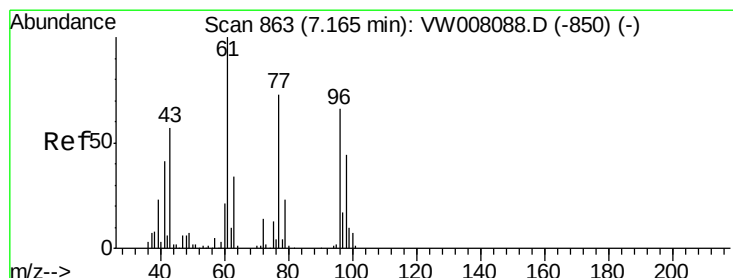


Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW



Time-->



#26

2,2-Dichloropropane

Concen: 1.191 ug/l

RT: 7.14 min Scan# 859

Delta R.T. -0.02 min

Lab File: VW008291.D

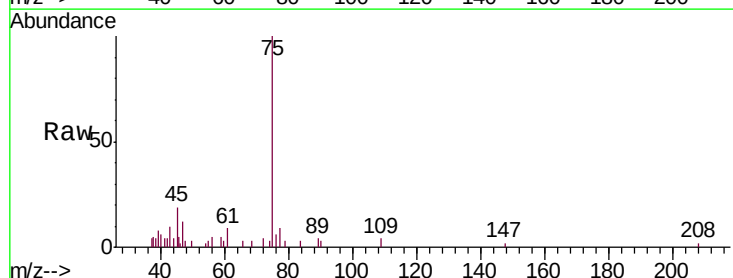
Acq: 15 Jan 2019 19:35

Tgt Ion: 77 Resp: 178

Ion Ratio Lower Upper

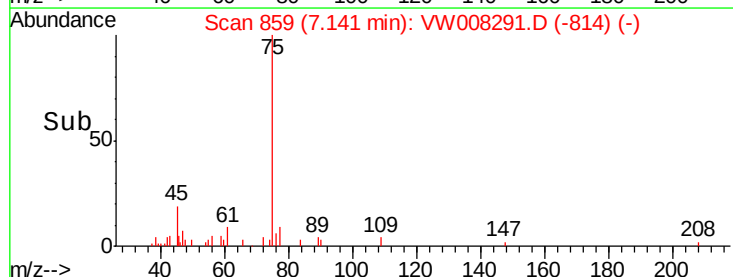
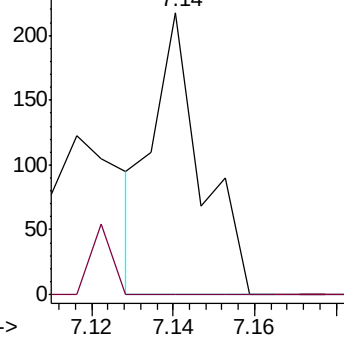
77 100

97 0.0 11.4 34.1#

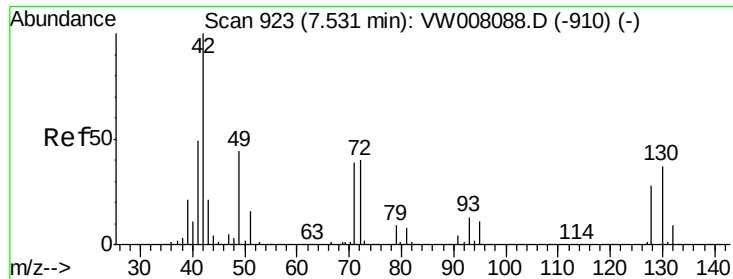


Abundance Ion 76.90 (76.60 to 77.60): VW

Ion 96.90 (96.60 to 97.60): VW



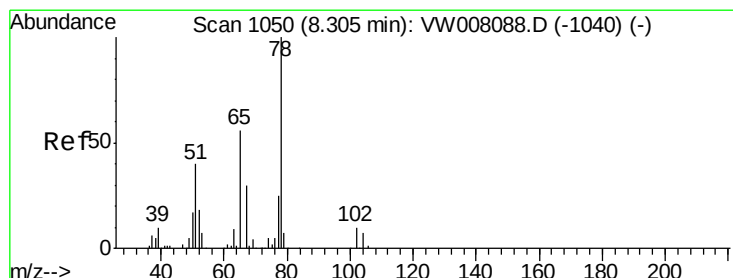
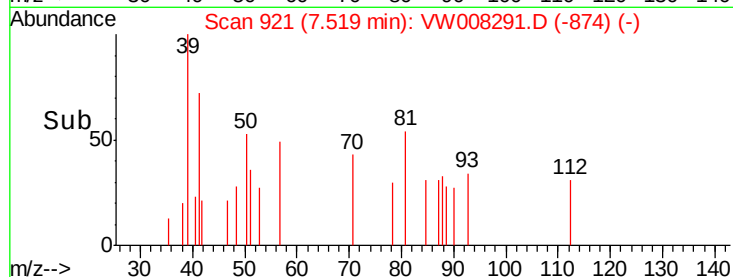
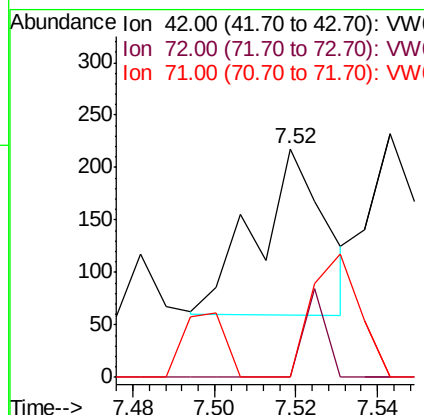
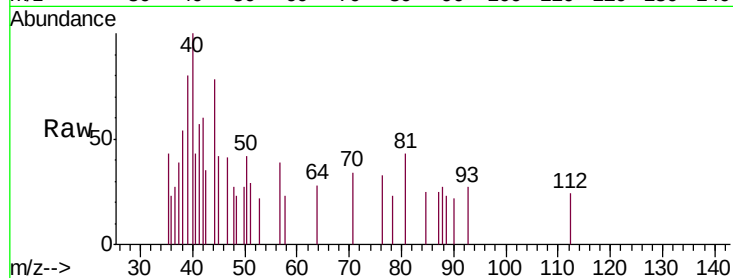
Time-->



#29  
Tetrahydrofuran  
Concen: 8.870 ug/l  
RT: 7.52 min Scan# 921  
Delta R.T. -0.01 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

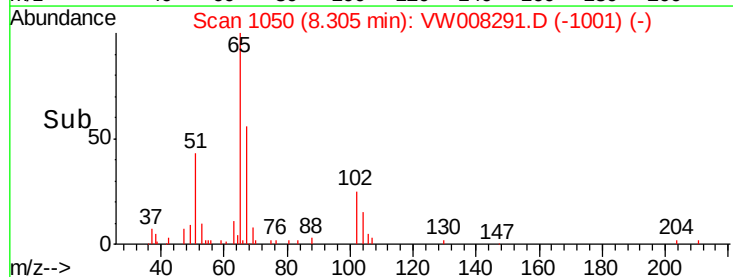
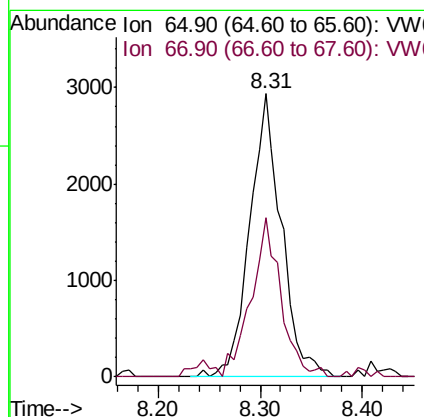
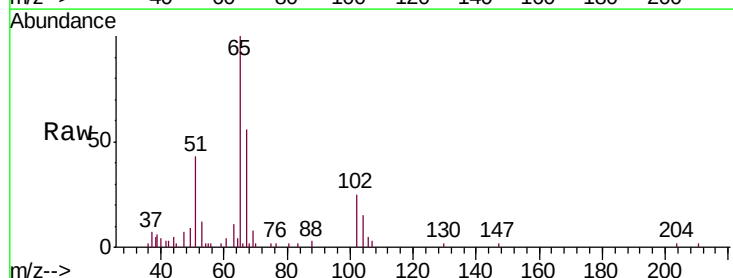
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-7

Tgt Ion: 42 Resp: 185  
Ion Ratio Lower Upper  
42 100  
72 16.8 32.4 48.6#  
71 51.4 31.3 46.9#

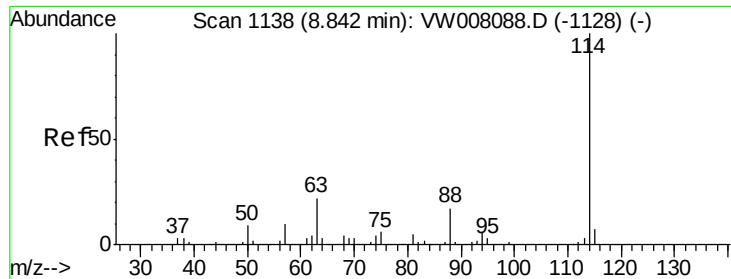


#33  
1,2-Dichloroethane-d4  
Concen: 56.700 ug/l  
RT: 8.31 min Scan# 1050  
Delta R.T. -0.00 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

Tgt Ion: 65 Resp: 6363  
Ion Ratio Lower Upper  
65 100  
67 53.1 0.0 106.8



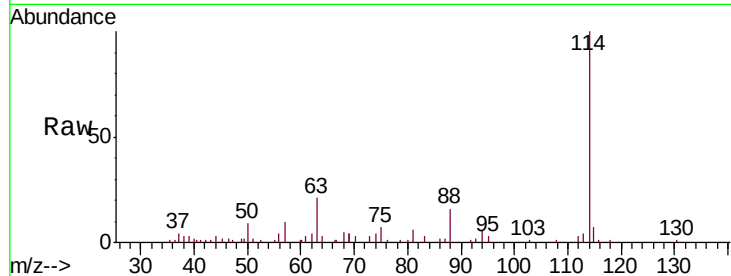




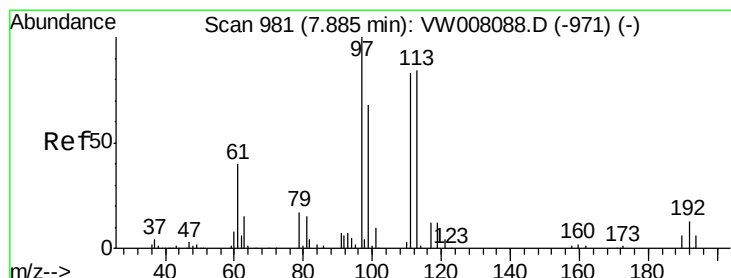
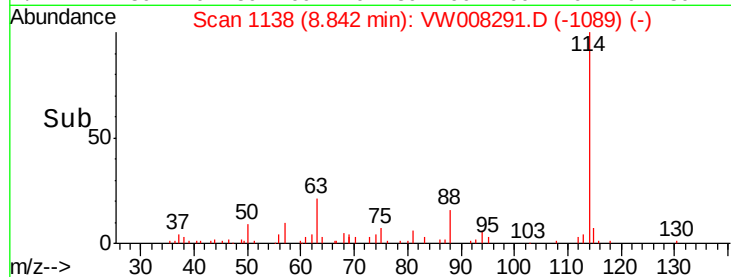
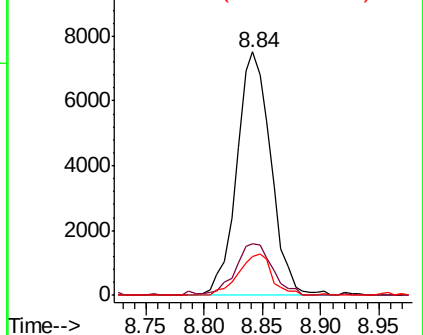
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW008291.D  
 Acq: 15 Jan 2019 19:35

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-7

Tgt Ion:114 Resp: 15325  
 Ion Ratio Lower Upper  
 114 100  
 63 21.1 0.0 43.4  
 88 15.8 0.0 33.4

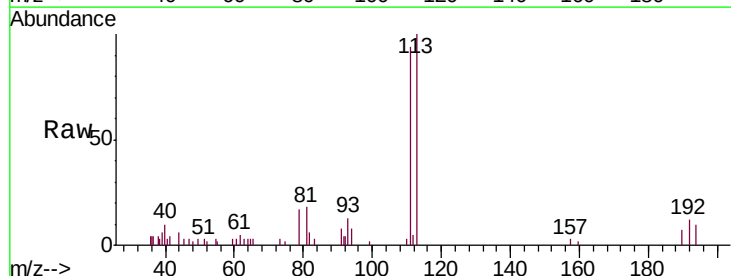


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VV  
 Ion 87.90 (87.60 to 88.60): VV

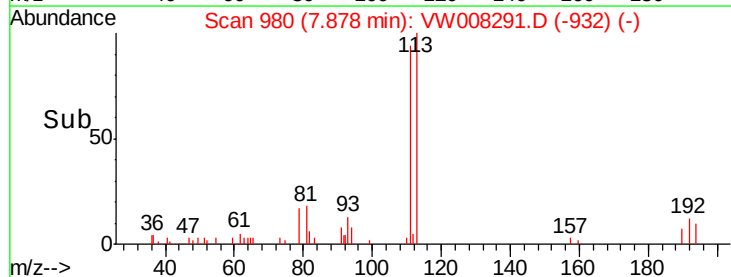
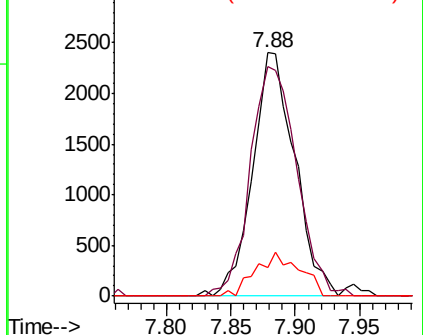


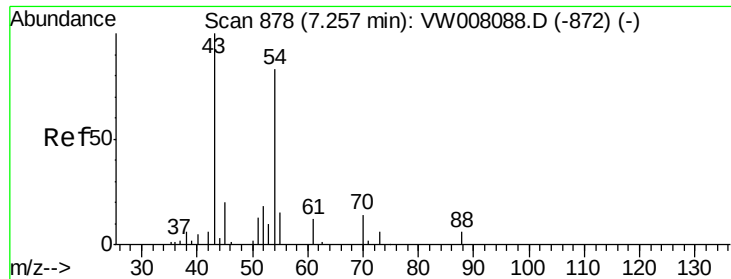
#35  
 Dibromofluoromethane  
 Concen: 61.053 ug/l  
 RT: 7.88 min Scan# 980  
 Delta R.T. -0.01 min  
 Lab File: VW008291.D  
 Acq: 15 Jan 2019 19:35

Tgt Ion:113 Resp: 5457  
 Ion Ratio Lower Upper  
 113 100  
 111 103.8 81.8 122.8  
 192 18.7 12.8 19.2



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





#37

Ethyl Acetate

Concen: 2.166 ug/l

RT: 7.26 min Scan# 879

Delta R.T. 0.01 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampled :

TP-7

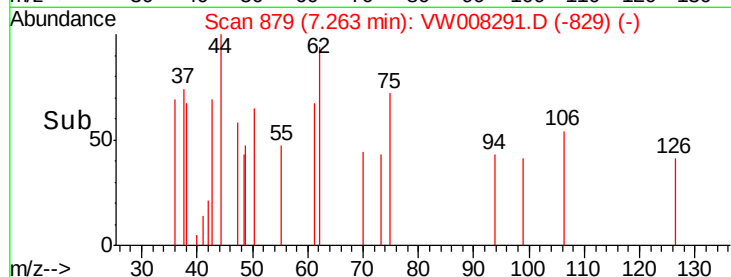
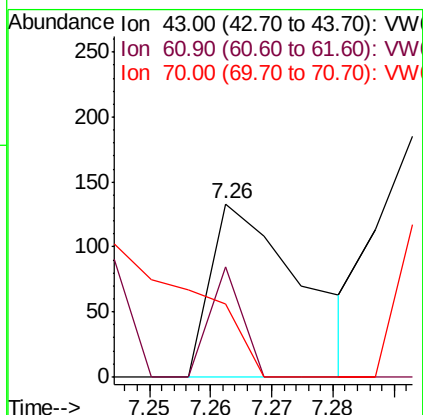
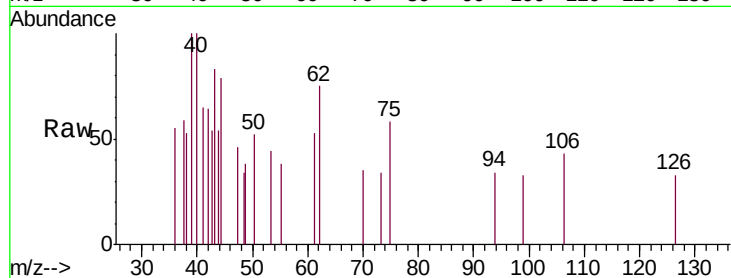
Tgt Ion: 43 Resp: 137

Ion Ratio Lower Upper

43 100

61 22.6 10.6 16.0#

70 0.0 8.9 13.3#



#38

Carbon Tetrachloride

Concen: 9.004 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.12 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

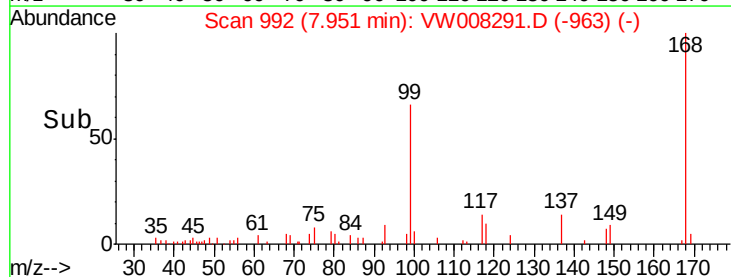
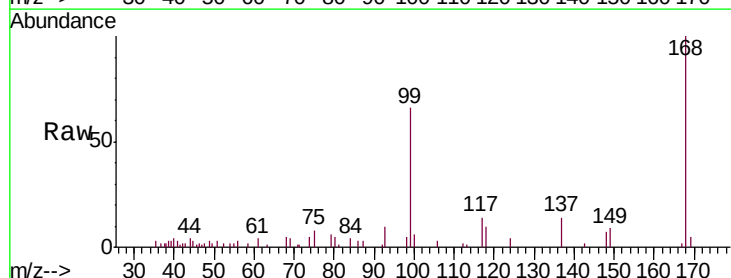
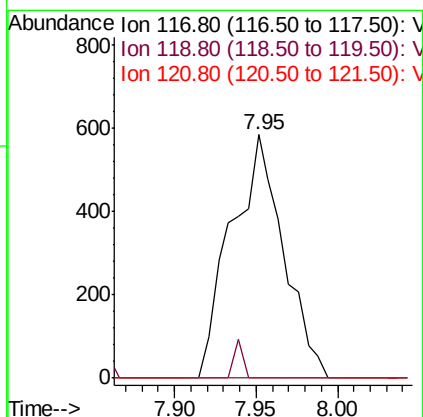
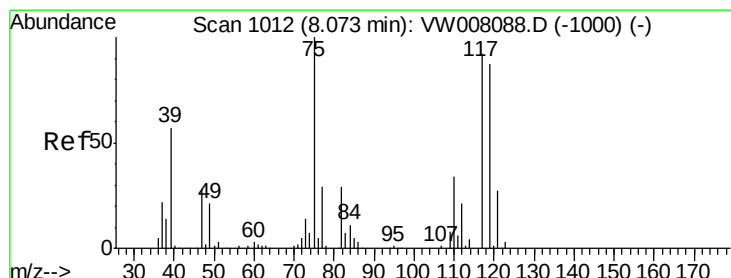
Tgt Ion: 117 Resp: 1301

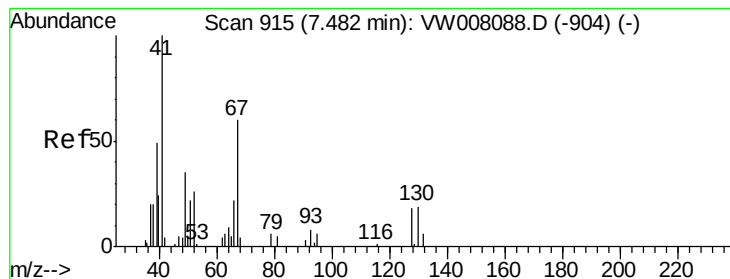
Ion Ratio Lower Upper

117 100

119 0.0 75.8 113.8#

121 0.0 23.7 35.5#





#41

Methacrylonitrile

Concen: 4.981 ug/l

RT: 7.48 min Scan# 915

Delta R.T. -0.00 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampled :

TP-7

Tgt Ion: 41 Resp: 199

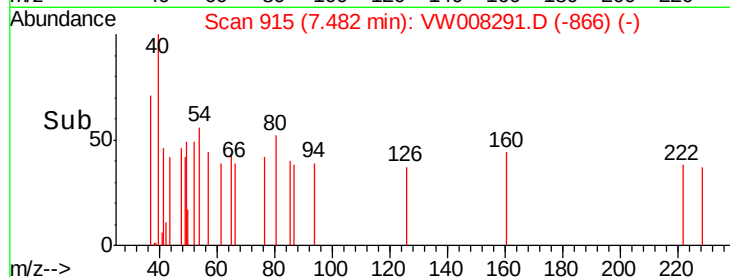
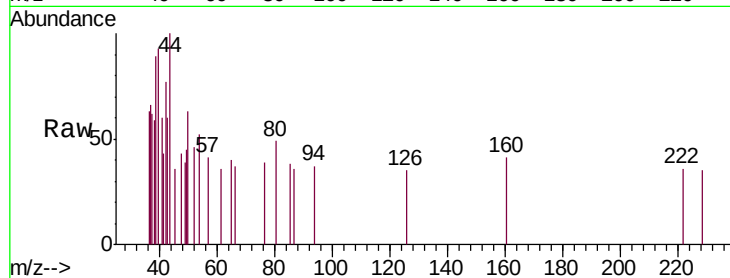
Ion Ratio Lower Upper

41 100

39 0.0 47.9 71.9#

67 0.0 56.3 84.5#

52 39.2 24.5 36.7#

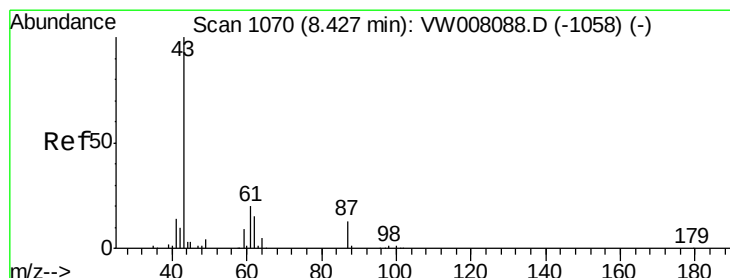
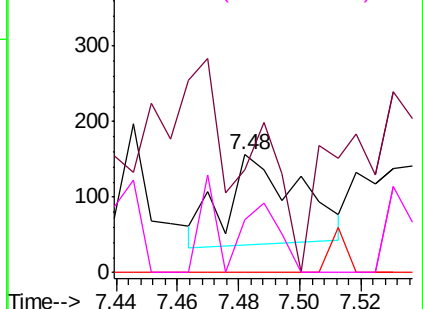


Abundance Ion 41.00 (40.70 to 41.70): VW

Ion 39.00 (38.70 to 39.70): VW

Ion 67.00 (66.70 to 67.70): VW

Ion 52.00 (51.70 to 52.70): VW



#43

Isopropyl Acetate

Concen: 1.637 ug/l

RT: 8.18 min Scan# 1029

Delta R.T. -0.25 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

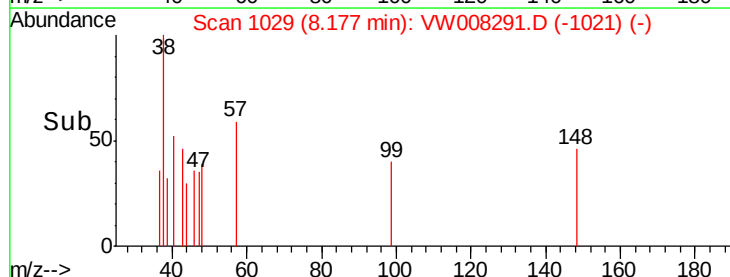
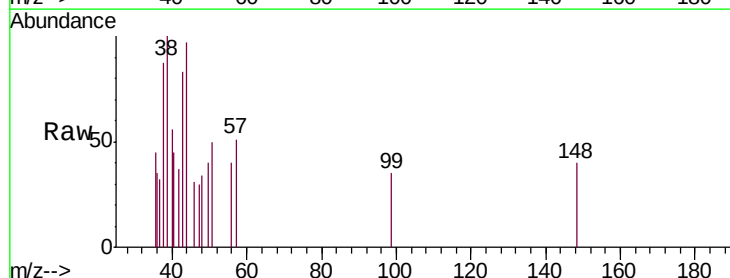
Tgt Ion: 43 Resp: 207

Ion Ratio Lower Upper

43 100

61 27.1 24.8 37.2

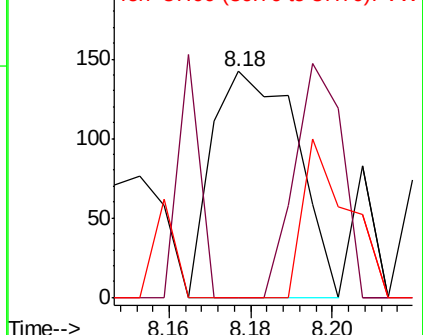
87 11.1 10.4 15.6

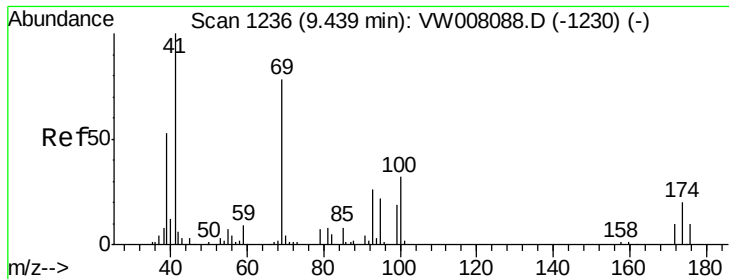


Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 87.00 (86.70 to 87.70): VW





#48

Methyl methacrylate

Concen: 2.128 ug/l

RT: 9.46 min Scan# 1239

Delta R.T. 0.02 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampled :

TP-7

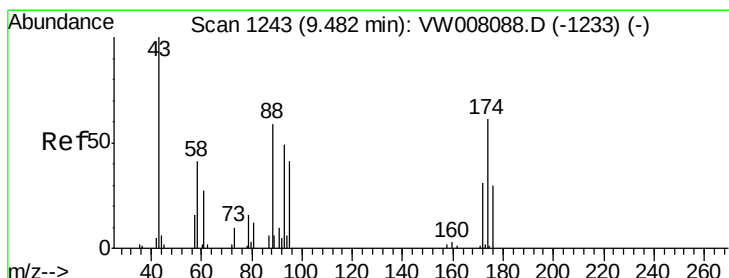
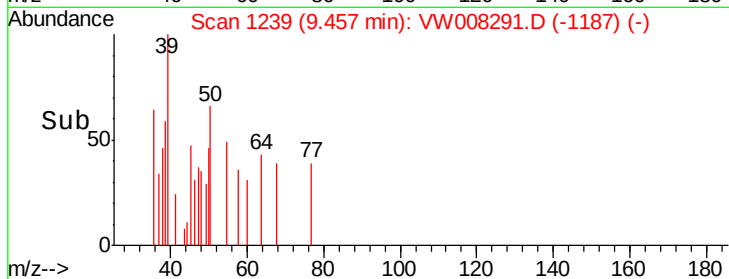
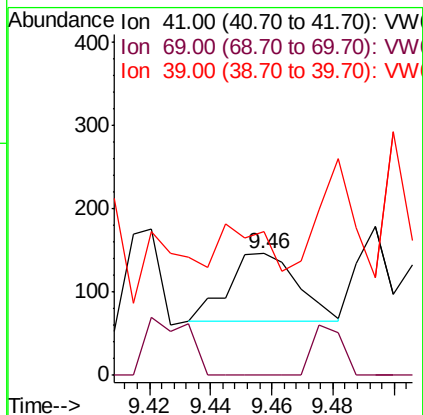
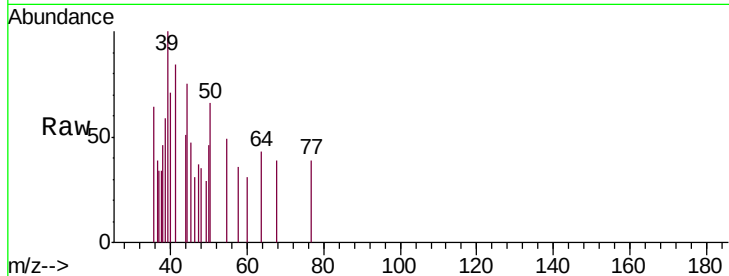
Tgt Ion: 41 Resp: 127

Ion Ratio Lower Upper

41 100

69 0.0 61.9 92.9#

39 139.4 43.0 64.4#



#49

1,4-Dioxane

Concen: 57.245 ug/l

RT: 9.49 min Scan# 1244

Delta R.T. 0.01 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

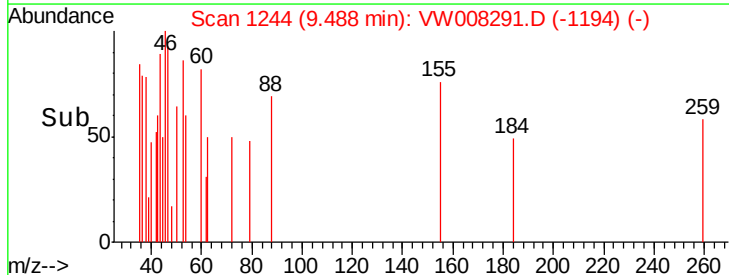
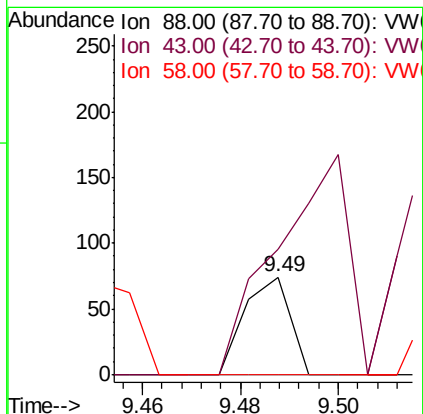
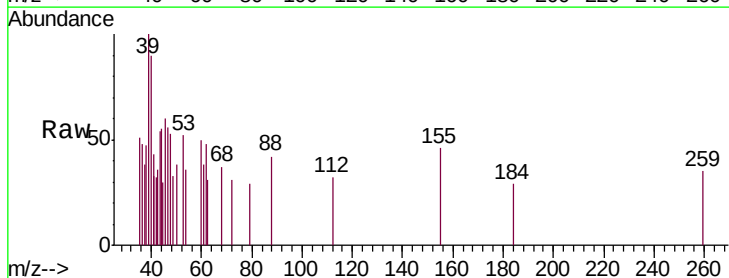
Tgt Ion: 88 Resp: 48

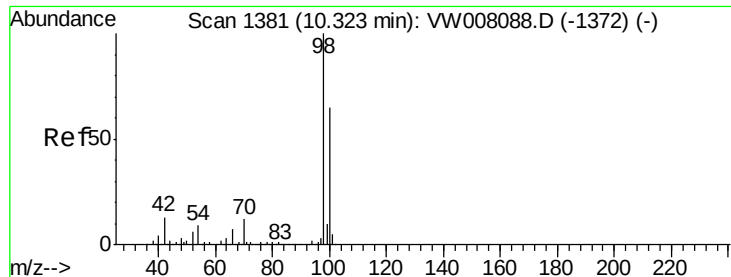
Ion Ratio Lower Upper

88 100

43 354.2 0.0 0.0#

58 0.0 61.7 92.5#





#50

Toluene-d8

Concen: 49.997 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampled :

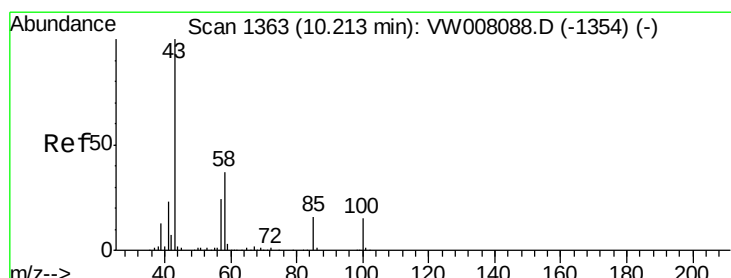
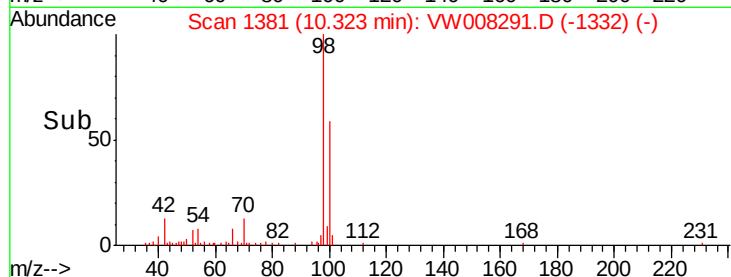
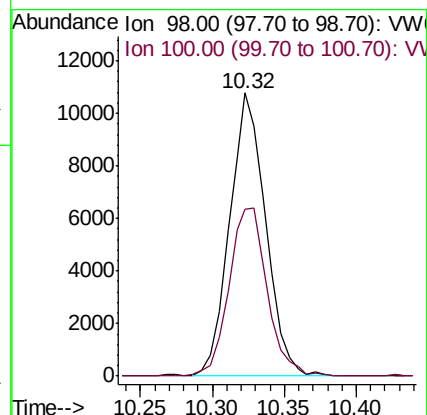
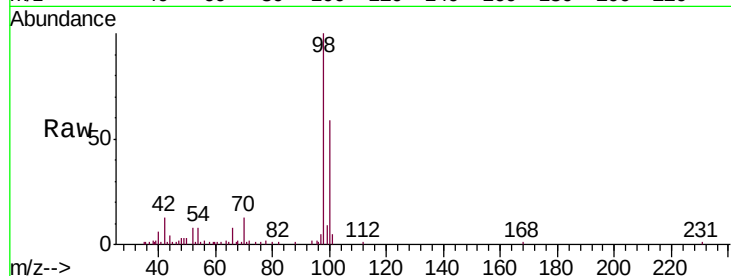
TP-7

Tgt Ion: 98 Resp: 18753

Ion Ratio Lower Upper

98 100

100 63.2 51.7 77.5



#51

4-Methyl-2-Pentanone

Concen: 1.454 ug/l

RT: 10.26 min Scan# 1371

Delta R.T. 0.05 min

Lab File: VW008291.D

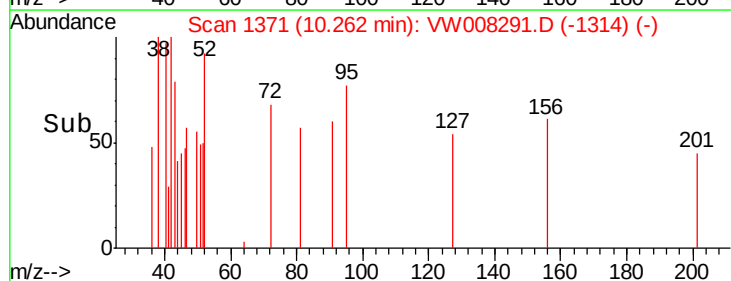
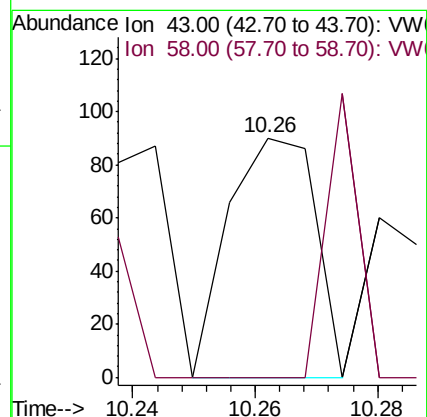
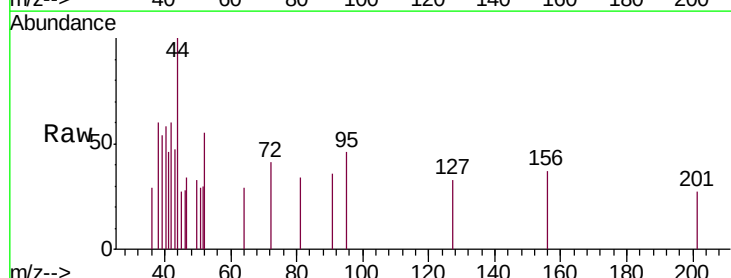
Acq: 15 Jan 2019 19:35

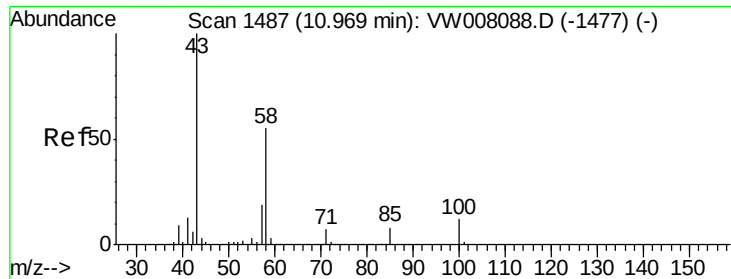
Tgt Ion: 43 Resp: 89

Ion Ratio Lower Upper

43 100

58 43.8 30.6 46.0

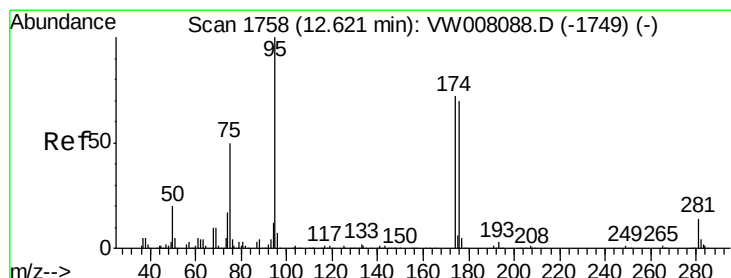
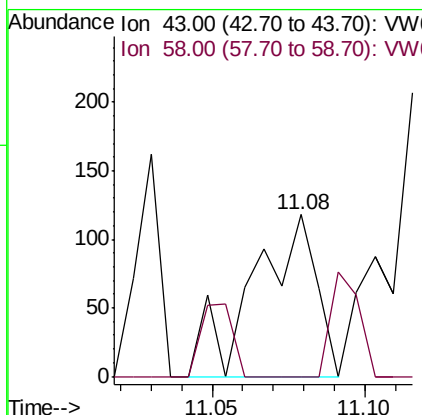
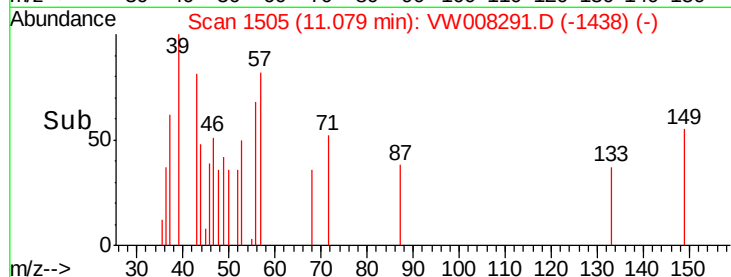
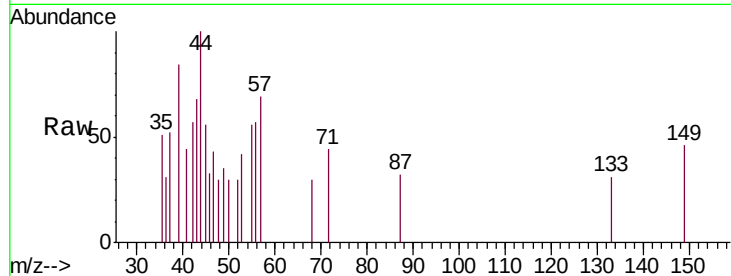




#59  
2-Hexanone  
Concen: 4.107 ug/l  
RT: 11.08 min Scan# 1505  
Delta R.T. 0.11 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

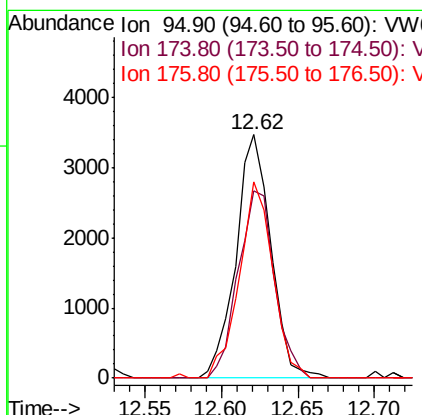
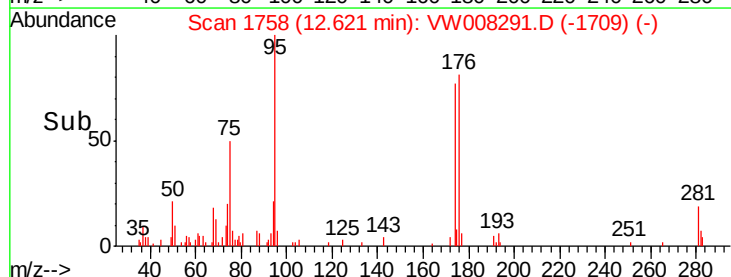
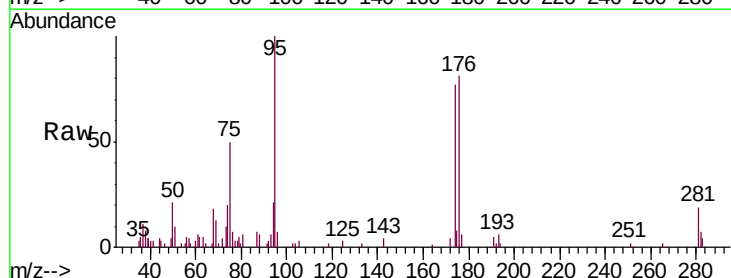
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-7

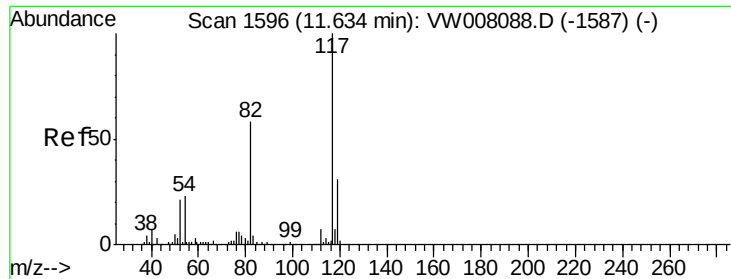
Tgt Ion: 43 Resp: 170  
Ion Ratio Lower Upper  
43 100  
58 28.8 27.2 81.5



#62  
4-Bromofluorobenzene  
Concen: 41.014 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. -0.00 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

Tgt Ion: 95 Resp: 5515  
Ion Ratio Lower Upper  
95 100  
174 79.5 0.0 143.0  
176 77.0 0.0 140.2

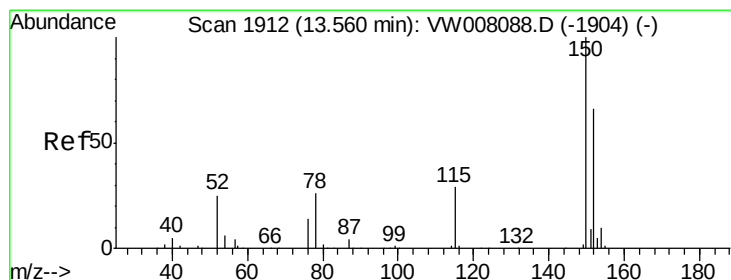
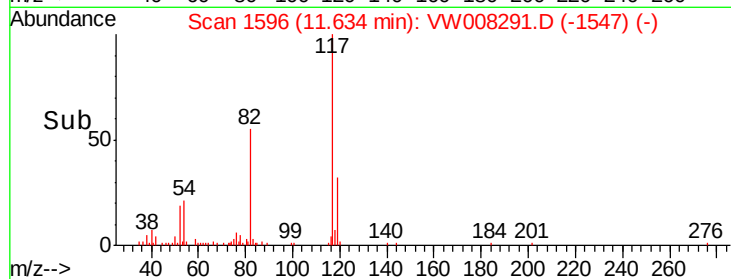
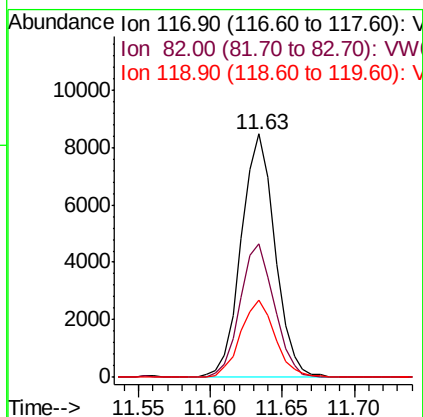
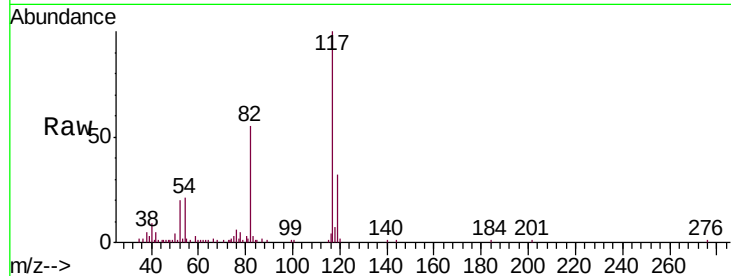




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

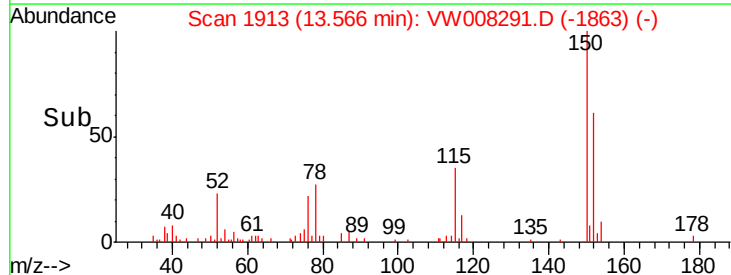
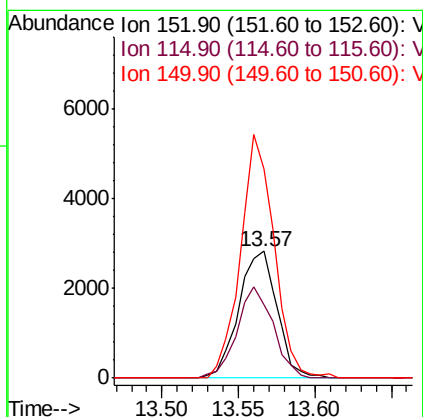
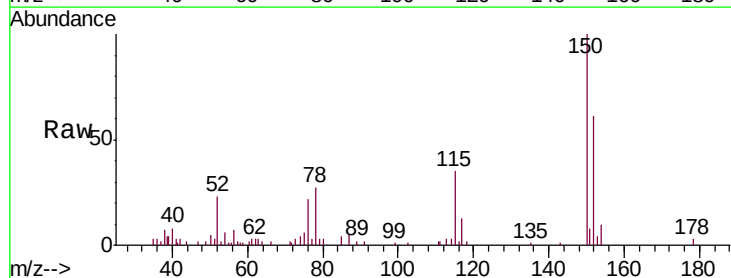
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-7

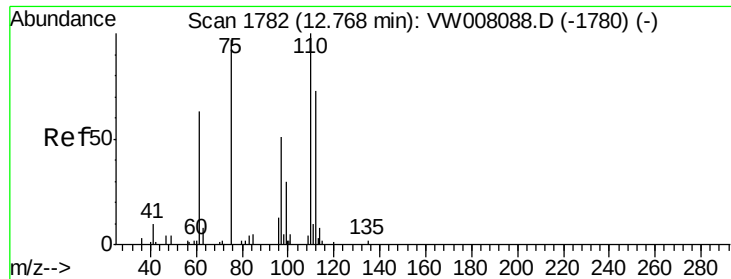
Tgt Ion:117 Resp: 13790  
Ion Ratio Lower Upper  
117 100  
82 55.1 46.4 69.6  
119 31.8 24.7 37.1



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.57 min Scan# 1913  
Delta R.T. 0.01 min  
Lab File: VW008291.D  
Acq: 15 Jan 2019 19:35

Tgt Ion:152 Resp: 4938  
Ion Ratio Lower Upper  
152 100  
115 67.2 30.8 92.4  
150 167.7 0.0 350.2





#76

1,2,3-Trichloropropane

Concen: 65.556 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

Instrument :

MSVOA\_W

ClientSampleId :

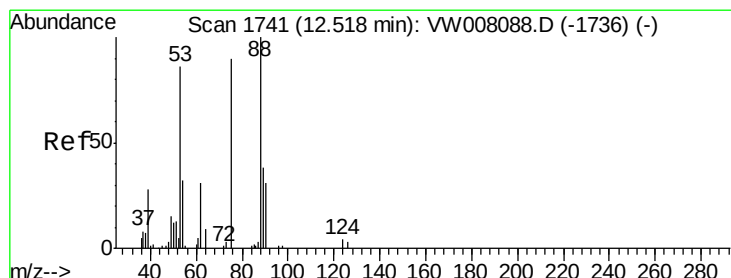
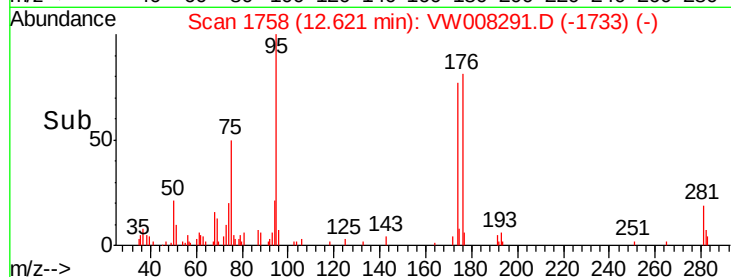
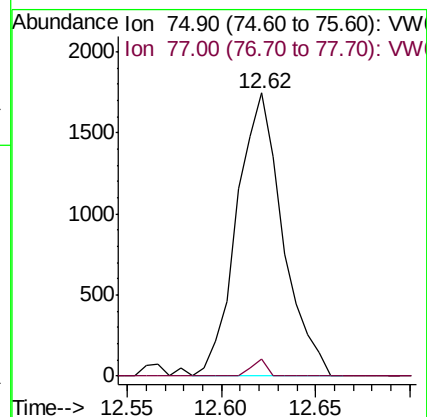
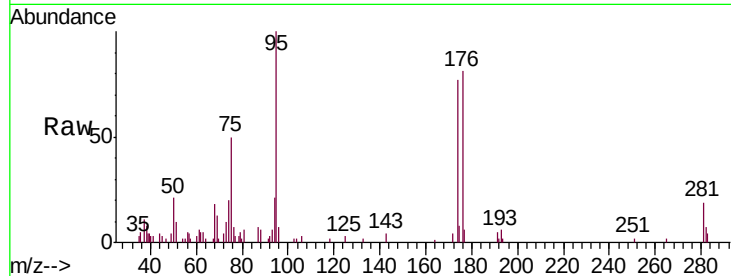
TP-7

Tgt Ion: 75 Resp: 2951

Ion Ratio Lower Upper

75 100

77 2.0 179.4 538.2#



#81

trans-1,4-Dichloro-2-butene

Concen: 152.659 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.10 min

Lab File: VW008291.D

Acq: 15 Jan 2019 19:35

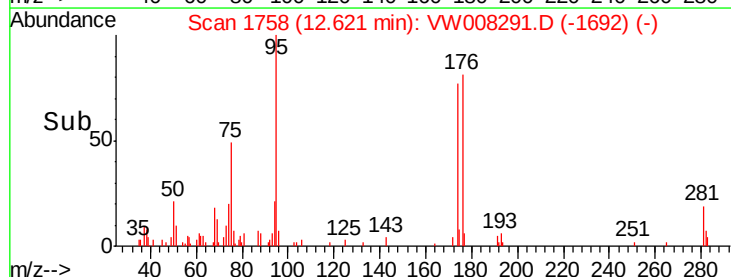
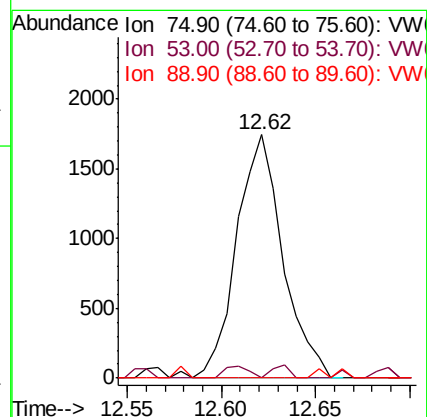
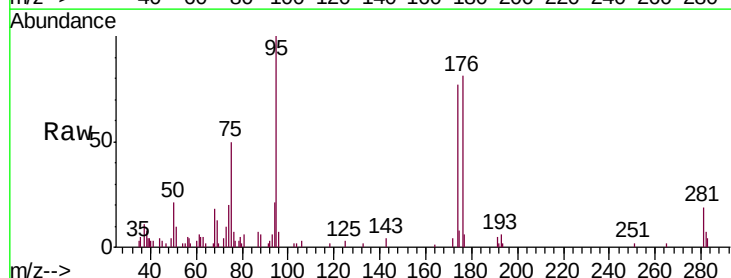
Tgt Ion: 75 Resp: 2951

Ion Ratio Lower Upper

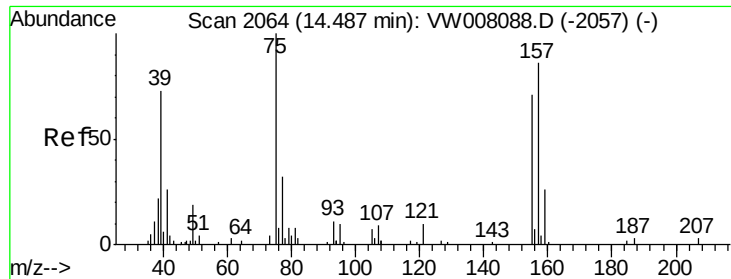
75 100

53 2.7 78.8 118.2#

89 0.0 35.4 53.2#







#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 6.309 ug/l  
 RT: 14.53 min Scan# 2071  
 Delta R.T. 0.04 min  
 Lab File: VW008291.D  
 Acq: 15 Jan 2019 19:35

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-7

Tgt Ion: 75 Resp: 63  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 38.6 115.7#  
 157 0.0 47.5 142.6#

