

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW011619\  
 Data File : VW008307.D  
 Acq On : 16 Jan 2019 14:42  
 Operator : SY/VA  
 Sample : K1147-25RE  
 Misc : 6.71G/5ML/MSVOA W/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-9RE

Quant Time: Jan 17 05:02:58 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      | 7.94  | 168  | 23053    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 39663    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 34889    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 14752    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 14052    | 54.23 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.46% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 13122    | 56.72 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 113.44% |          |
| 50) Toluene-d8              | 10.32 | 98   | 47914    | 49.36 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.72%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 14913    | 42.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.70%  |          |

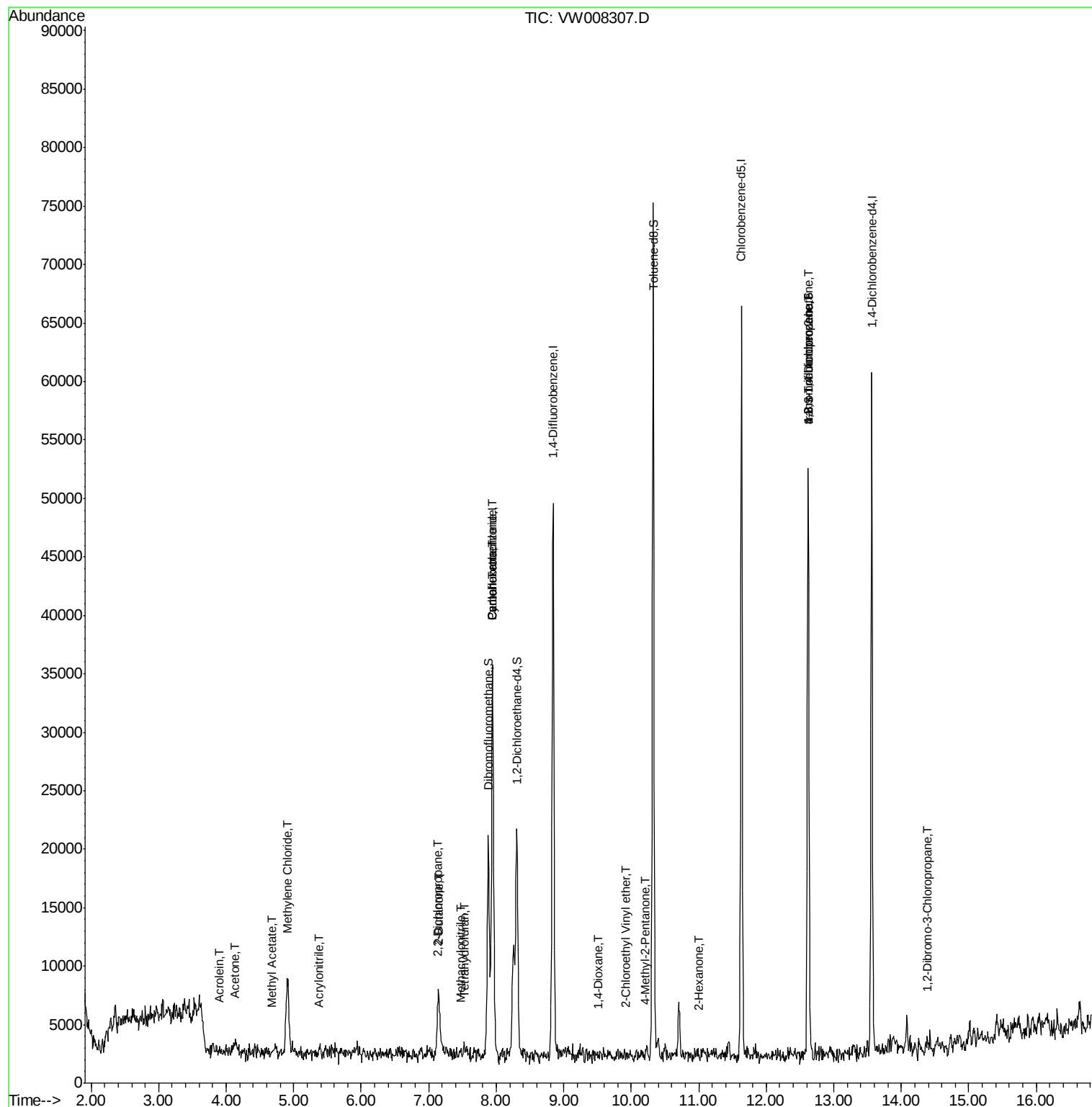
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.23  | 59   | 125      | Below Cal | #      | 100    |
| 13) Acrolein                   | 3.89  | 56   | 47       | 1.235     | ug/l # | 14     |
| 15) Acrylonitrile              | 5.36  | 53   | 74       | 1.328     | ug/l # | 31     |
| 16) Acetone                    | 4.12  | 43   | 2271     | 30.165    | ug/l   | 91     |
| 18) Methyl Acetate             | 4.68  | 43   | 196      | 1.197     | ug/l # | 88     |
| 20) Methylene Chloride         | 4.90  | 84   | 4716     | 15.134    | ug/l   | 97     |
| 25) 2-Butanone                 | 7.15  | 43   | 417      | 5.785     | ug/l # | 58     |
| 26) 2,2-Dichloropropane        | 7.13  | 77   | 413      | 1.197     | ug/l # | 53     |
| 29) Tetrahydrofuran            | 7.53  | 42   | 481      | 9.989     | ug/l # | 46     |
| 31) Cyclohexane                | 7.94  | 56   | 948      | 1.739     | ug/l # | 14     |
| 38) Carbon Tetrachloride       | 7.94  | 117  | 2564     | 6.856     | ug/l # | 19     |
| 41) Methacrylonitrile          | 7.48  | 41   | 211      | 2.041     | ug/l # | 37     |
| 49) 1,4-Dioxane                | 9.51  | 88   | 40       | 18.432    | ug/l # | 19     |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 382      | 2.411     | ug/l   | 98     |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 147      | 1.213     | ug/l # | 76     |
| 59) 2-Hexanone                 | 11.01 | 43   | 115      | 1.073     | ug/l   | 81     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 7315     | 54.395    | ug/l # | 1      |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 7315     | 126.668   | ug/l # | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.38 | 75   | 47       | 1.575     | ug/l # | 6      |

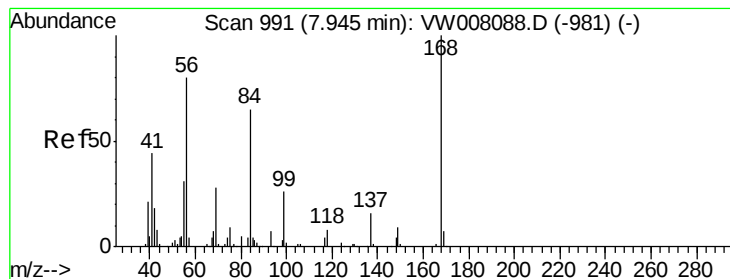
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW011619\  
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TP-9RE

Quant Time: Jan 17 05:02:58 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W010819S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 09 04:40:48 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.01 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

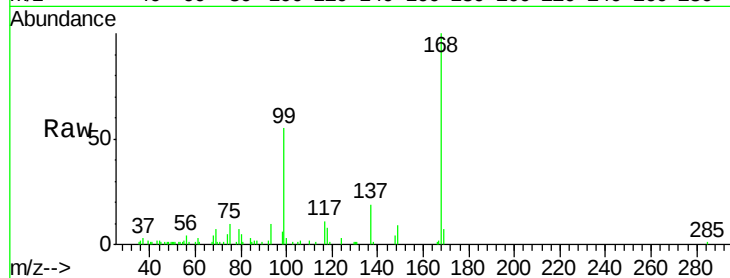
TP-9RE

Tot Ion:168 Resp: 23053

Ion Ratio Lower Upper

168 100

99 55.4 52.6 78.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.94

10000

8000

6000

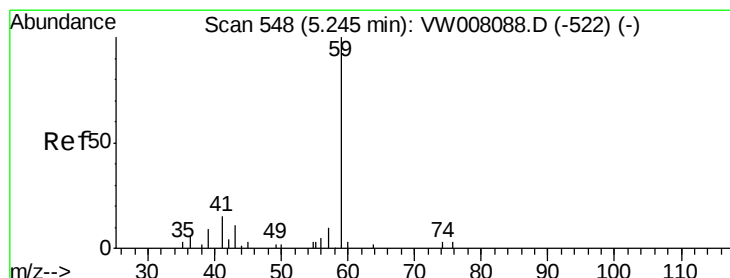
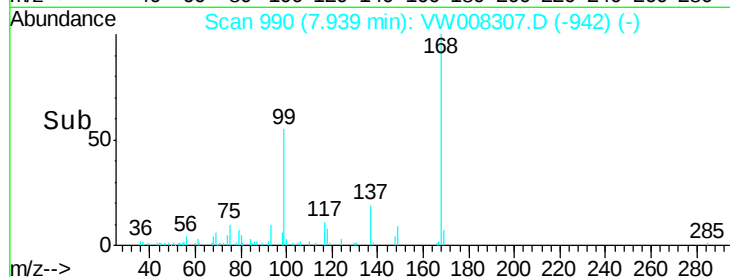
4000

2000

0

Time-->

7.85 7.90 7.95 8.00 8.05



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.23 min Scan# 545

Delta R.T. -0.02 min

Lab File: VW008307.D

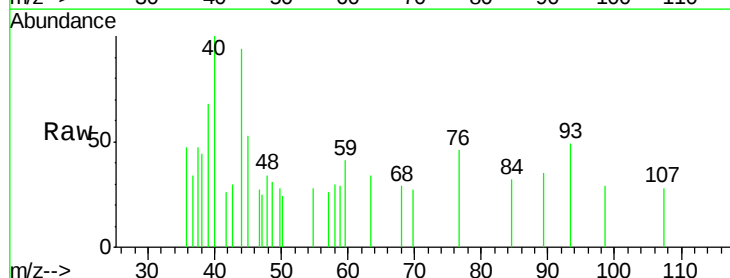
Acq: 16 Jan 2019 14:42

Tgt Ion: 59 Resp: 125

Ion Ratio Lower Upper

59 100

57 16.8 0.0 0.0#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.23

150

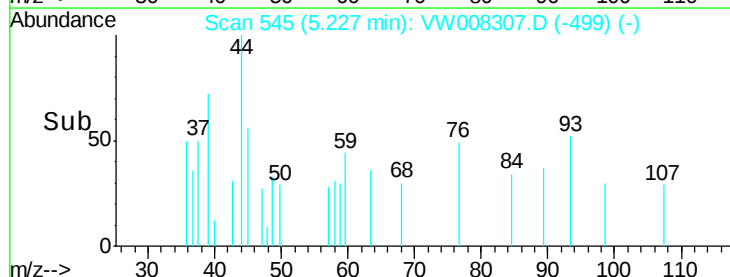
100

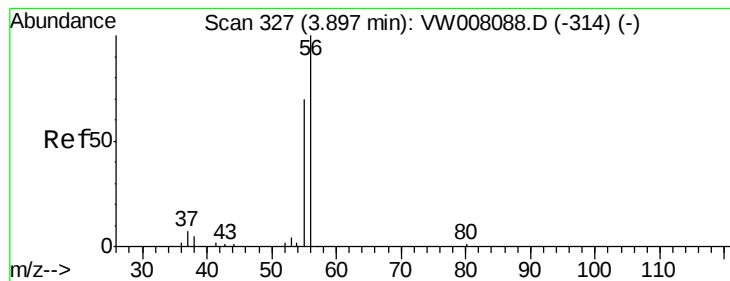
50

0

Time-->

5.20 5.22 5.24





#13

Acrolein

Concen: 1.235 ug/l

RT: 3.89 min Scan# 326

Delta R.T. -0.01 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

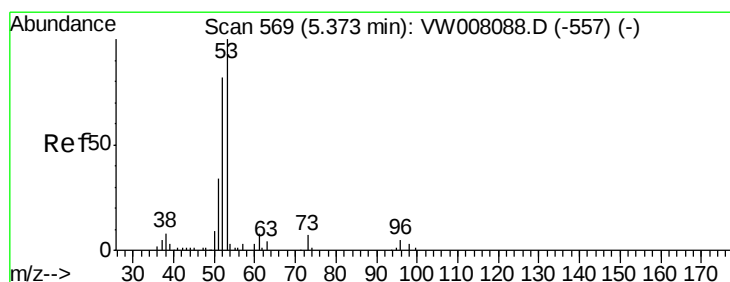
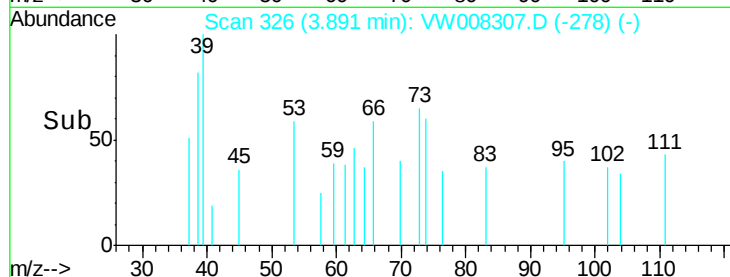
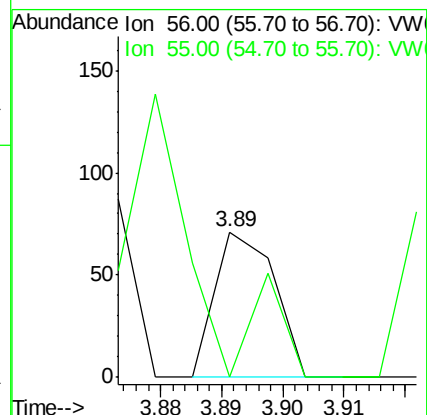
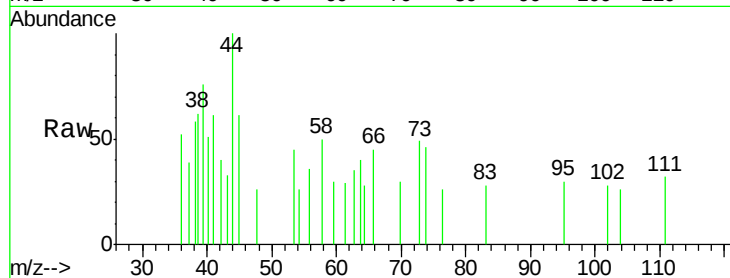
TP-9RE

Tot Ion: 56 Resp: 47

Ion Ratio Lower Upper

56 100

55 0.0 56.6 84.8#



#15

Acrylonitrile

Concen: 1.328 ug/l

RT: 5.36 min Scan# 567

Delta R.T. -0.01 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

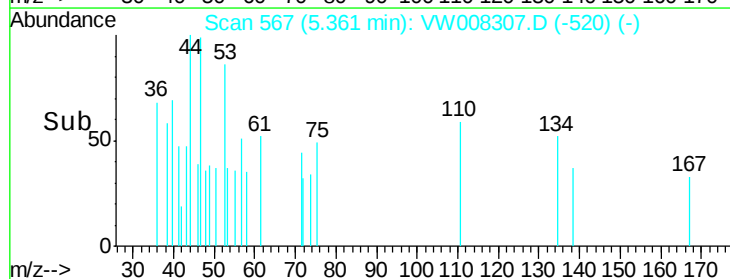
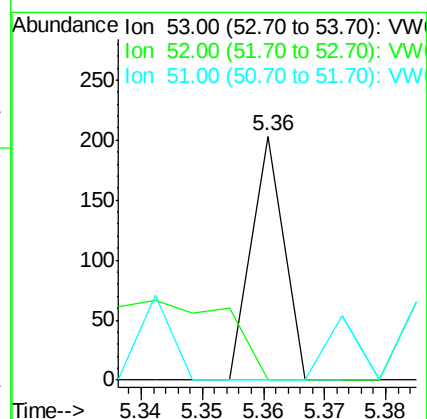
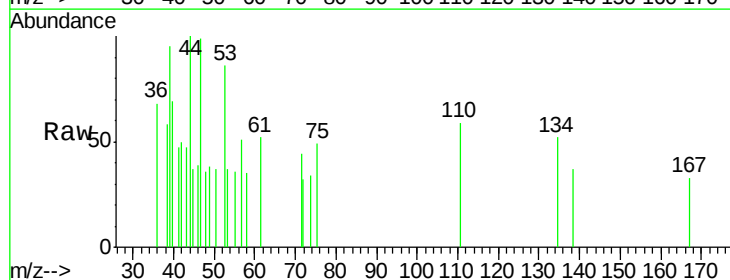
Tgt Ion: 53 Resp: 74

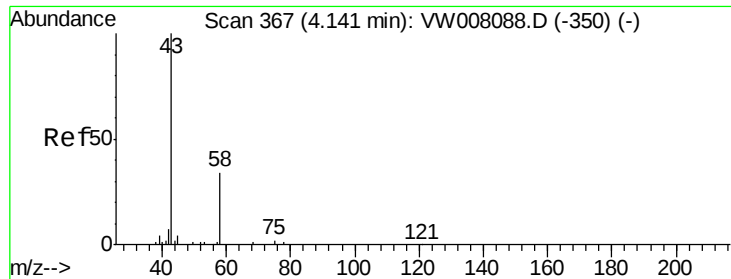
Ion Ratio Lower Upper

53 100

52 0.0 66.8 100.2#

51 27.0 29.7 44.5#





#16

Acetone

Concen: 30.165 ug/l

RT: 4.12 min Scan# 364

Delta R.T. -0.02 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

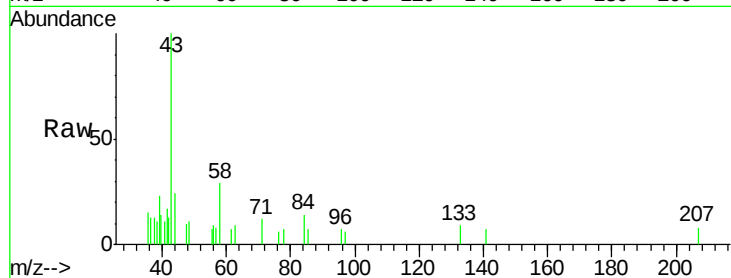
TP-9RE

Tot Ion: 43 Resp: 2271

Ion Ratio Lower Upper

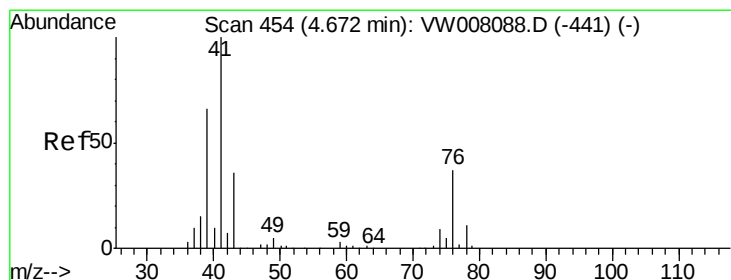
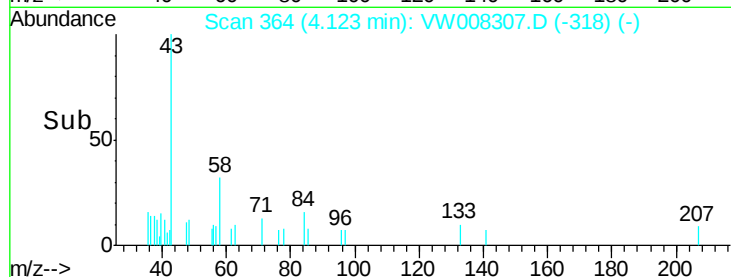
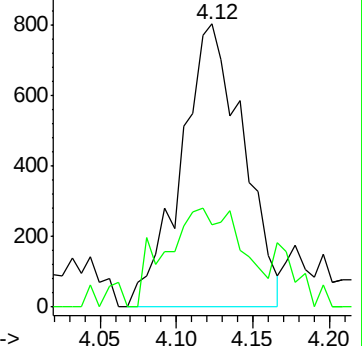
43 100

58 29.0 27.5 41.3



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#18

Methyl Acetate

Concen: 1.197 ug/l

RT: 4.68 min Scan# 455

Delta R.T. 0.01 min

Lab File: VW008307.D

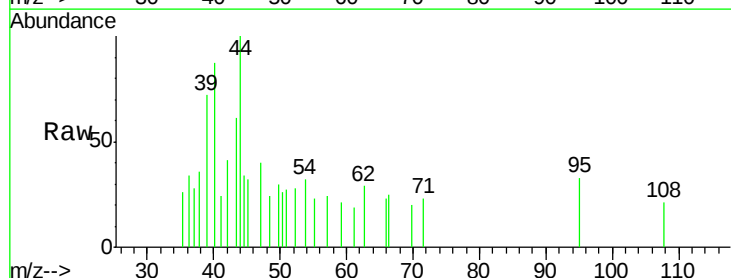
Acq: 16 Jan 2019 14:42

Tgt Ion: 43 Resp: 196

Ion Ratio Lower Upper

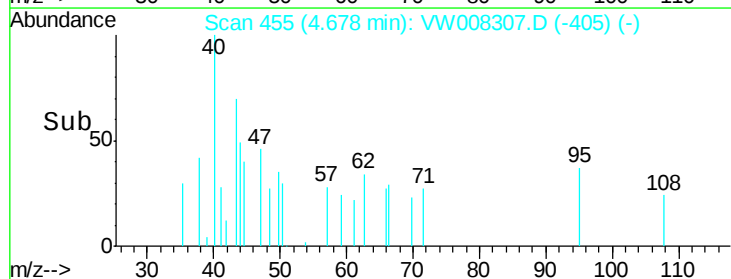
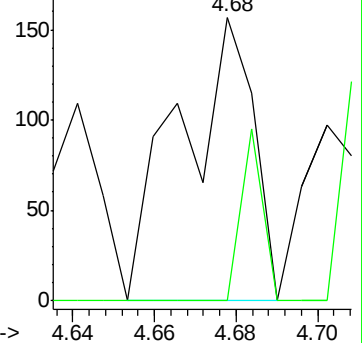
43 100

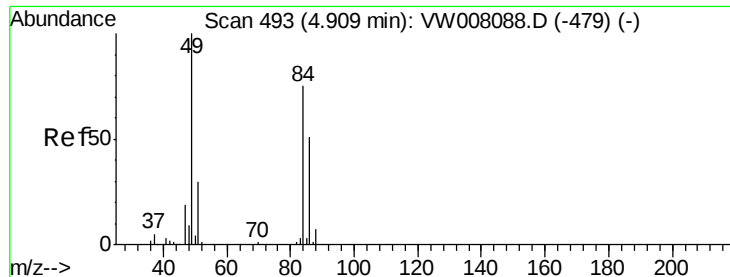
74 17.9 19.0 28.4#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 74.00 (73.70 to 74.70): VW

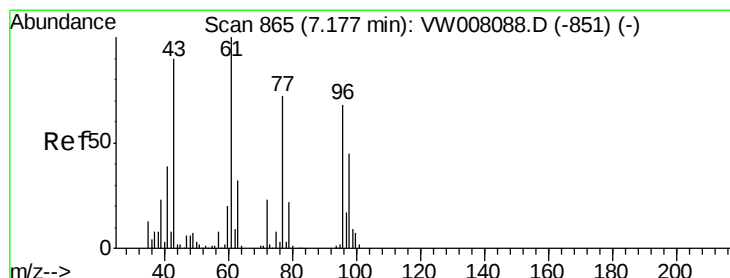
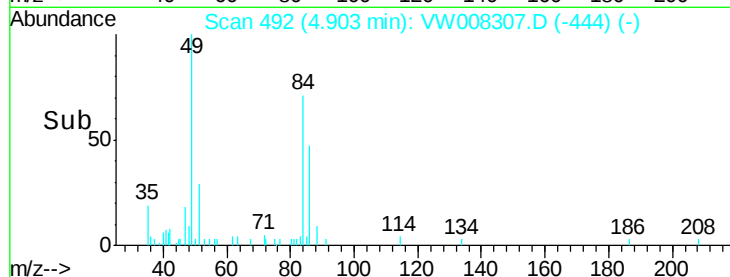
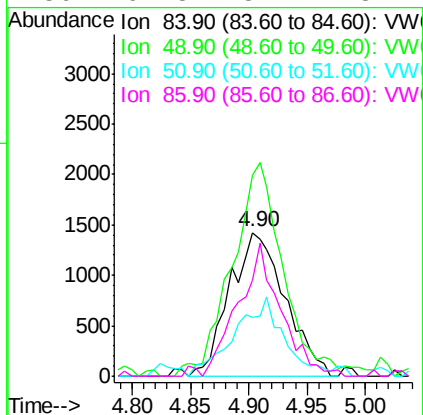
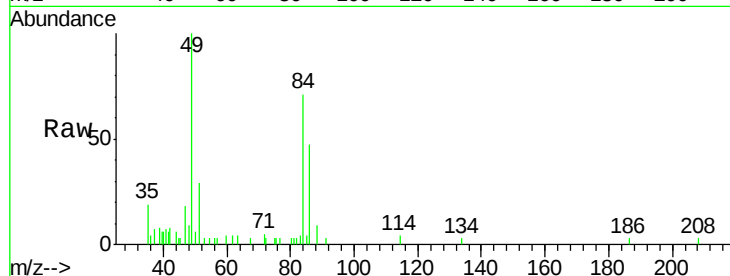




#20  
Methylene Chloride  
Concen: 15.134 ug/l  
RT: 4.90 min Scan# 492  
Delta R.T. -0.01 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

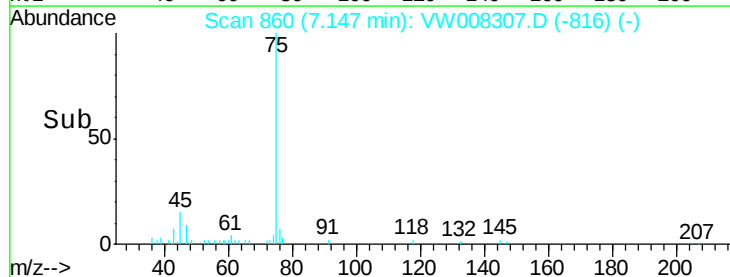
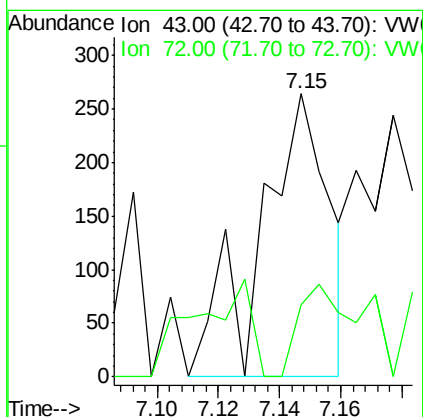
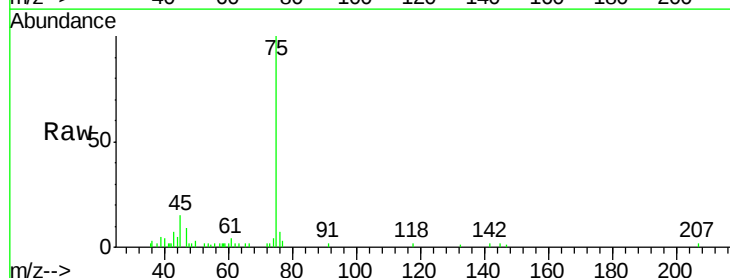
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-9RE

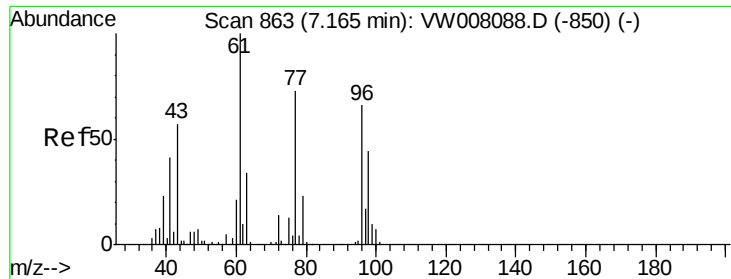
Tot Ion: 84 Resp: 4716  
Ion Ratio Lower Upper  
84 100  
49 134.9 107.1 160.7  
51 41.0 32.4 48.6  
86 61.8 54.2 81.4



#25  
2-Butanone  
Concen: 5.785 ug/l  
RT: 7.15 min Scan# 860  
Delta R.T. -0.03 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

Tgt Ion: 43 Resp: 417  
Ion Ratio Lower Upper  
43 100  
72 4.5 20.5 30.7#





#26

2,2-Dichloropropane

Concen: 1.197 ug/l

RT: 7.13 min Scan# 857

Delta R.T. -0.04 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

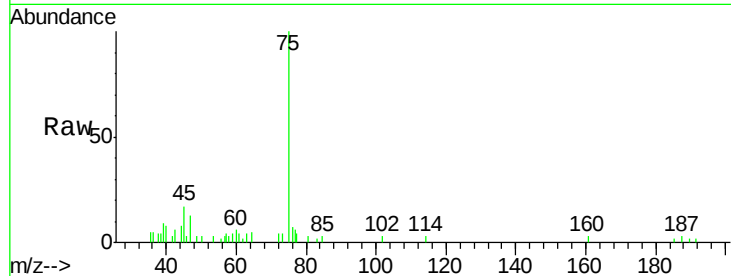
TP-9RE

Tot Ion: 77 Resp: 413

Ion Ratio Lower Upper

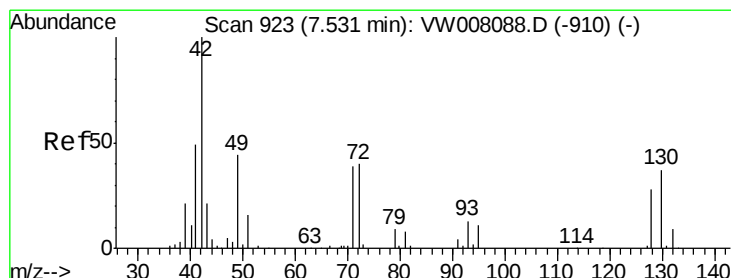
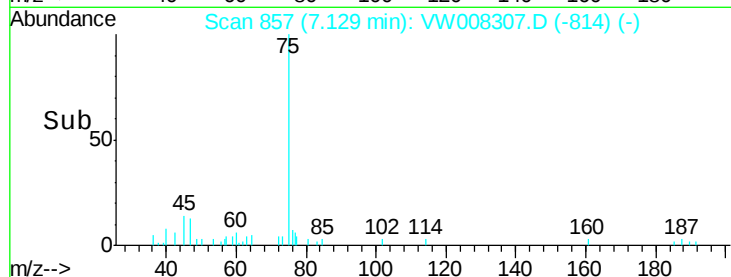
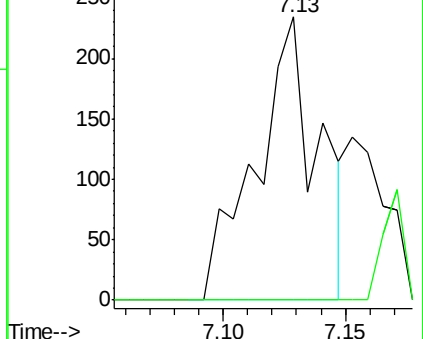
77 100

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



#29

Tetrahydrofuran

Concen: 9.989 ug/l

RT: 7.53 min Scan# 923

Delta R.T. 0.00 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

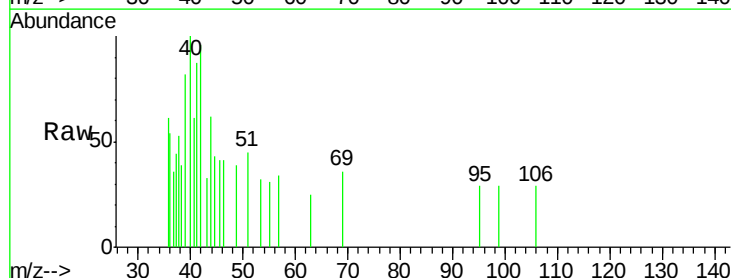
Tgt Ion: 42 Resp: 481

Ion Ratio Lower Upper

42 100

72 0.0 32.4 48.6#

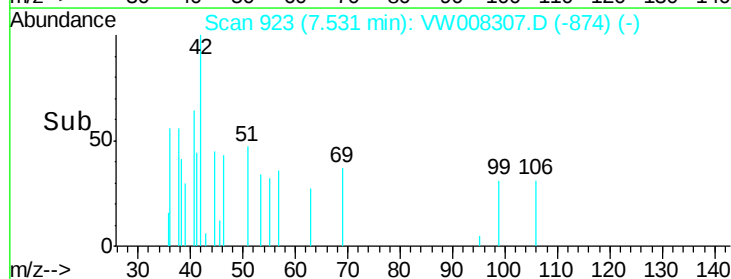
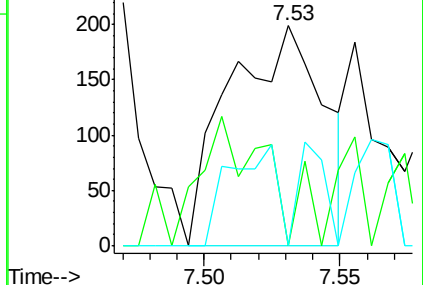
71 13.1 31.3 46.9#

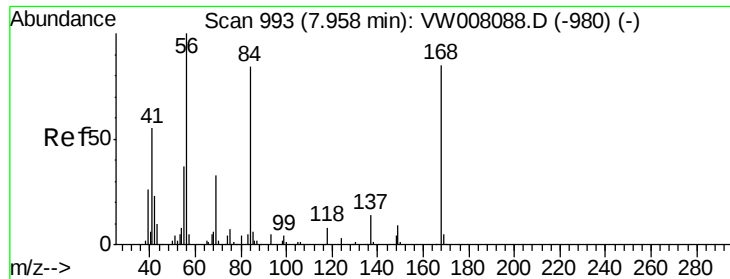


Abundance Ion 42.00 (41.70 to 42.70): VW

Ion 72.00 (71.70 to 72.70): VW

Ion 71.00 (70.70 to 71.70): VW

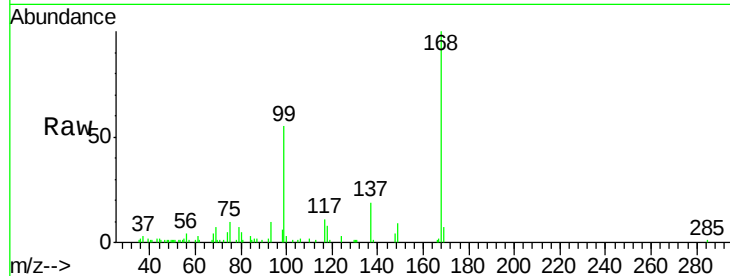




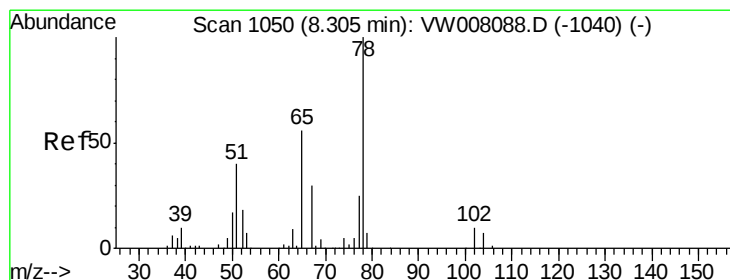
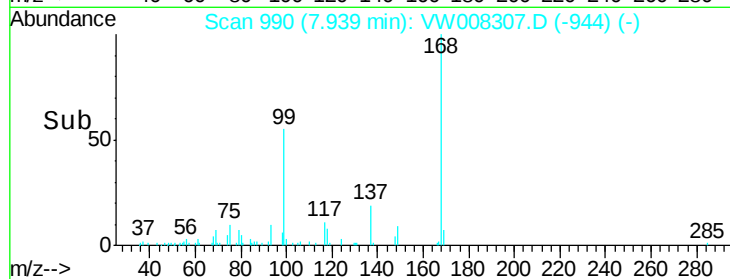
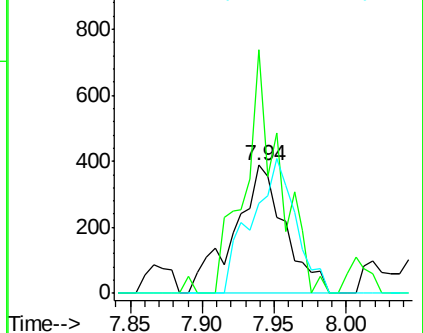
#31  
Cyclohexane  
Concen: 1.739 ug/l  
RT: 7.94 min Scan# 990  
Delta R.T. -0.02 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

Instrument :  
MSVOA\_W  
ClientSampled :  
TP-9RE

Tot Ion: 56 Resp: 948  
Ion Ratio Lower Upper  
56 100  
69 190.2 26.2 39.4#  
84 93.8 67.4 101.2

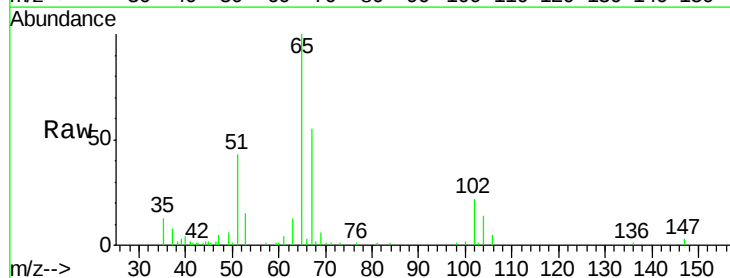


Abundance Ion 56.00 (55.70 to 56.70): VW  
Ion 69.00 (68.70 to 69.70): VW  
Ion 84.00 (83.70 to 84.70): VW

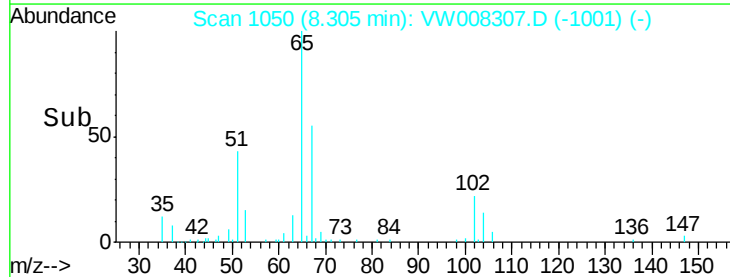
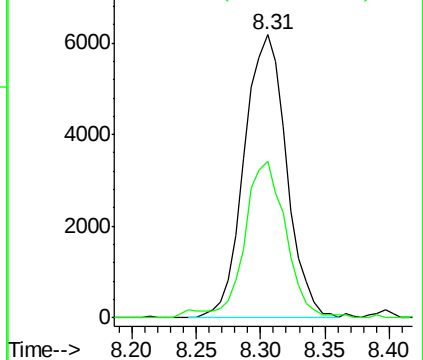


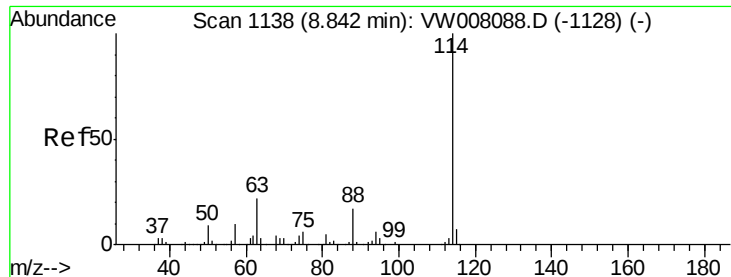
#33  
1,2-Dichloroethane-d4  
Concen: 54.235 ug/l  
RT: 8.31 min Scan# 1050  
Delta R.T. 0.00 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

Tgt Ion: 65 Resp: 14052  
Ion Ratio Lower Upper  
65 100  
67 53.0 0.0 106.8



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





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. 0.00 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

TP-9RE

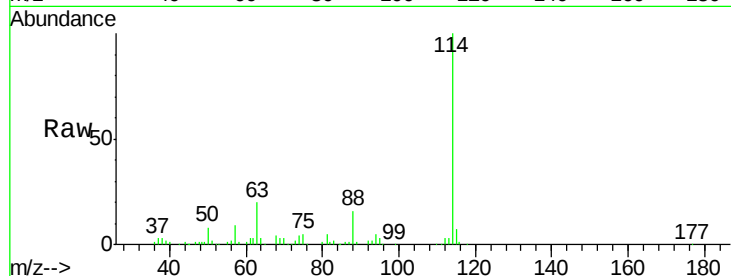
Tot Ion:114 Resp: 39663

Ion Ratio Lower Upper

114 100

63 19.6 0.0 43.4

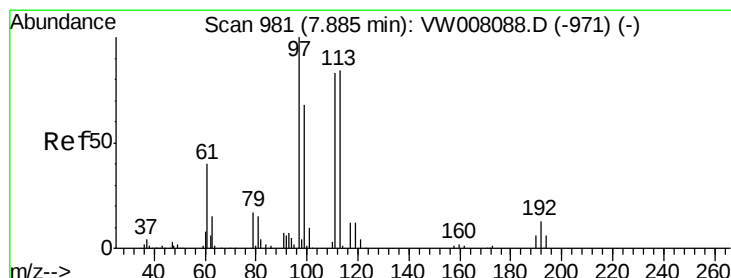
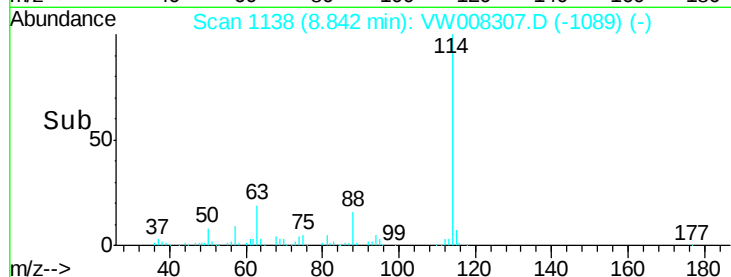
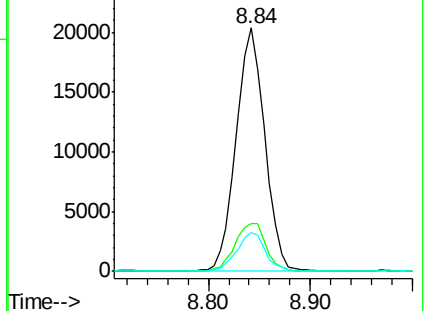
88 15.7 0.0 33.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VW

Ion 87.90 (87.60 to 88.60): VW



#35

Dibromofluoromethane

Concen: 56.724 ug/l

RT: 7.88 min Scan# 981

Delta R.T. 0.00 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

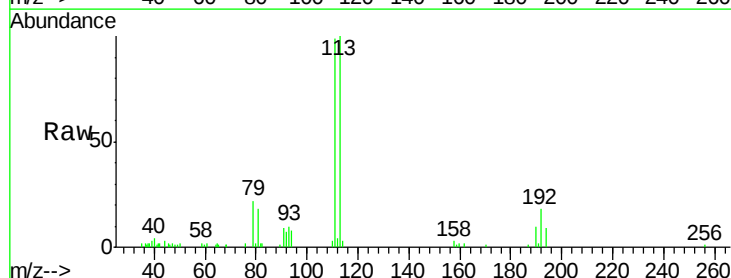
Tgt Ion:113 Resp: 13122

Ion Ratio Lower Upper

113 100

111 100.2 81.8 122.8

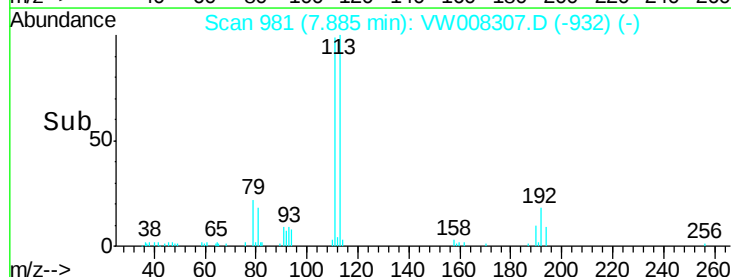
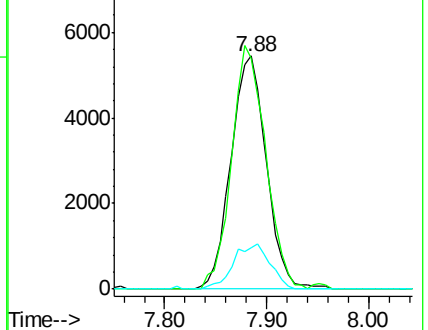
192 20.0 12.8 19.2#

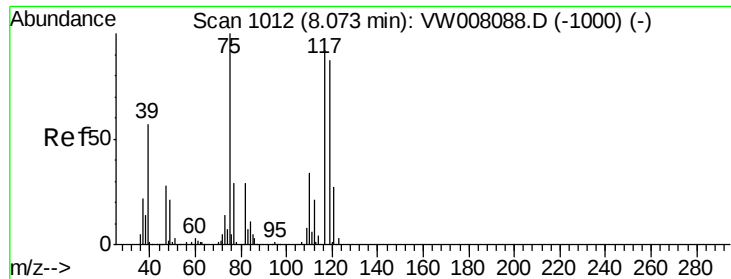


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#38

Carbon Tetrachloride

Concen: 6.856 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.13 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

TP-9RE

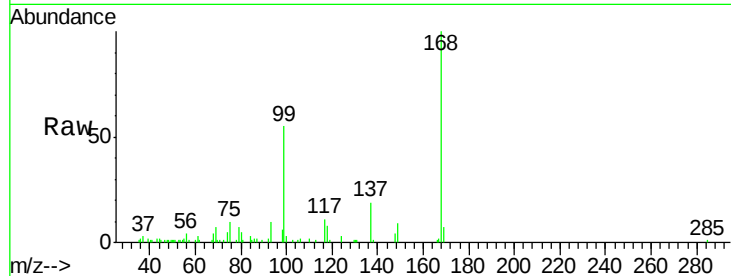
Tot Ion:117 Resp: 2564

Ion Ratio Lower Upper

117 100

119 7.9 75.8 113.8#

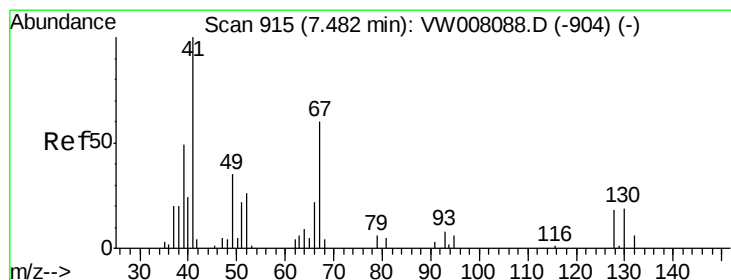
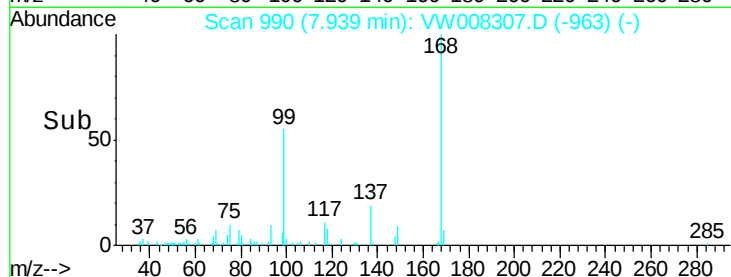
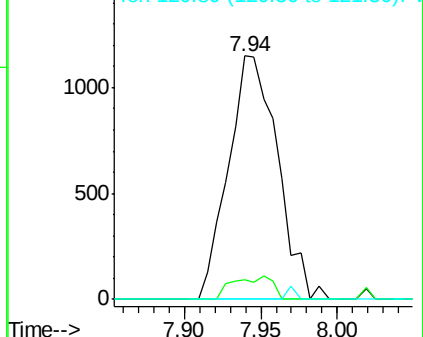
121 0.0 23.7 35.5#



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



#41

Methacrylonitrile

Concen: 2.041 ug/l

RT: 7.48 min Scan# 914

Delta R.T. -0.01 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Tgt Ion: 41 Resp: 211

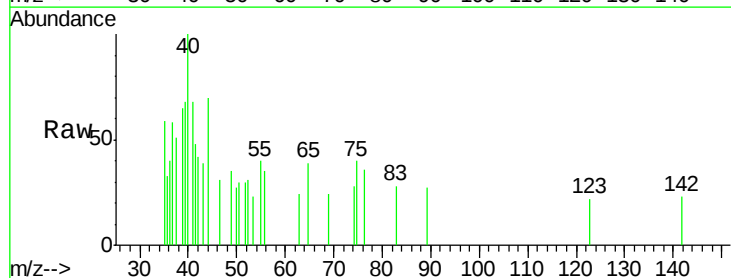
Ion Ratio Lower Upper

41 100

39 110.0 47.9 71.9#

67 9.5 56.3 84.5#

52 46.4 24.5 36.7#

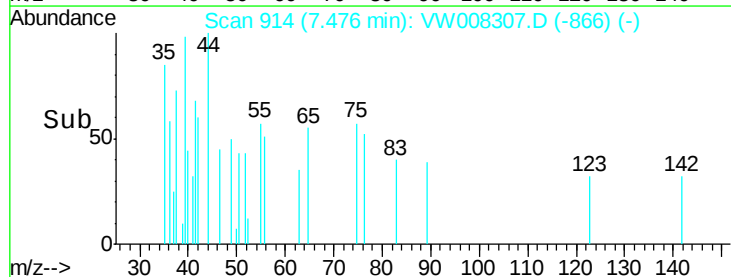
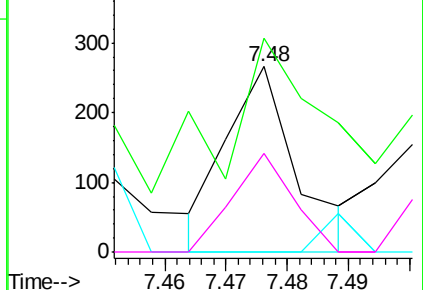


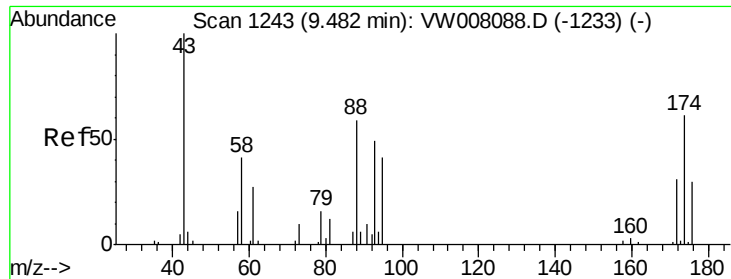
Abundance Ion 41.00 (40.70 to 41.70): VW

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





#49

1,4-Dioxane

Concen: 18.432 ug/l

RT: 9.51 min Scan# 1248

Delta R.T. 0.03 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

TP-9RE

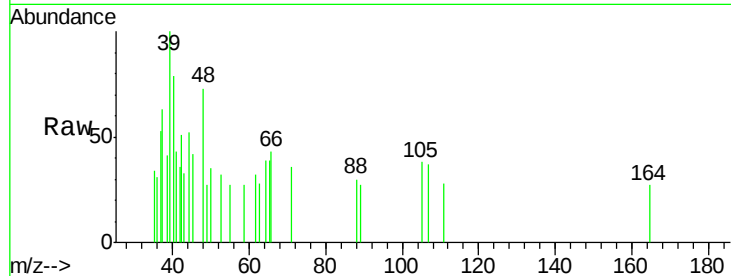
Tot Ion: 88 Resp: 40

Ion Ratio Lower Upper

88 100

43 290.0 0.0 0.0#

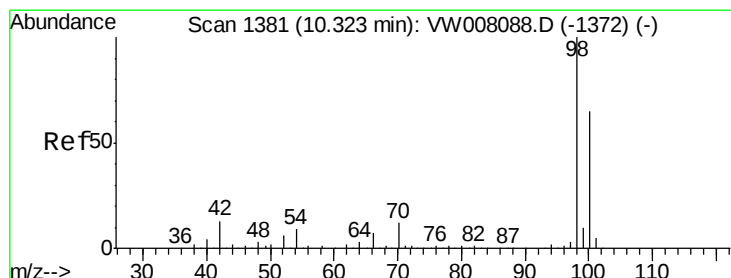
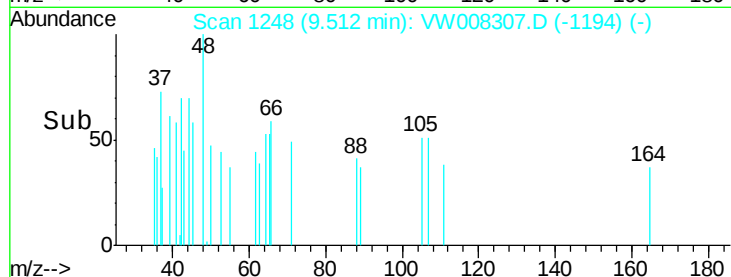
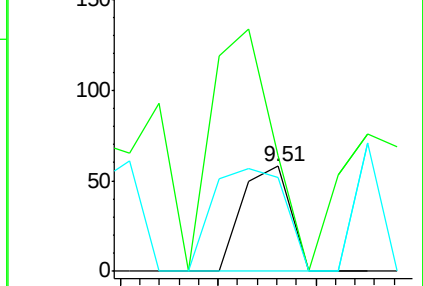
58 147.5 61.7 92.5#



Abundance Ion 88.00 (87.70 to 88.70): VW

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#50

Toluene-d8

Concen: 49.358 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VW008307.D

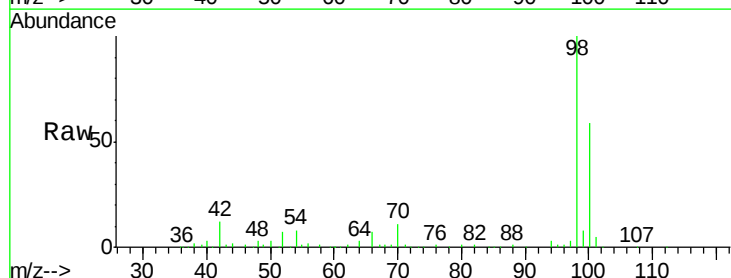
Acq: 16 Jan 2019 14:42

Tgt Ion: 98 Resp: 47914

Ion Ratio Lower Upper

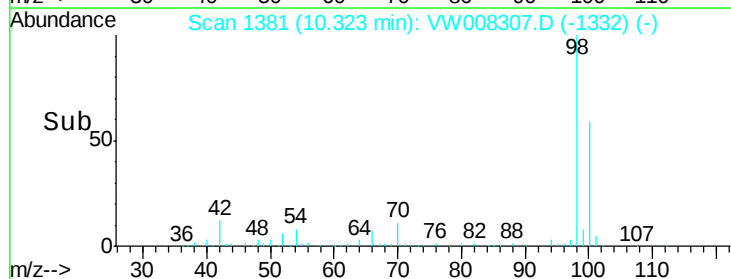
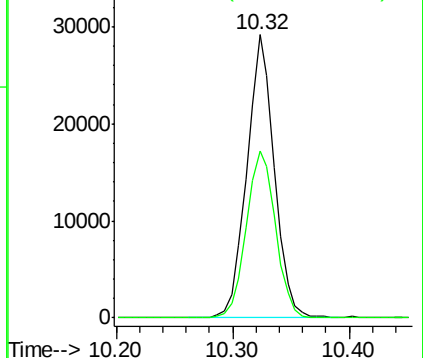
98 100

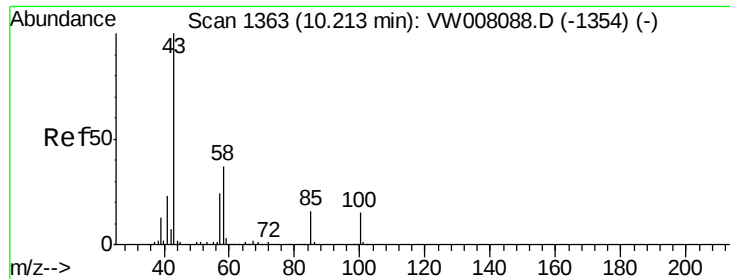
100 63.0 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW





#51

4-Methyl-2-Pentanone

Concen: 2.411 ug/l

RT: 10.21 min Scan# 1362

Delta R.T. -0.01 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampled :

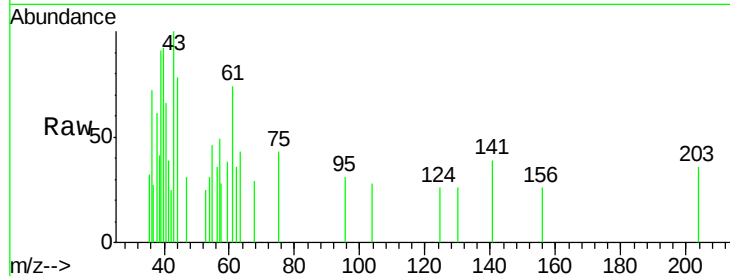
TP-9RE

Tot Ion: 43 Resp: 382

Ion Ratio Lower Upper

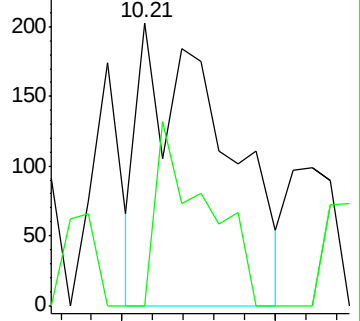
43 100

58 39.3 30.6 46.0

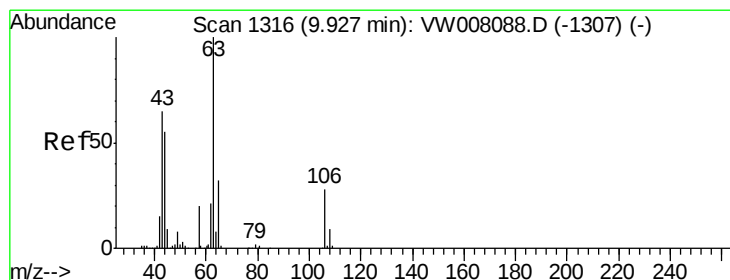
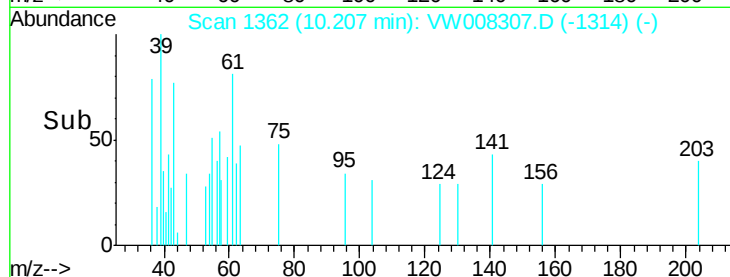


Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



Time-->



#58

2-Chloroethyl Vinyl ether

Concen: 1.213 ug/l

RT: 9.93 min Scan# 1317

Delta R.T. 0.01 min

Lab File: VW008307.D

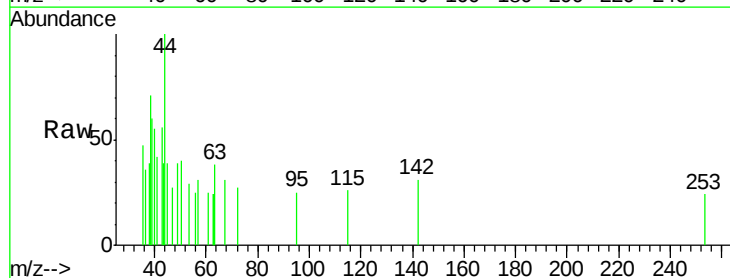
Acq: 16 Jan 2019 14:42

Tgt Ion: 63 Resp: 147

Ion Ratio Lower Upper

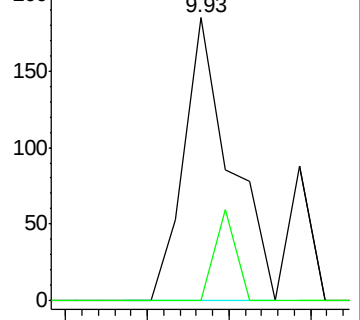
63 100

106 15.0 21.8 32.6#

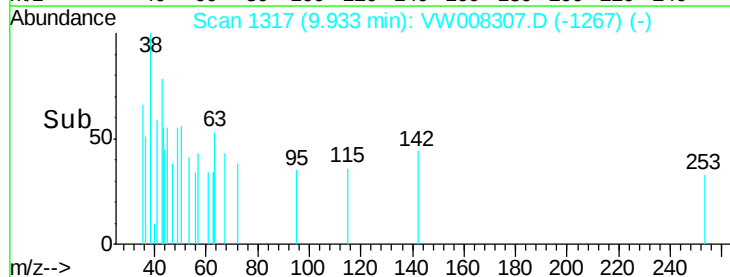


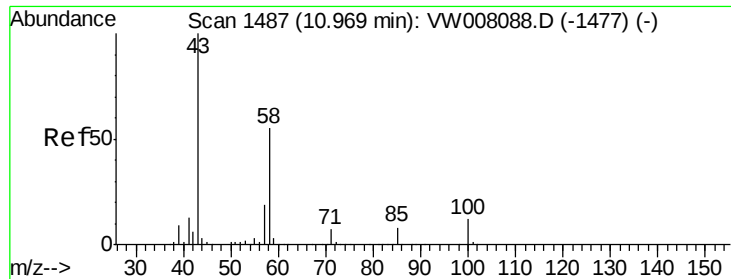
Abundance Ion 62.90 (62.60 to 63.60): VW

Ion 105.90 (105.60 to 106.60): V



Time-->

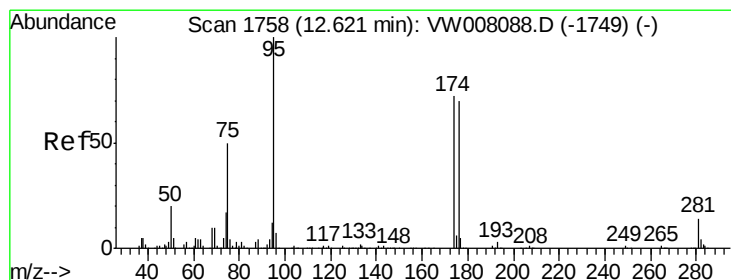
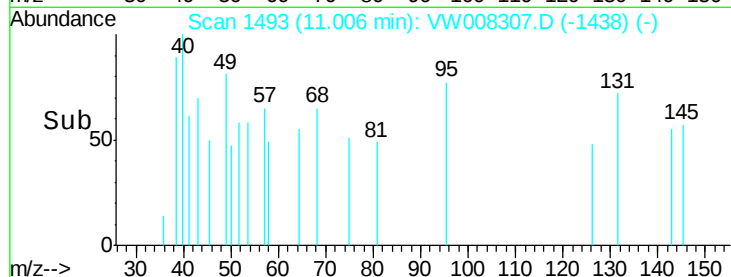
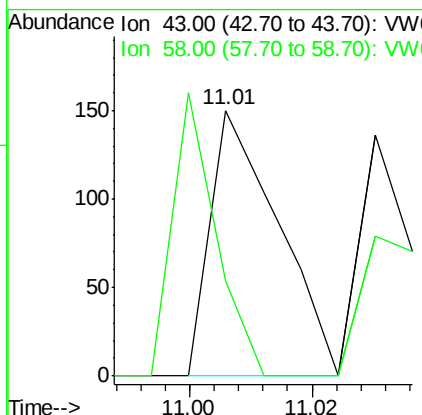
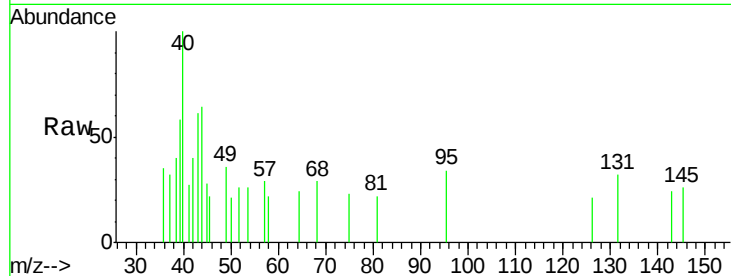




#59  
2-Hexanone  
Concen: 1.073 ug/l  
RT: 11.01 min Scan# 1493  
Delta R.T. 0.04 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

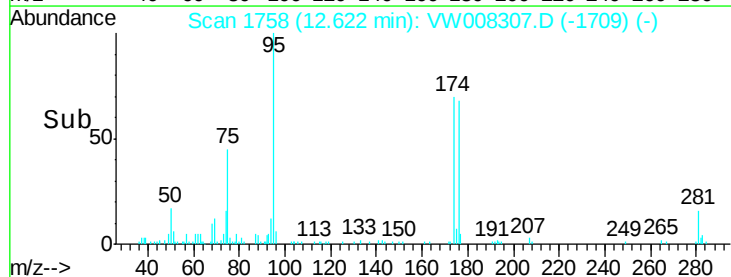
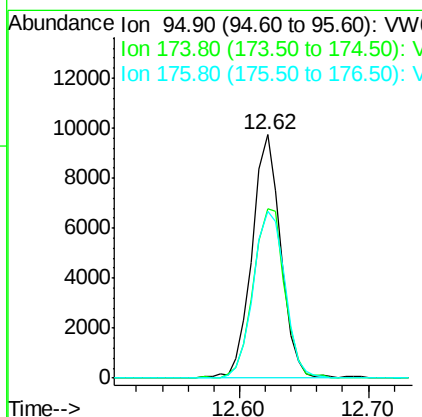
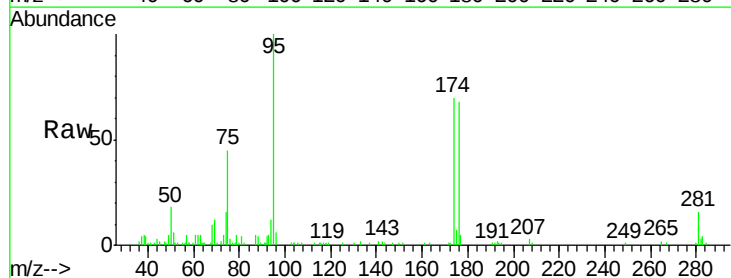
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-9RE

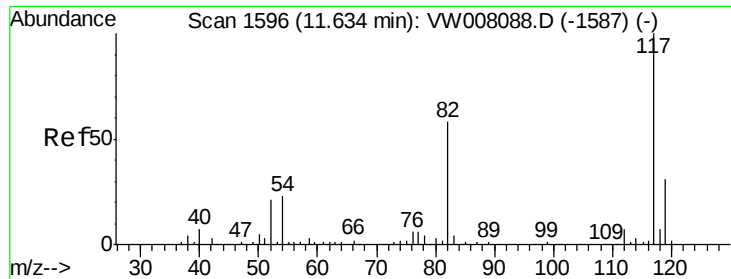
Tot Ion: 43 Resp: 115  
Ion Ratio Lower Upper  
43 100  
58 67.8 27.2 81.5



#62  
4-Bromofluorobenzene  
Concen: 42.852 ug/l  
RT: 12.62 min Scan# 1758  
Delta R.T. 0.00 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

Tgt Ion: 95 Resp: 14913  
Ion Ratio Lower Upper  
95 100  
174 76.6 0.0 143.0  
176 75.8 0.0 140.2

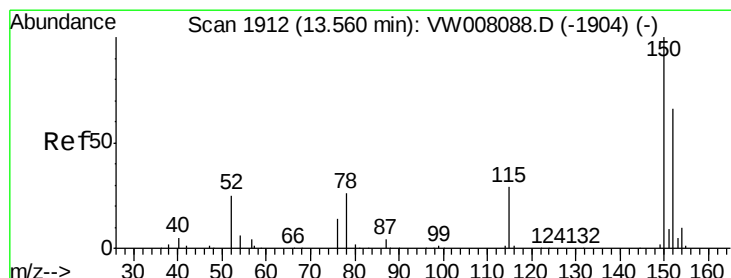
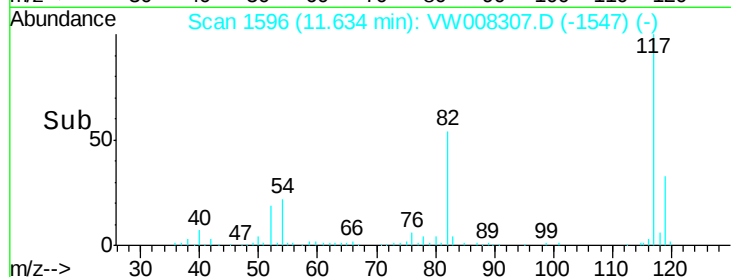
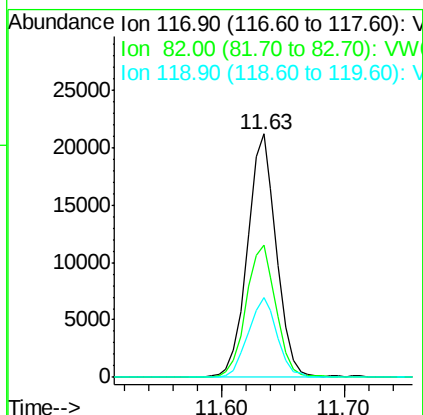
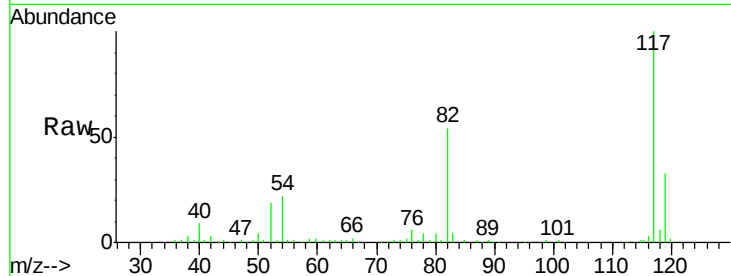




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. 0.00 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

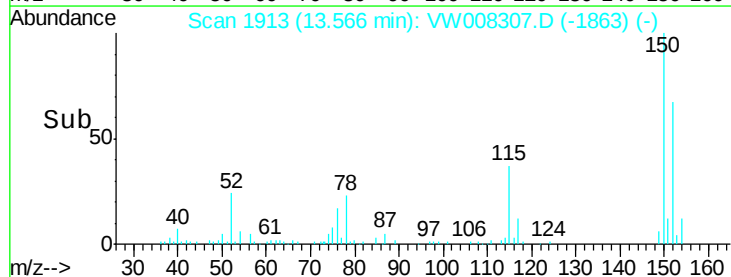
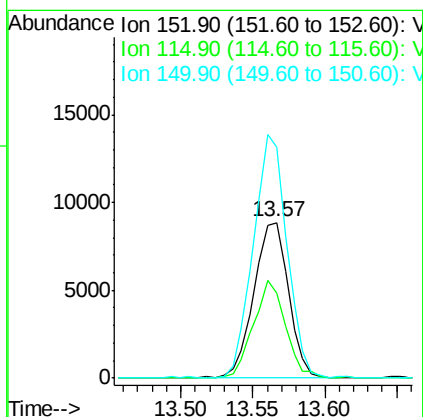
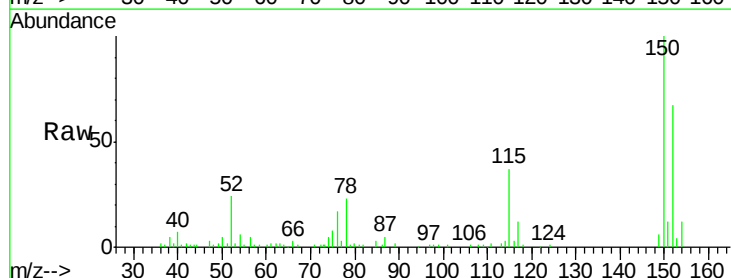
Instrument :  
MSVOA\_W  
ClientSampled :  
TP-9RE

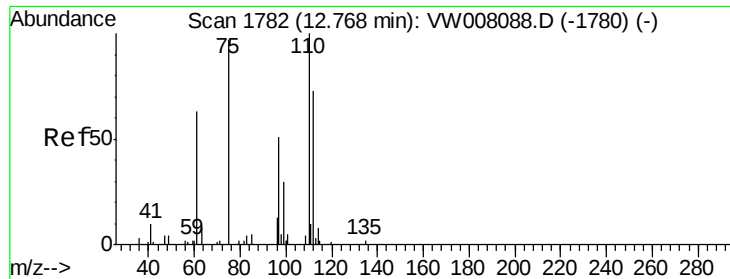
Tot Ion:117 Resp: 34889  
Ion Ratio Lower Upper  
117 100  
82 54.1 46.4 69.6  
119 32.6 24.7 37.1



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.57 min Scan# 1913  
Delta R.T. 0.01 min  
Lab File: VW008307.D  
Acq: 16 Jan 2019 14:42

Tgt Ion:152 Resp: 14752  
Ion Ratio Lower Upper  
152 100  
115 58.1 30.8 92.4  
150 151.8 0.0 350.2





#76

1,2,3-Trichloropropane

Concen: 54.395 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampleId :

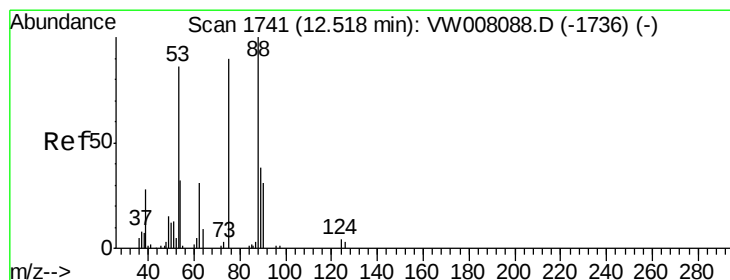
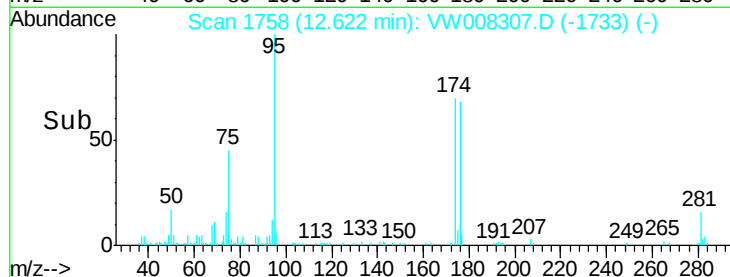
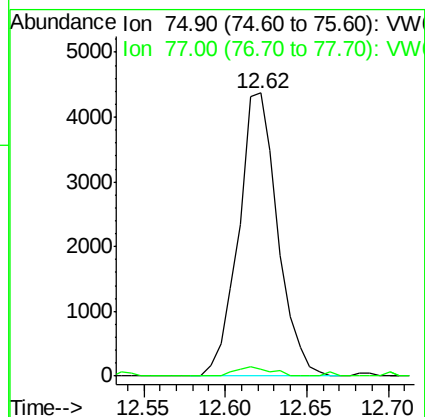
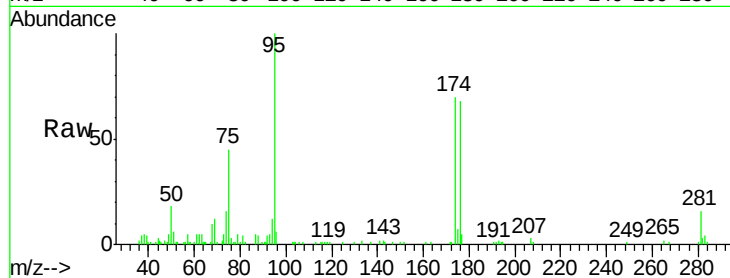
TP-9RE

Tot Ion: 75 Resp: 7315

Ion Ratio Lower Upper

75 100

77 2.9 179.4 538.2#



#81

trans-1,4-Dichloro-2-butene

Concen: 126.668 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.10 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

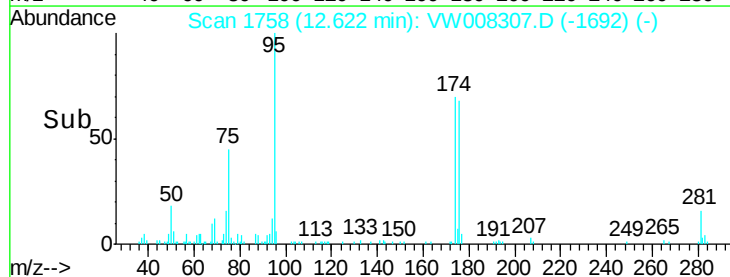
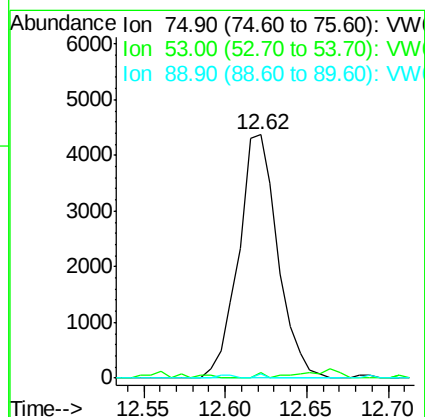
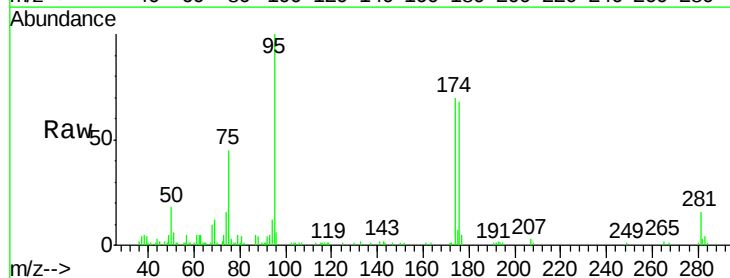
Tgt Ion: 75 Resp: 7315

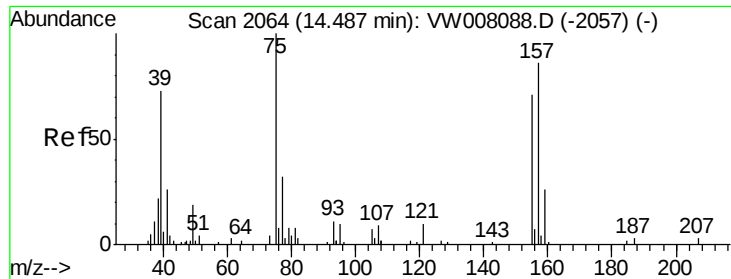
Ion Ratio Lower Upper

75 100

53 0.5 78.8 118.2#

89 0.4 35.4 53.2#





#92

1,2-Dibromo-3-Chloropropane

Concen: 1.575 ug/l

RT: 14.38 min Scan# 2046

Delta R.T. -0.11 min

Lab File: VW008307.D

Acq: 16 Jan 2019 14:42

Instrument :

MSVOA\_W

ClientSampleId :

TP-9RE

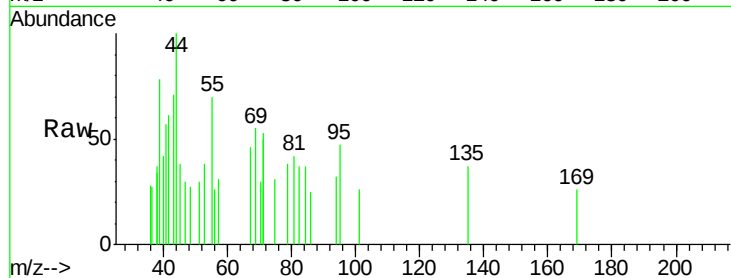
Tot Ion: 75 Resp: 47

Ion Ratio Lower Upper

75 100

155 0.0 38.6 115.7#

157 0.0 47.5 142.6#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

