

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF121818\  
 Data File : VF061062.D  
 Acq On : 18 Dec 2018 14:58  
 Operator : VA/AP  
 Sample : J6464-04RE  
 Misc : 5.1g/5mL/MSVOA-F/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VB16202RE

Quant Time: Dec 19 00:51:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F112618S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 27 01:36:26 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.87  | 168  | 4648     | 50.00 | ug/l  | -0.04    |
| 34) 1,4-Difluorobenzene    | 5.60  | 114  | 6245     | 50.00 | ug/l  | -0.04    |
| 63) Chlorobenzene-d5       | 9.78  | 117  | 4303     | 50.00 | ug/l  | -0.04    |
| 72) 1,4-Dichlorobenzene-d4 | 12.55 | 152  | 1235     | 50.00 | ug/l  | -0.03    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.85  | 65   | 983      | 17.95  | ug/l   | -0.03    |
| Spiked Amount               |       |      |          | 50.000 |        |          |
|                             |       |      | Recovery | =      | 35.90% |          |
| 35) Dibromofluoromethane    | 4.11  | 113  | 1500     | 30.28  | ug/l   | -0.04    |
| Spiked Amount               |       |      |          | 50.000 |        |          |
|                             |       |      | Recovery | =      | 60.56% |          |
| 50) Toluene-d8              | 7.56  | 98   | 5587     | 38.28  | ug/l   | -0.04    |
| Spiked Amount               |       |      |          | 50.000 |        |          |
|                             |       |      | Recovery | =      | 76.56% |          |
| 62) 4-Bromofluorobenzene    | 11.41 | 95   | 1489     | 22.45  | ug/l   | -0.03    |
| Spiked Amount               |       |      |          | 50.000 |        |          |
|                             |       |      | Recovery | =      | 44.90% |          |

| Target Compounds              | R.T. | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|------|------|----------|-----------|--------|--------|
| 3) Chloromethane              | 1.08 | 50   | 151      | 3.339     | ug/l # | 41     |
| 4) Vinyl Chloride             | 1.05 | 62   | 98       | 2.323     | ug/l # | 42     |
| 5) Bromomethane               | 1.30 | 94   | 164      | 5.514     | ug/l   | 87     |
| 6) Chloroethane               | 1.35 | 64   | 88       | 4.826     | ug/l # | 1      |
| 8) Diethyl Ether              | 1.61 | 74   | 183      | 14.061    | ug/l # | 28     |
| 11) Tert butyl alcohol        | 2.45 | 59   | 62       | 27.623    | ug/l # | 62     |
| 12) 1,1-Dichloroethene        | 1.80 | 96   | 131      | 3.559     | ug/l # | 1      |
| 13) Acrolein                  | 2.02 | 56   | 278      | 130.723   | ug/l   | 96     |
| 14) Allyl chloride            | 2.10 | 41   | 462      | 10.072    | ug/l # | 59     |
| 15) Acrylonitrile             | 2.94 | 53   | 215      | 42.726    | ug/l # | 1      |
| 16) Acetone                   | 2.24 | 43   | 994      | 98.444    | ug/l # | 65     |
| 18) Methyl Acetate            | 2.44 | 43   | 583      | 33.884    | ug/l   | 93     |
| 19) Methyl tert-butyl Ether   | 2.45 | 73   | 144      | 1.737     | ug/l # | 58     |
| 20) Methylene Chloride        | 2.24 | 84   | 63       | 1.701     | ug/l # | 1      |
| 21) trans-1,2-Dichloroethene  | 2.34 | 96   | 272      | 7.666     | ug/l # | 1      |
| 22) Diisopropyl ether         | 2.79 | 45   | 254      | 2.034     | ug/l # | 10     |
| 23) Vinyl Acetate             | 3.18 | 43   | 657      | 11.511    | ug/l # | 80     |
| 24) 1,1-Dichloroethane        | 2.92 | 63   | 283      | 3.809     | ug/l # | 16     |
| 25) 2-Butanone                | 4.31 | 43   | 266      | 15.231    | ug/l # | 57     |
| 26) 2,2-Dichloropropane       | 3.59 | 77   | 122      | 2.533     | ug/l # | 60     |
| 27) cis-1,2-Dichloroethene    | 3.44 | 96   | 65       | 1.125     | ug/l   | 1      |
| 28) Bromochloromethane        | 3.61 | 49   | 66       | 1.851     | ug/l # | 11     |
| 29) Tetrahydrofuran           | 4.08 | 42   | 382      | 51.601    | ug/l # | 55     |
| 37) Ethyl Acetate             | 4.12 | 43   | 575      | 20.427    | ug/l # | 14     |
| 41) Methacrylonitrile         | 4.73 | 41   | 417      | 26.814    | ug/l # | 40     |
| 43) Isopropyl Acetate         | 6.96 | 43   | 61       | Below Cal | #      | 49     |
| 48) Methyl methacrylate       | 6.67 | 41   | 215      | 8.438     | ug/l # | 7      |
| 49) 1,4-Dioxane               | 6.26 | 88   | 65       | 348.572   | ug/l # | 20     |
| 51) 4-Methyl-2-Pentanone      | 8.23 | 43   | 172      | 6.626     | ug/l # | 38     |
| 52) Toluene                   | 7.63 | 92   | 813      | 7.564     | ug/l # | 30     |
| 53) t-1,3-Dichloropropene     | 8.31 | 75   | 78       | 1.339     | ug/l # | 40     |
| 55) 1,1,2-Trichloroethane     | 8.59 | 97   | 76       | 2.427     | ug/l # | 15     |
| 56) Ethyl methacrylate        | 8.65 | 69   | 79       | 2.271     | ug/l # | 17     |
| 58) 2-Chloroethyl Vinyl ether | 7.17 | 63   | 91       | 25.570    | ug/l # | 46     |

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 Quant Title : SW846 8260  
 QLast Update : Tue Nov 27 01:36:26 2018  
 Response via : Initial Calibration

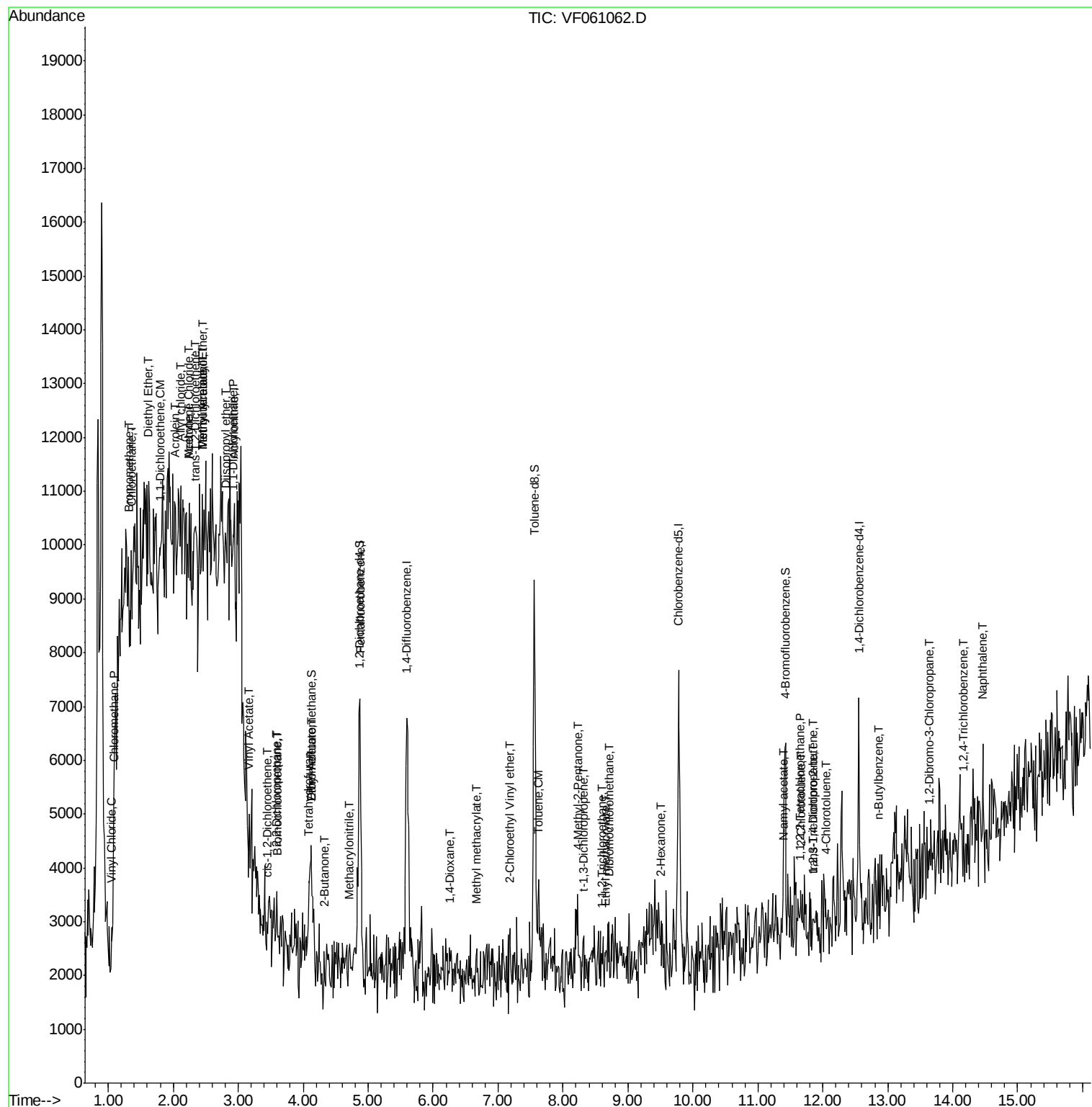
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 59) 2-Hexanone                 | 9.51  | 43   | 185      | 10.159 | uq/l   | 84       |
| 60) Dibromochloromethane       | 8.72  | 129  | 66       | 1.414  | uq/l # | 12       |
| 74) N-amyl acetate             | 11.38 | 43   | 385      | 17.083 | uq/l # | 45       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.64 | 83   | 82       | 5.105  | uq/l # | 25       |
| 76) 1,2,3-Trichloropropane     | 11.86 | 75   | 98       | 8.394  | uq/l # | 38       |
| 79) 2-Chlorotoluene            | 11.66 | 91   | 107      | 1.633  | uq/l # | 43       |
| 81) trans-1,4-Dichloro-2-buten | 11.86 | 75   | 98       | 17.132 | uq/l # | 16       |
| 82) 4-Chlorotoluene            | 12.06 | 91   | 70       | 1.015  | uq/l # | 45       |
| 89) n-Butylbenzene             | 12.84 | 91   | 178      | 1.900  | uq/l # | 27       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.63 | 75   | 77       | 24.795 | uq/l # | 1        |
| 93) 1,2,4-Trichlorobenzene     | 14.17 | 180  | 80       | 2.971  | uq/l # | 11       |
| 95) Naphthalene                | 14.46 | 128  | 837      | 13.456 | uq/l # | 69       |

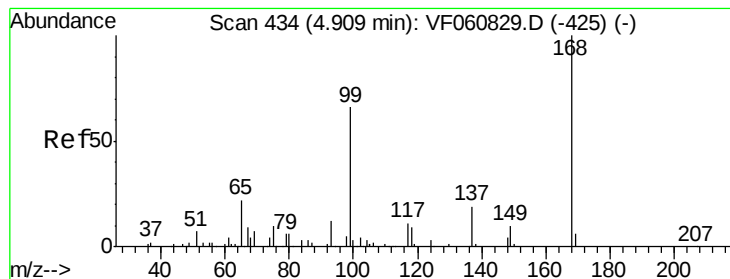
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.87 min Scan# 430

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

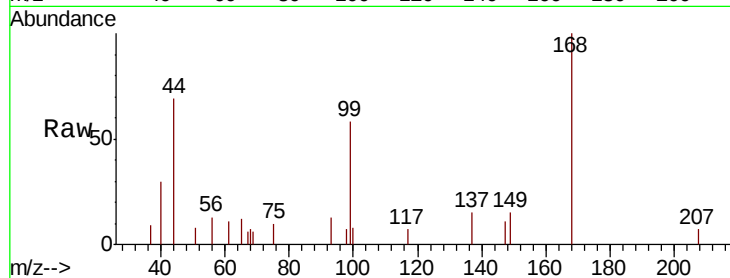
VB16202RE

Tot Ion:168 Resp: 4648

Ion Ratio Lower Upper

168 100

99 58.0 52.6 79.0



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.87

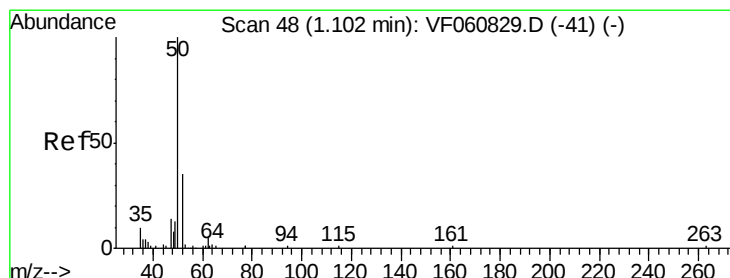
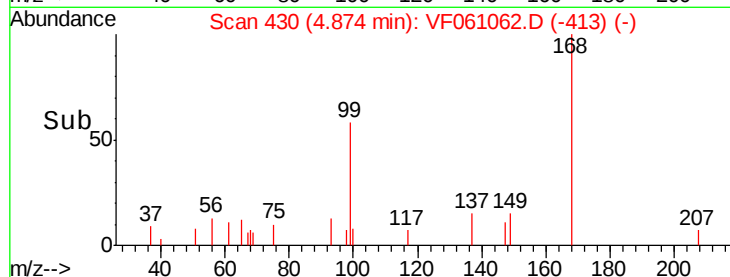
1500

1000

500

0

Time-->



#3

Chloromethane

Concen: 3.339 ug/l

RT: 1.08 min Scan# 45

Delta R.T. -0.03 min

Lab File: VF061062.D

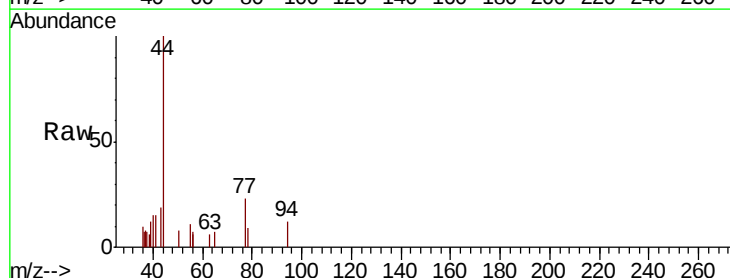
Acq: 18 Dec 2018 14:58

Tgt Ion: 50 Resp: 151

Ion Ratio Lower Upper

50 100

52 0.0 27.0 40.4#



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

1.08

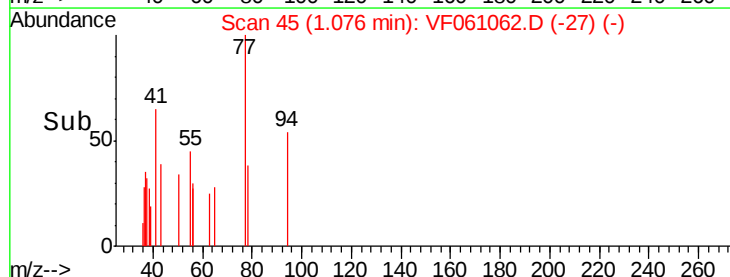
150

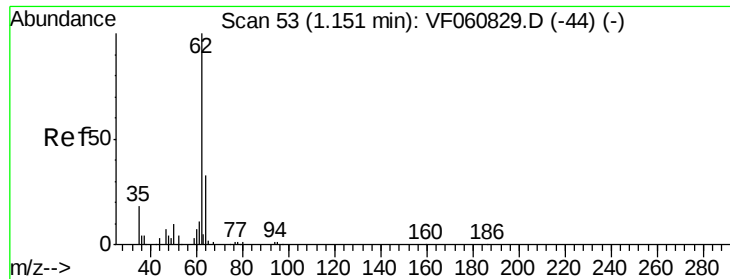
100

50

0

Time-->





#4

Vinyl Chloride

Concen: 2.323 ug/l

RT: 1.05 min Scan# 42

Delta R.T. -0.10 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

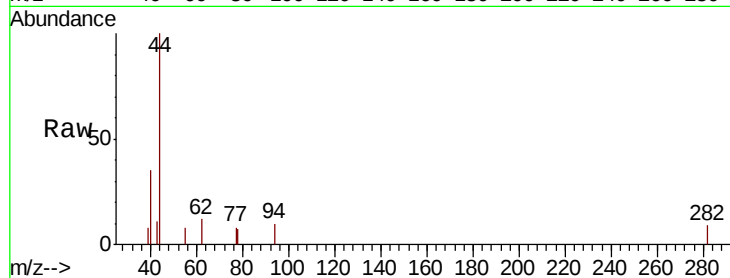
VB16202RE

Tot Ion: 62 Resp: 98

Ion Ratio Lower Upper

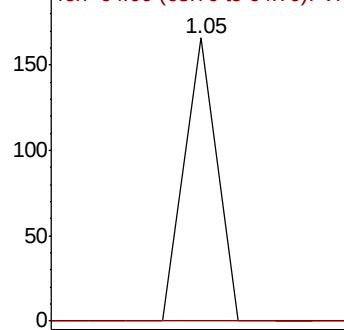
62 100

64 0.0 26.4 39.6#

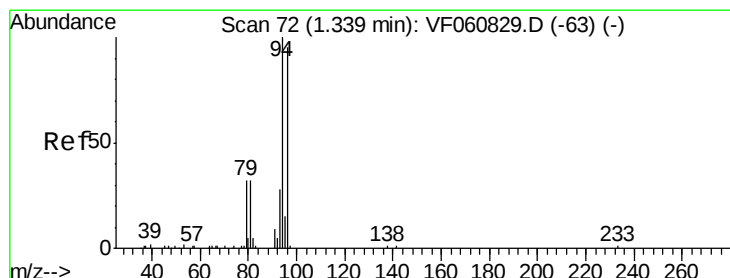
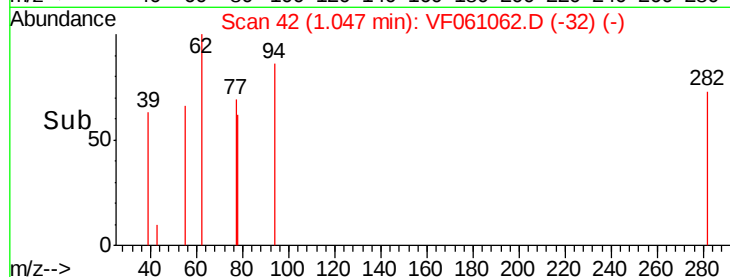


Abundance Ion 62.00 (61.70 to 62.70): VF0

Ion 64.00 (63.70 to 64.70): VF0



Time-->



#5

Bromomethane

Concen: 5.514 ug/l

RT: 1.30 min Scan# 68

Delta R.T. -0.04 min

Lab File: VF061062.D

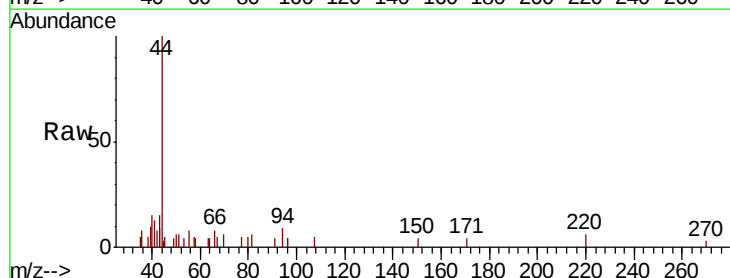
Acq: 18 Dec 2018 14:58

Tgt Ion: 94 Resp: 164

Ion Ratio Lower Upper

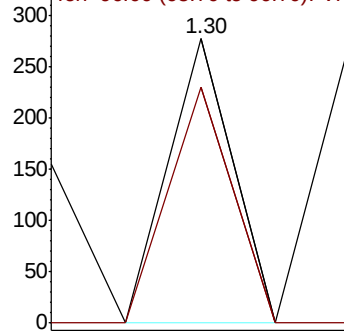
94 100

96 82.7 75.9 113.9

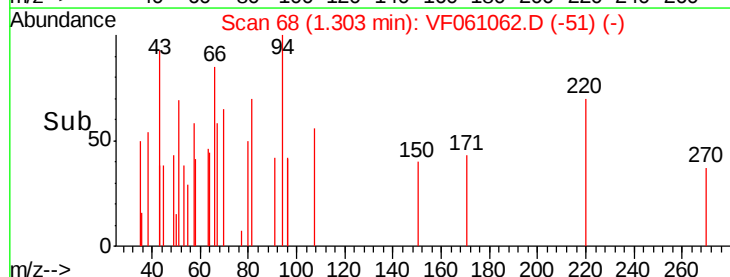


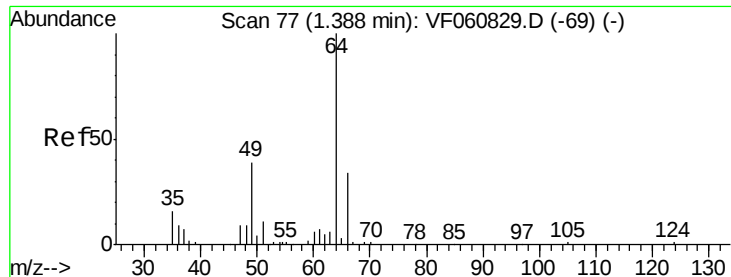
Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0



Time-->





#6

Chloroethane

Concen: 4.826 ug/l

RT: 1.35 min Scan# 73

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

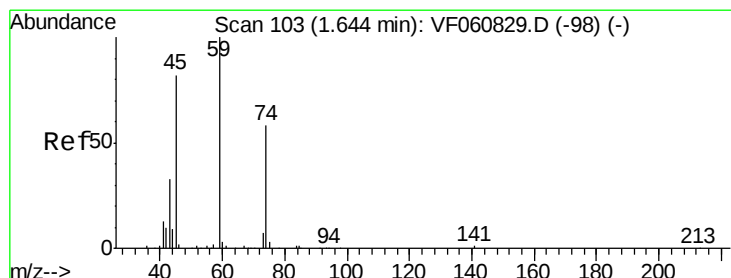
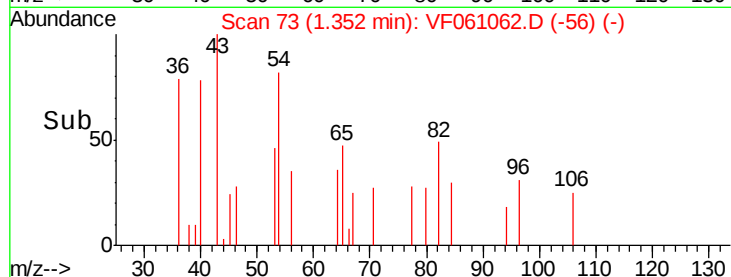
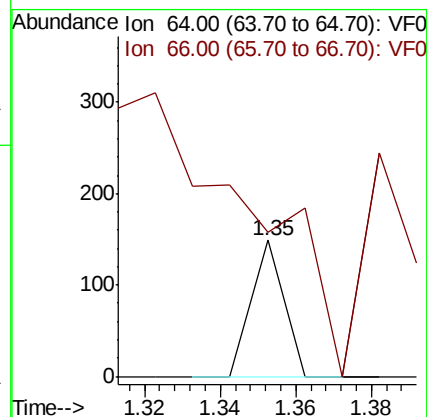
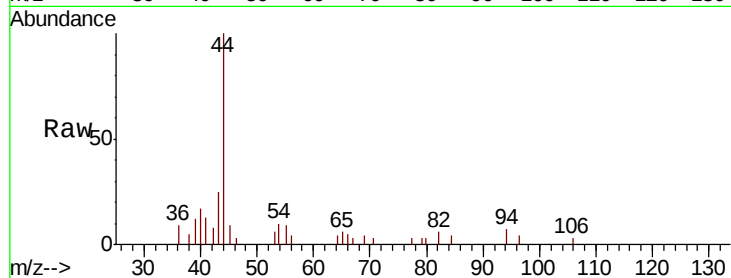
VB16202RE

Tot Ion: 64 Resp: 88

Ion Ratio Lower Upper

64 100

66 106.0 28.1 42.1#



#8

Diethyl Ether

Concen: 14.061 ug/l

RT: 1.61 min Scan# 99

Delta R.T. -0.04 min

Lab File: VF061062.D

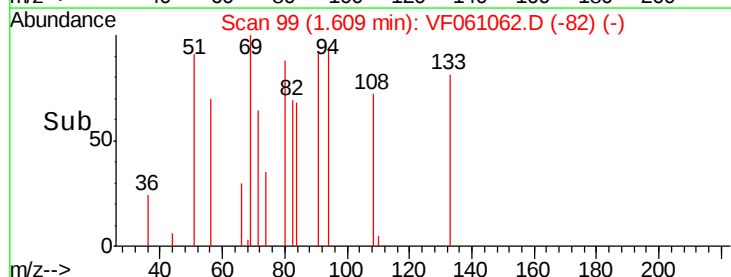
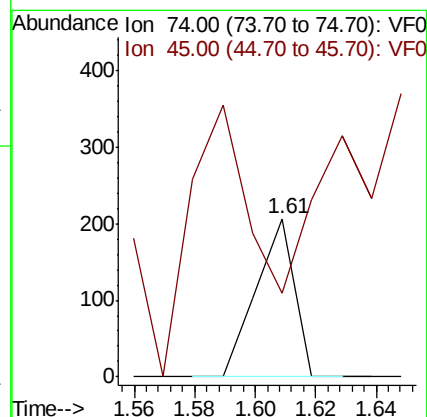
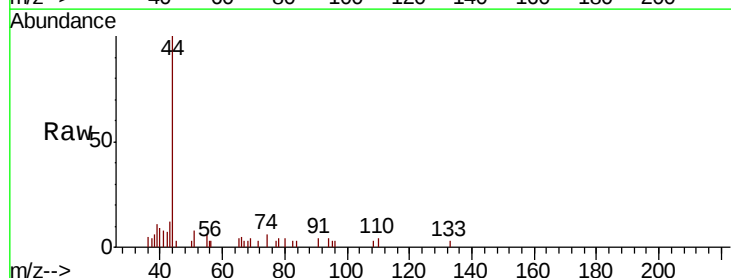
Acq: 18 Dec 2018 14:58

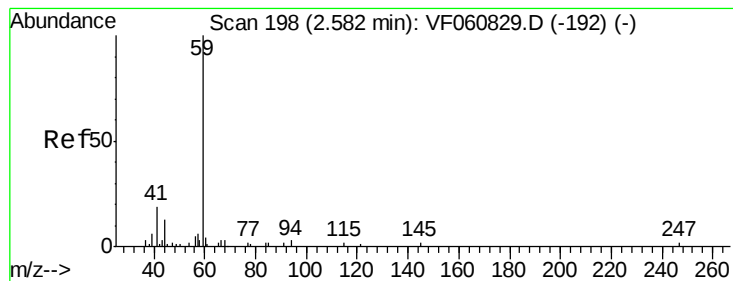
Tgt Ion: 74 Resp: 183

Ion Ratio Lower Upper

74 100

45 52.9 71.0 212.8#



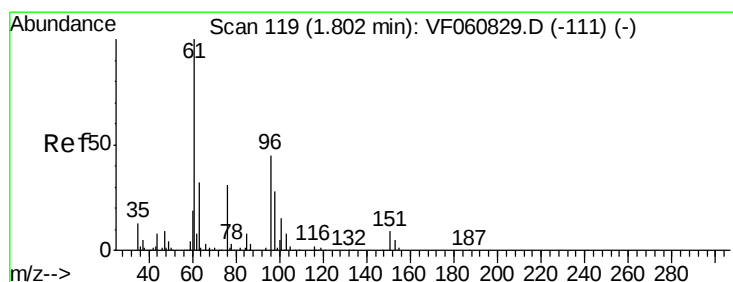
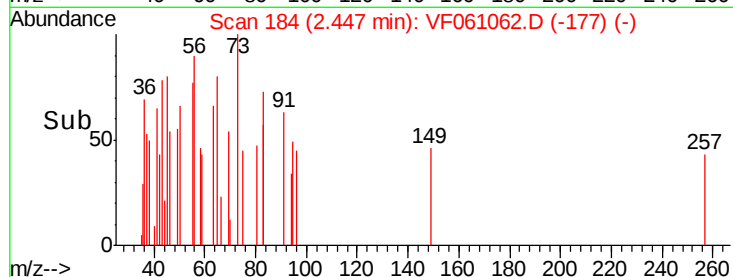
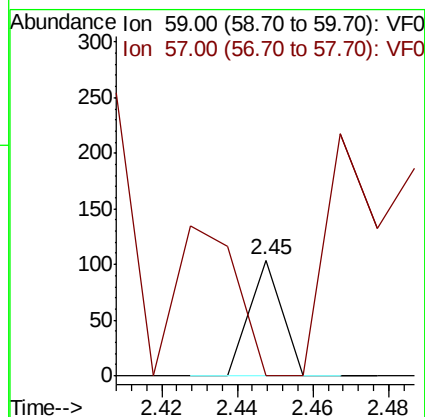
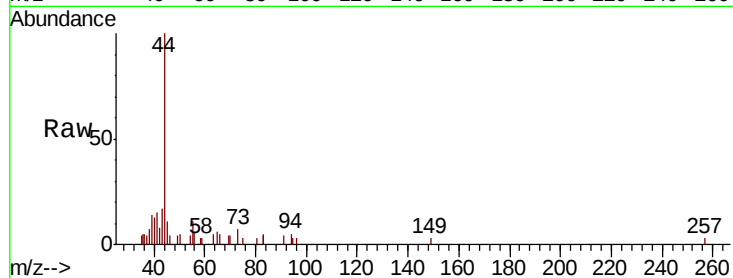


#11

Tert butyl alcohol  
Concen: 27.623 ug/l  
RT: 2.45 min Scan# 184  
Delta R.T. -0.13 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

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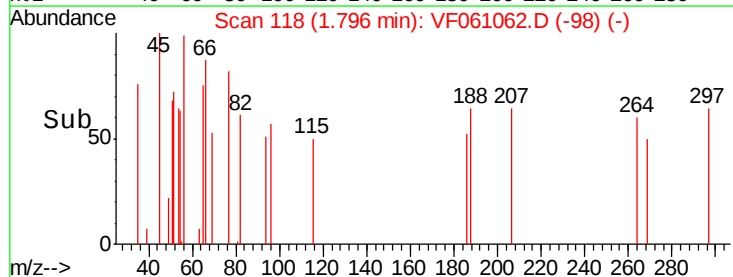
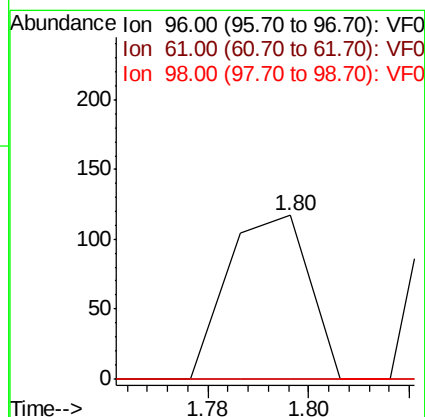
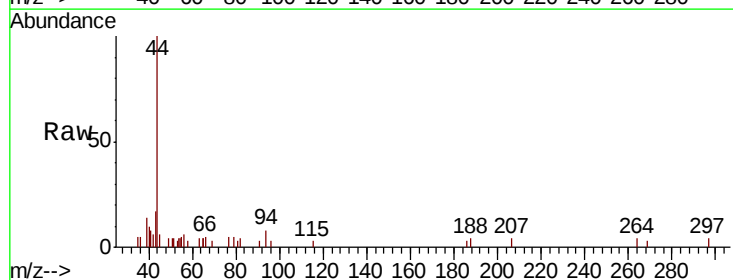
Tot Ion: 59 Resp: 62  
Ion Ratio Lower Upper  
59 100  
57 0.0 12.7 19.1#

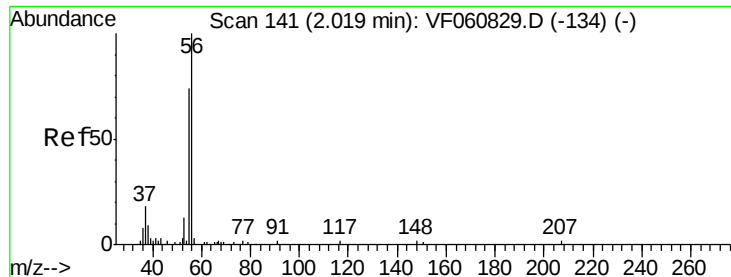


#12

1,1-Dichloroethene  
Concen: 3.559 ug/l  
RT: 1.80 min Scan# 118  
Delta R.T. -0.01 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

Tgt Ion: 96 Resp: 131  
Ion Ratio Lower Upper  
96 100  
61 0.0 177.3 265.9#  
98 0.0 49.6 74.4#





#13

Acrolein

Concen: 130.723 ug/l

RT: 2.02 min Scan# 141

Delta R.T. 0.00 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

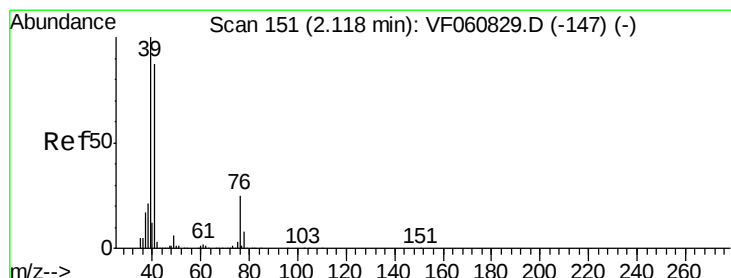
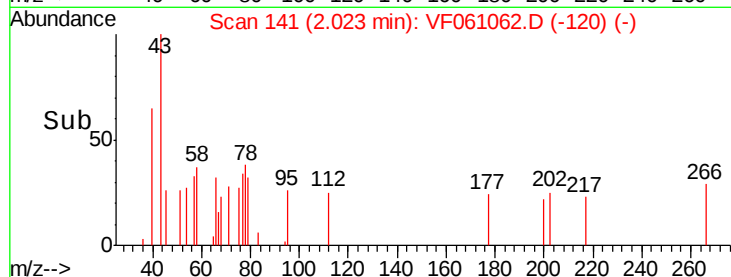
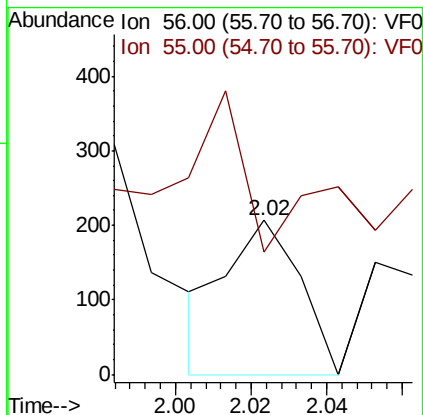
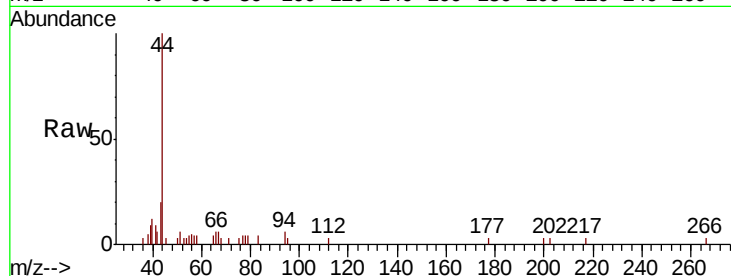
VB16202RE

Tot Ion: 56 Resp: 278

Ion Ratio Lower Upper

56 100

55 79.7 61.2 91.8



#14

Allyl chloride

Concen: 10.072 ug/l

RT: 2.10 min Scan# 149

Delta R.T. -0.02 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

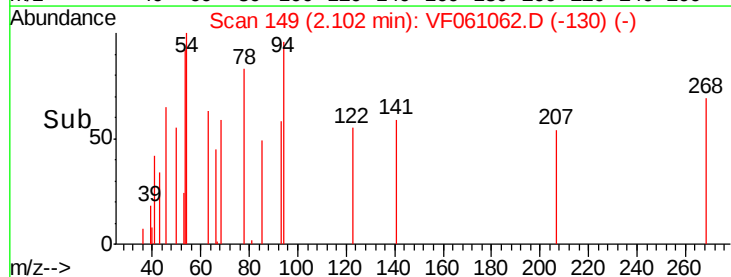
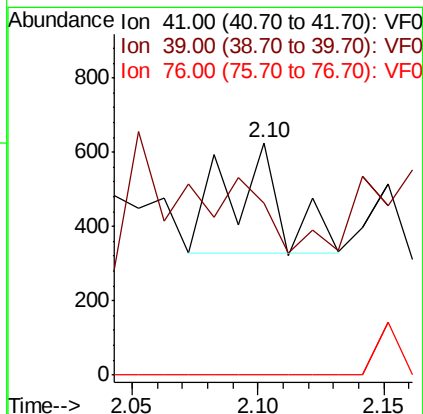
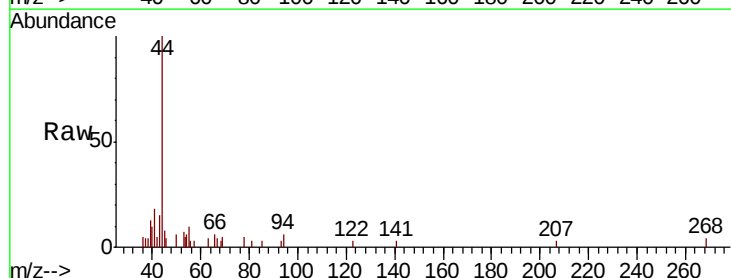
Tgt Ion: 41 Resp: 462

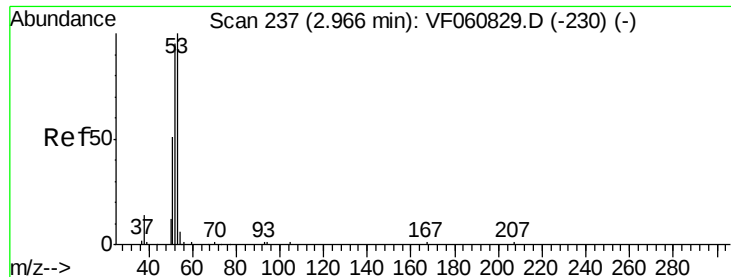
Ion Ratio Lower Upper

41 100

39 73.8 91.7 137.5#

76 0.0 23.5 35.3#





#15

Acrylonitrile

Concen: 42.726 ug/l

RT: 2.94 min Scan# 234

Delta R.T. -0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

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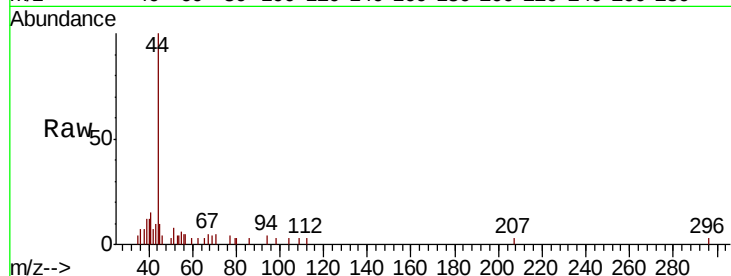
Tot Ion: 53 Resp: 215

Ion Ratio Lower Upper

53 100

52 0.0 76.5 114.7#

51 207.9 40.7 61.1#

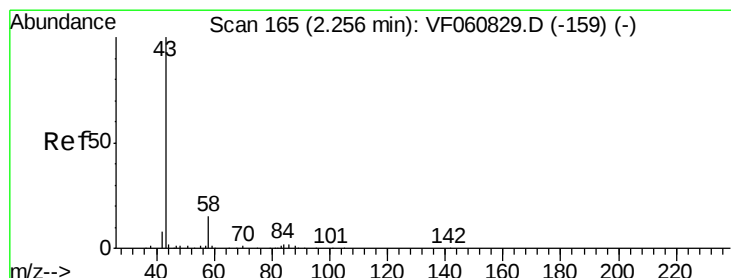
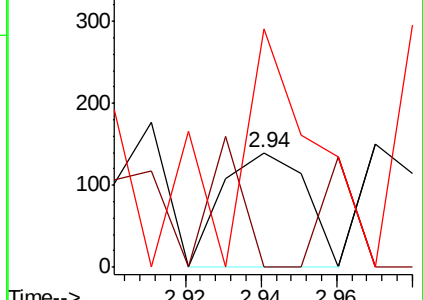
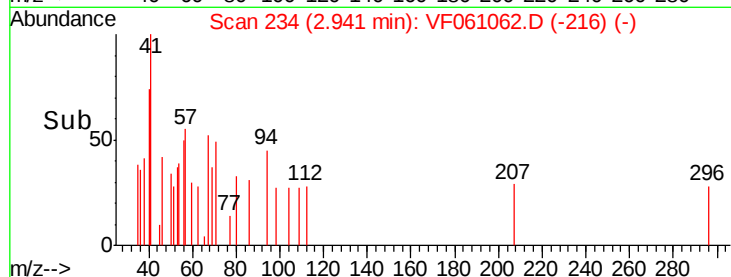


Abundance Ion 53.00 (52.70 to 53.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0

Time-->



#16

Acetone

Concen: 98.444 ug/l

RT: 2.24 min Scan# 163

Delta R.T. -0.02 min

Lab File: VF061062.D

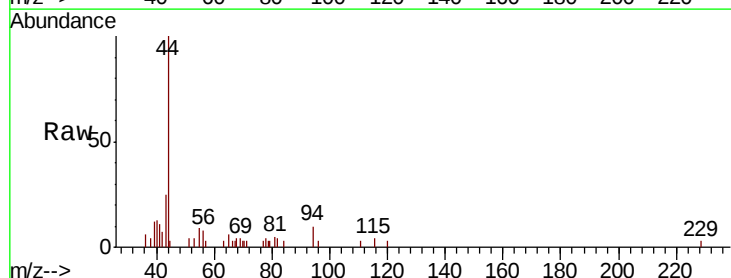
Acq: 18 Dec 2018 14:58

Tgt Ion: 43 Resp: 994

Ion Ratio Lower Upper

43 100

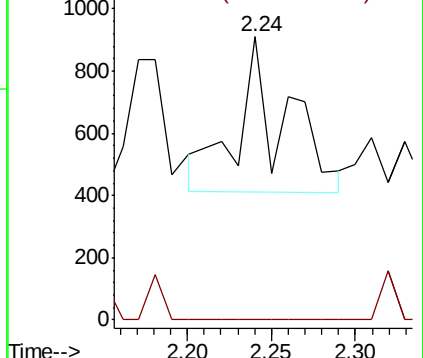
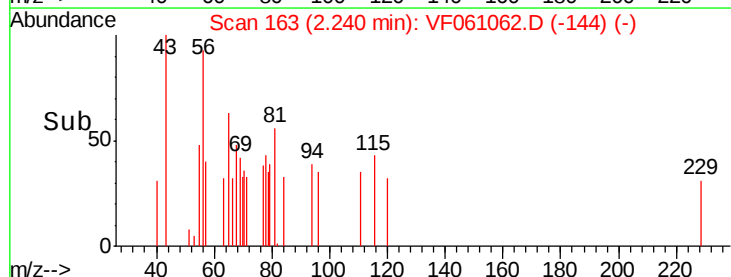
58 0.0 11.4 17.2#

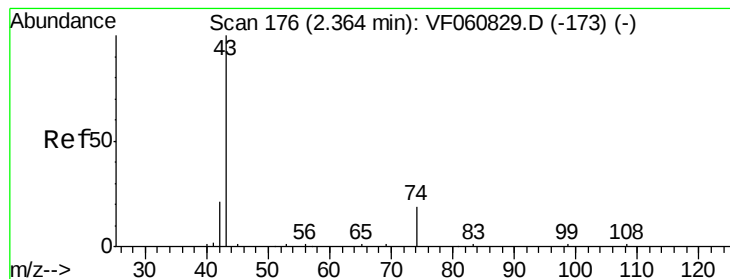


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

Time-->





#18

Methyl Acetate

Concen: 33.884 ug/l

RT: 2.44 min Scan# 183

Delta R.T. 0.07 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

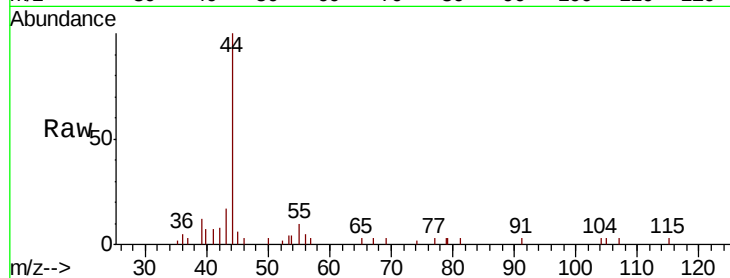
VB16202RE

Tot Ion: 43 Resp: 583

Ion Ratio Lower Upper

43 100

74 13.6 13.3 19.9



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 74.00 (73.70 to 74.70): VF0

800

600

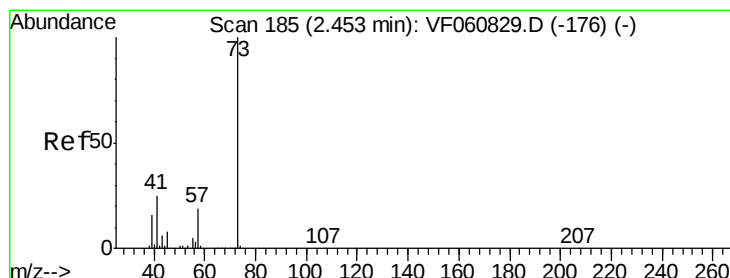
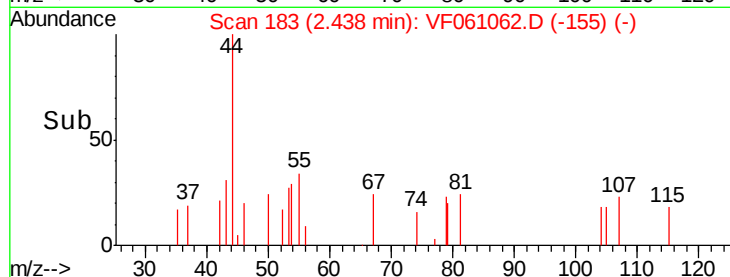
400

200

0

2.40 2.42 2.44 2.46

Time-->



#19

Methyl tert-butyl Ether

Concen: 1.737 ug/l

RT: 2.45 min Scan# 184

Delta R.T. -0.01 min

Lab File: VF061062.D

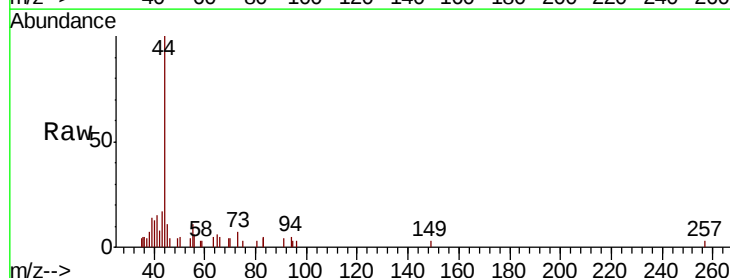
Acq: 18 Dec 2018 14:58

Tgt Ion: 73 Resp: 144

Ion Ratio Lower Upper

73 100

57 0.0 15.3 22.9#



Abundance Ion 73.00 (72.70 to 73.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

300

250

200

150

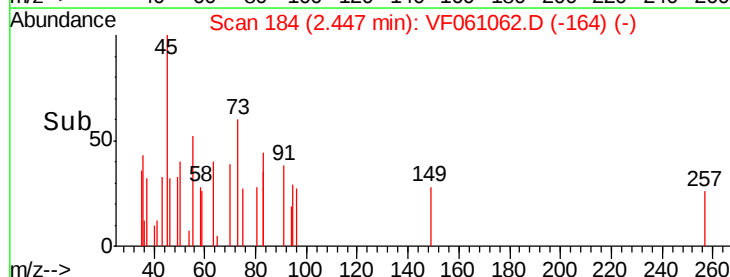
100

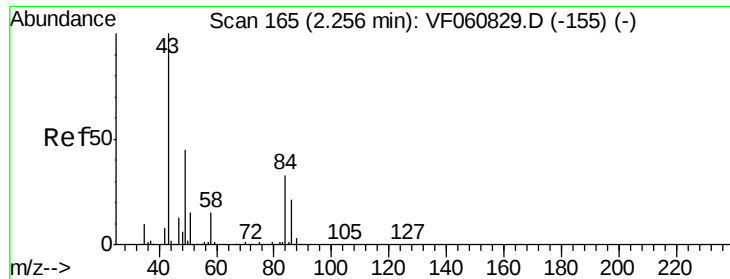
50

0

2.42 2.44 2.46 2.48

Time-->

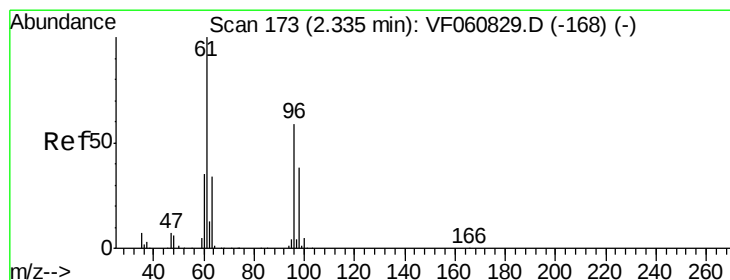
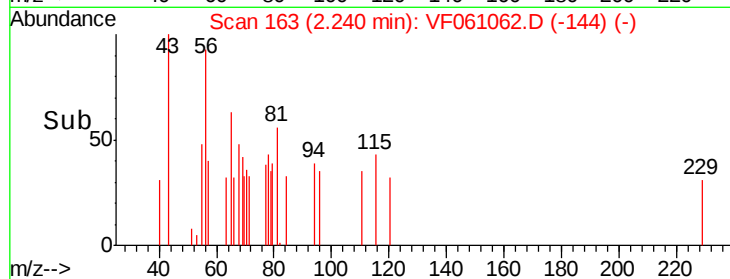
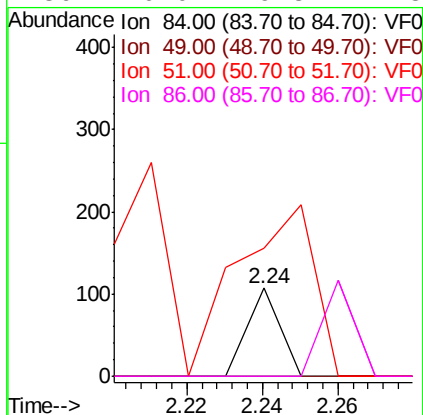
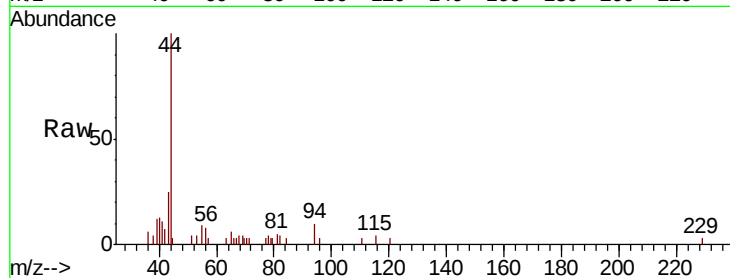




#20  
Methvlene Chloride  
Concen: 1.701 ug/l  
RT: 2.24 min Scan# 163  
Delta R.T. -0.02 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

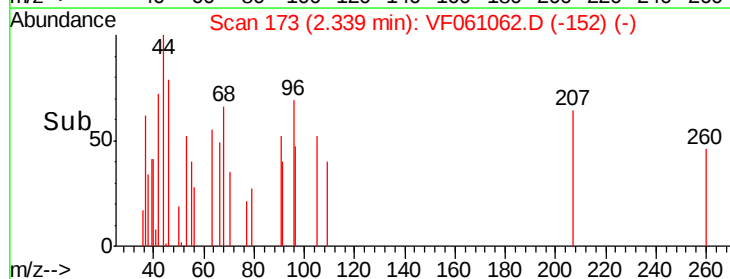
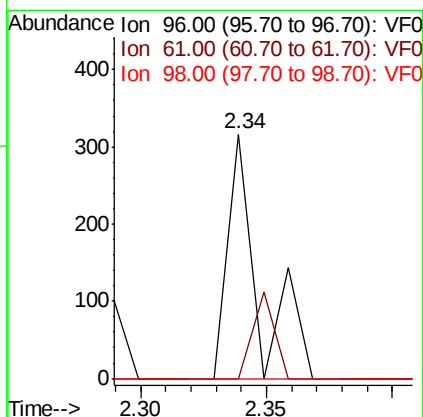
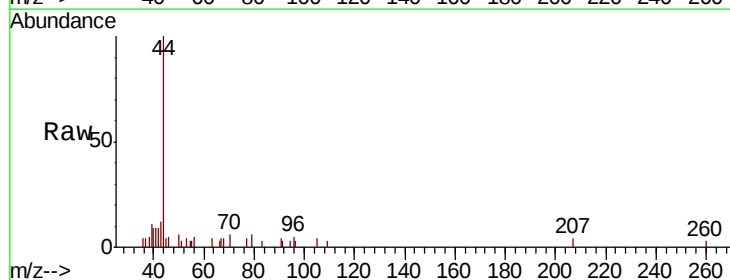
Instrument :  
MSVOA\_F  
ClientSampleId :  
VB16202RE

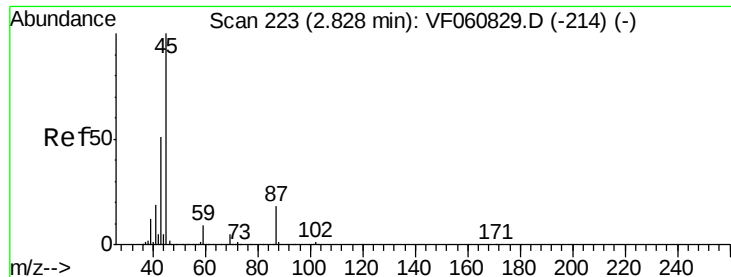
Tot Ion: 84 Resp: 63  
Ion Ratio Lower Upper  
84 100  
49 0.0 111.3 166.9#  
51 145.8 38.0 57.0#  
86 0.0 49.8 74.8#



#21  
trans-1,2-Dichloroethene  
Concen: 7.666 ug/l  
RT: 2.34 min Scan# 173  
Delta R.T. 0.00 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

Tgt Ion: 96 Resp: 272  
Ion Ratio Lower Upper  
96 100  
61 0.0 134.5 201.7#  
98 0.0 51.6 77.4#





#22

Diisopropyl ether

Concen: 2.034 ug/l

RT: 2.79 min Scan# 219

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

Tot Ion: 45 Resp: 254

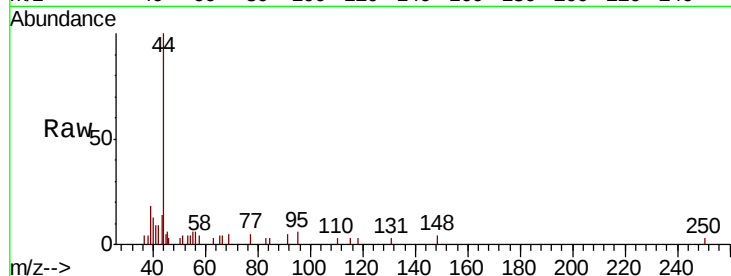
Ion Ratio Lower Upper

45 100

43 134.2 41.0 61.6#

87 0.0 14.6 22.0#

59 0.0 7.5 11.3#

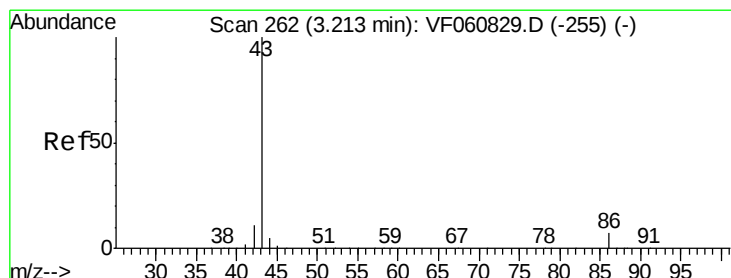
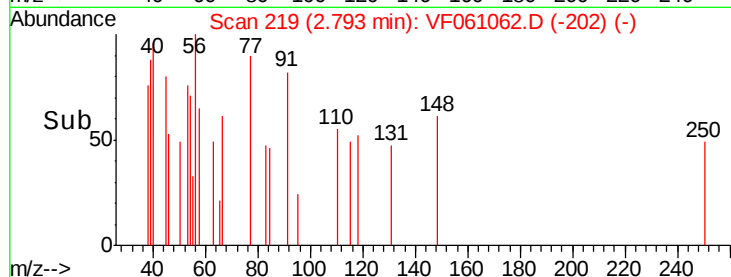
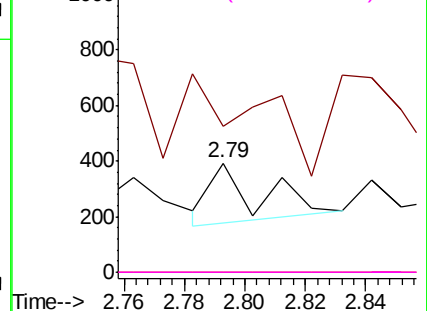


Abundance Ion 45.00 (44.70 to 45.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

Ion 59.00 (58.70 to 59.70): VF0



#23

Vinyl Acetate

Concen: 11.511 ug/l

RT: 3.18 min Scan# 258

Delta R.T. -0.04 min

Lab File: VF061062.D

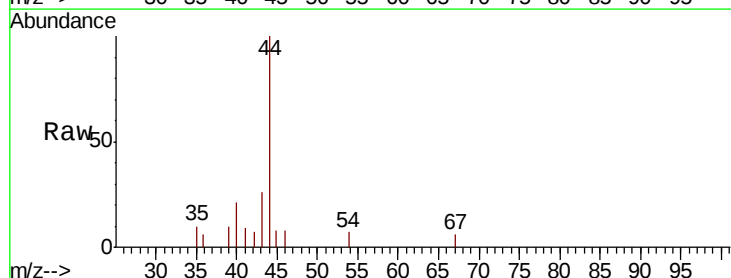
Acq: 18 Dec 2018 14:58

Tgt Ion: 43 Resp: 657

Ion Ratio Lower Upper

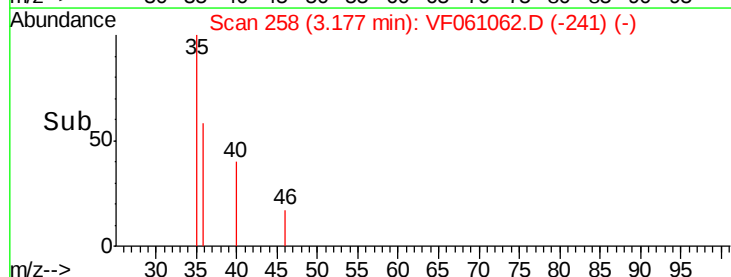
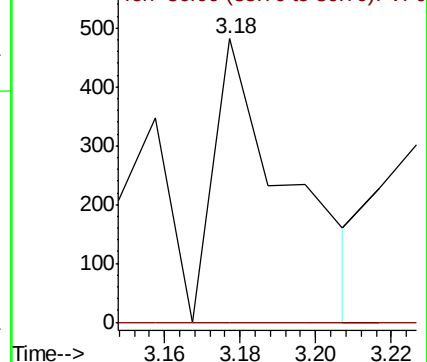
43 100

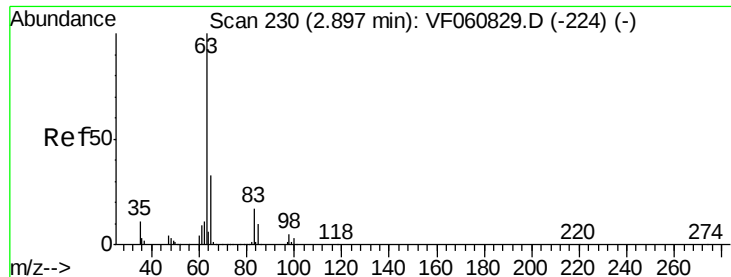
86 0.0 5.4 8.0#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0





#24

1,1-Dichloroethane

Concen: 3.809 ug/l

RT: 2.92 min Scan# 232

Delta R.T. 0.02 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

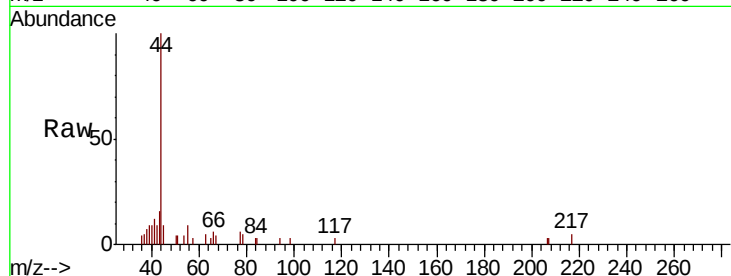
Tot Ion: 63 Resp: 283

Ion Ratio Lower Upper

63 100

98 47.4 2.7 8.1#

100 0.0 1.5 4.5#



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0

2.92

200

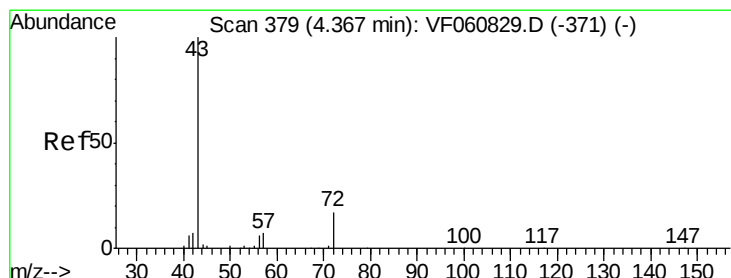
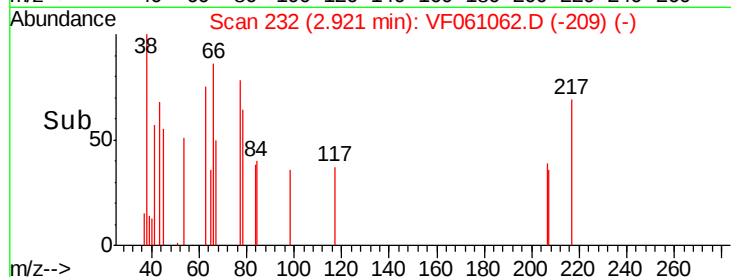
150

100

50

0

Time--> 2.85 2.90 2.95



#25

2-Butanone

Concen: 15.231 ug/l

RT: 4.31 min Scan# 373

Delta R.T. -0.06 min

Lab File: VF061062.D

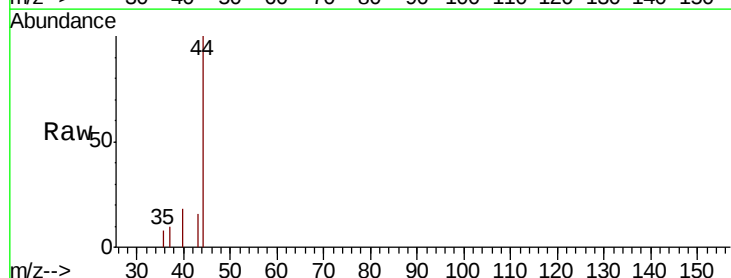
Acq: 18 Dec 2018 14:58

Tgt Ion: 43 Resp: 266

Ion Ratio Lower Upper

43 100

72 0.0 15.4 23.2#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

4.31

200

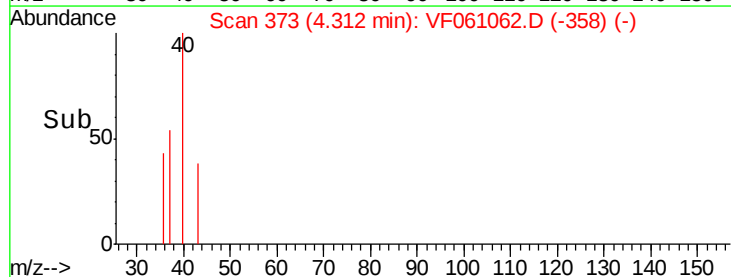
150

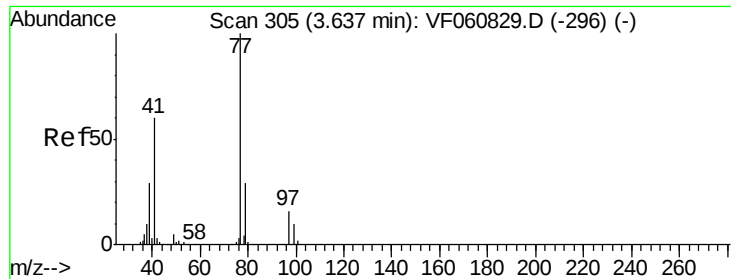
100

50

0

Time--> 4.30 4.32 4.34





#26

2,2-Dichloropropane

Concen: 2.533 ug/l

RT: 3.59 min Scan# 300

Delta R.T. -0.05 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

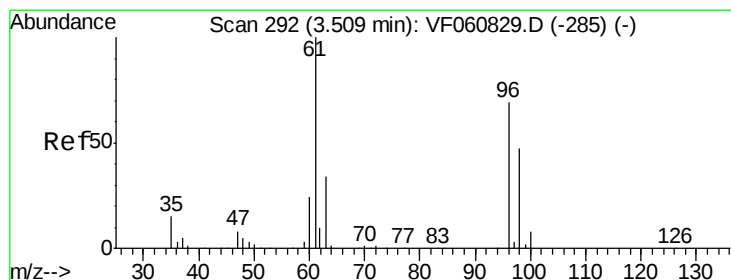
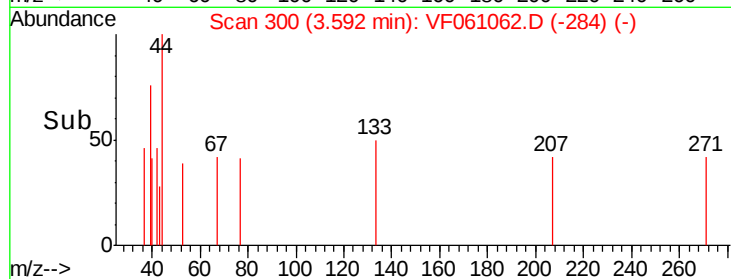
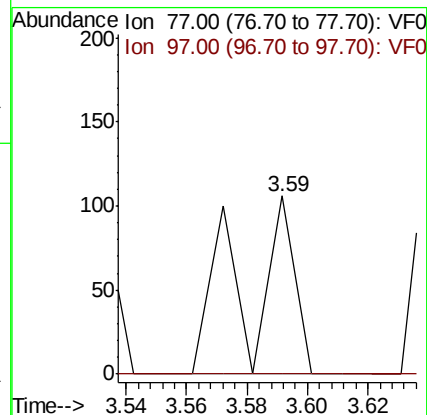
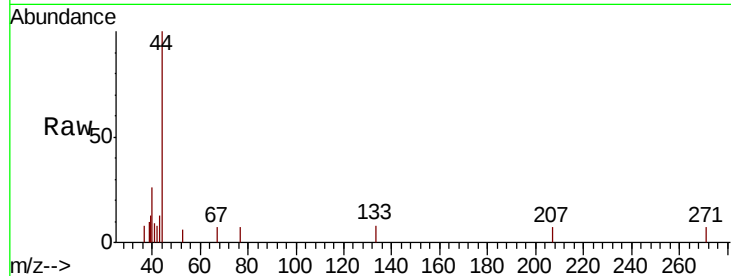
VB16202RE

Tot Ion: 77 Resp: 122

Ion Ratio Lower Upper

77 100

97 0.0 8.6 25.8#



#27

cis-1,2-Dichloroethene

Concen: 1.125 ug/l

RT: 3.44 min Scan# 285

Delta R.T. -0.07 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

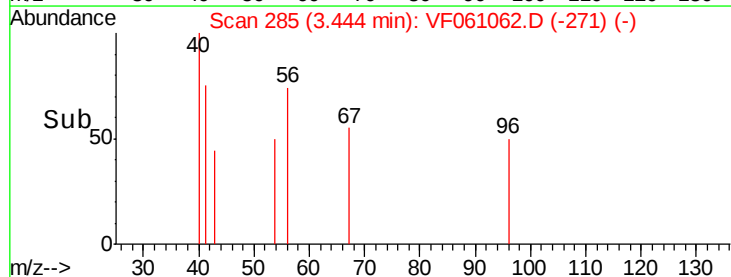
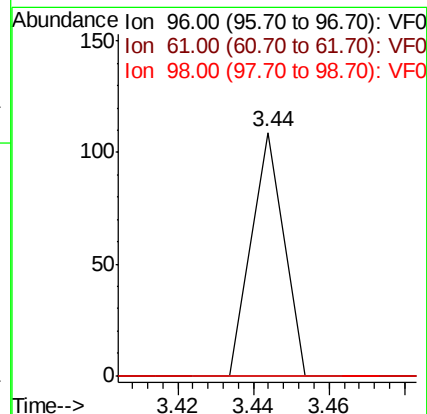
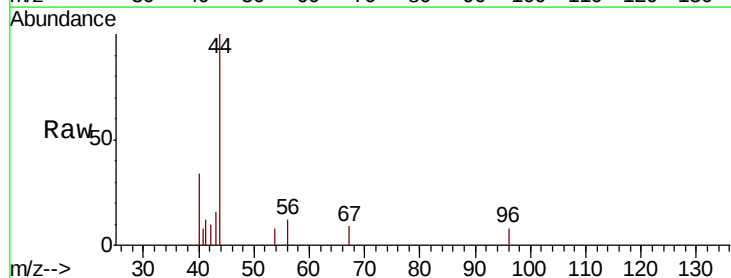
Tgt Ion: 96 Resp: 65

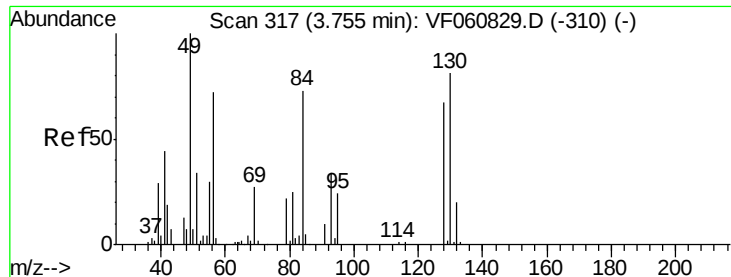
Ion Ratio Lower Upper

96 100

61 0.0 0.0 290.6

98 0.0 0.0 137.8





#28

Bromochloromethane

Concen: 1.851 ug/l

RT: 3.61 min Scan# 302

Delta R.T. -0.14 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

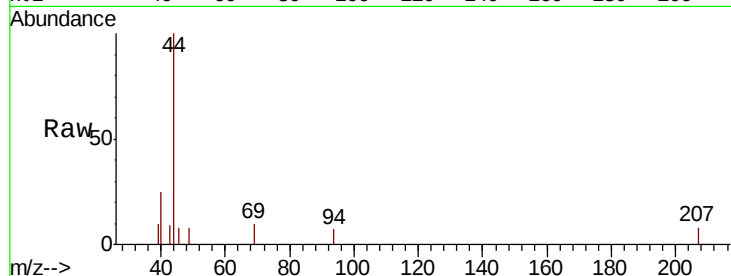
Tot Ion: 49 Resp: 66

Ion Ratio Lower Upper

49 100

129 0.0 0.0 4.4

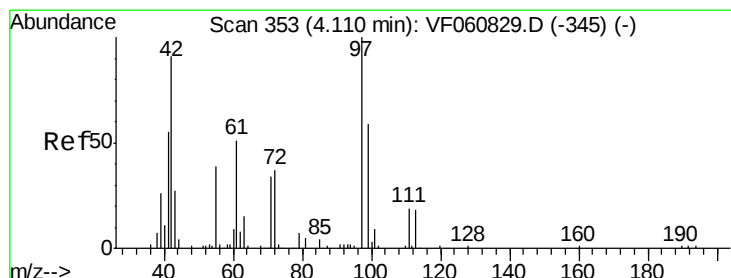
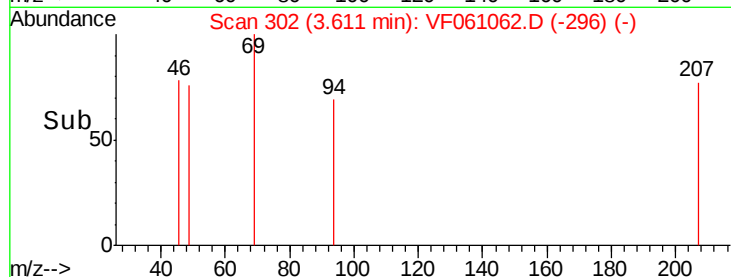
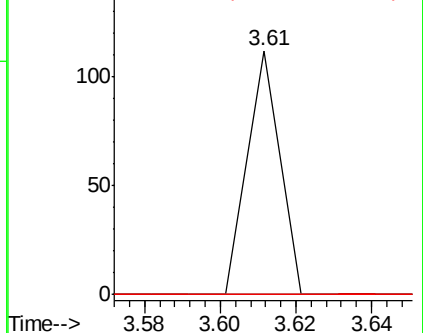
130 0.0 64.2 96.4#



Abundance Ion 49.00 (48.70 to 49.70): VF0

Ion 129.00 (128.70 to 129.70): V

Ion 130.00 (129.70 to 130.70): V



#29

Tetrahydrofuran

Concen: 51.601 ug/l

RT: 4.08 min Scan# 350

Delta R.T. -0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

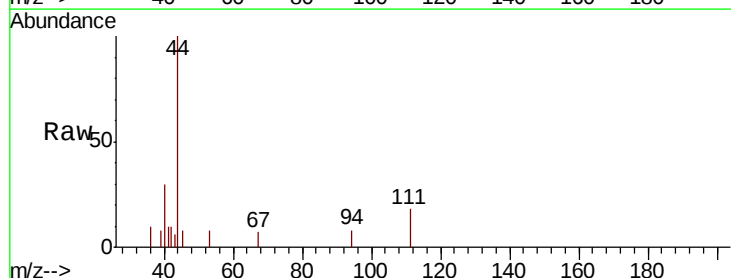
Tgt Ion: 42 Resp: 382

Ion Ratio Lower Upper

42 100

72 0.0 31.9 47.9#

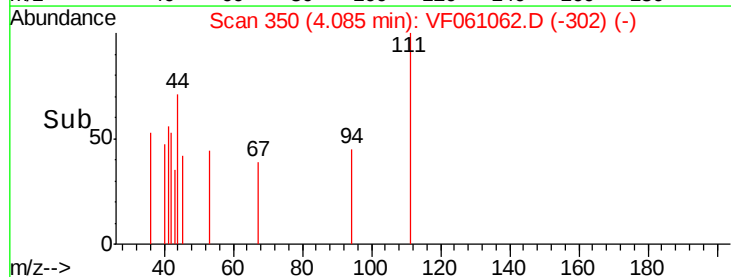
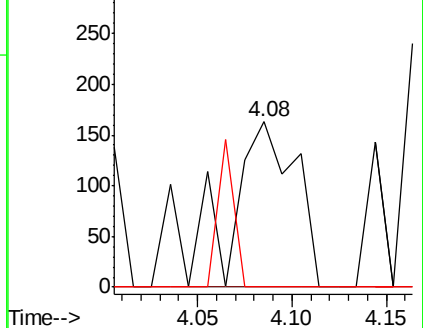
71 22.5 28.7 43.1#

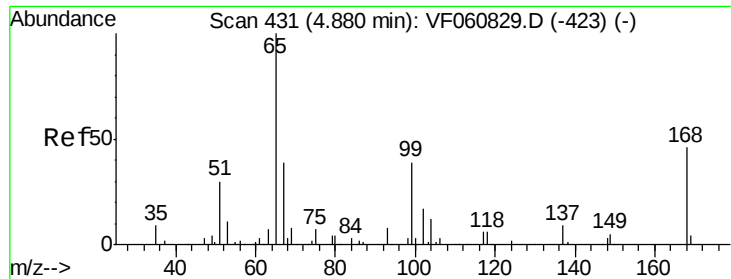


Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0





#33

1,2-Dichloroethane-d4

Concen: 17.953 ug/l

RT: 4.85 min Scan# 428

Delta R.T. -0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

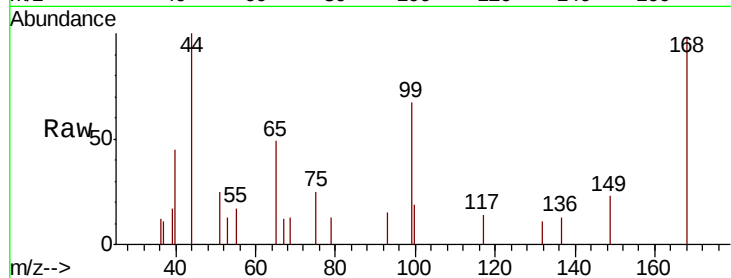
VB16202RE

Tot Ion: 65 Resp: 983

Ion Ratio Lower Upper

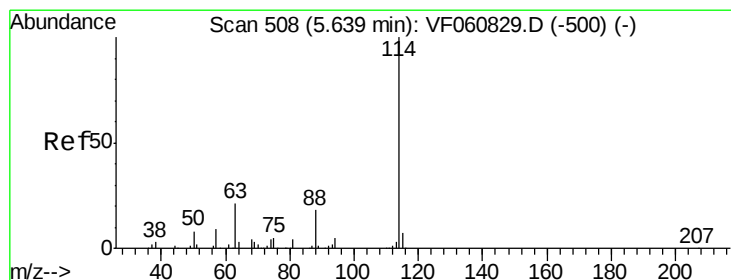
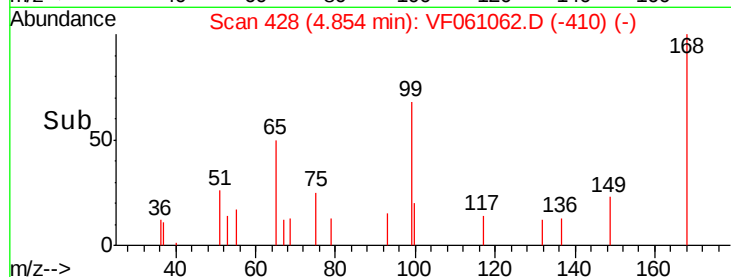
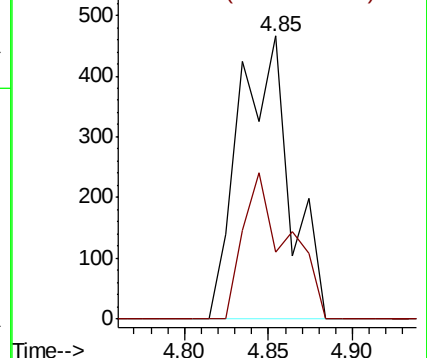
65 100

67 23.8 0.0 96.4



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.60 min Scan# 504

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

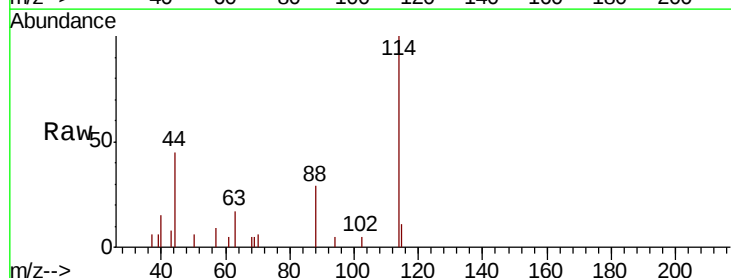
Tgt Ion: 114 Resp: 6245

Ion Ratio Lower Upper

114 100

63 17.5 0.0 41.6

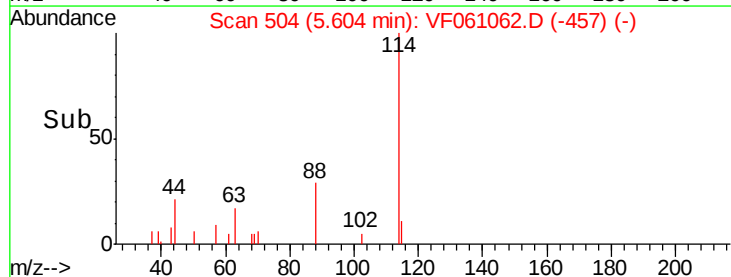
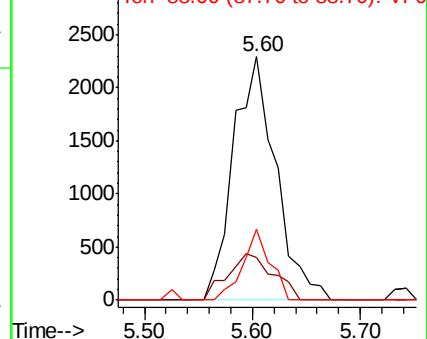
88 28.9 0.0 36.6

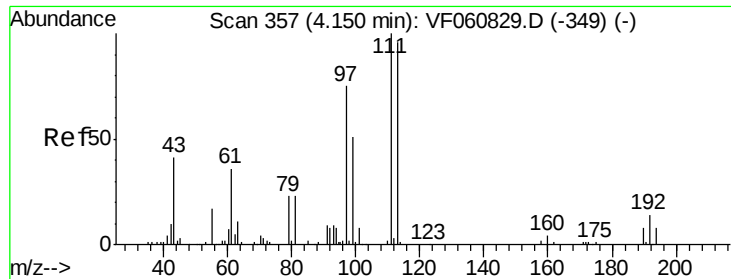


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0

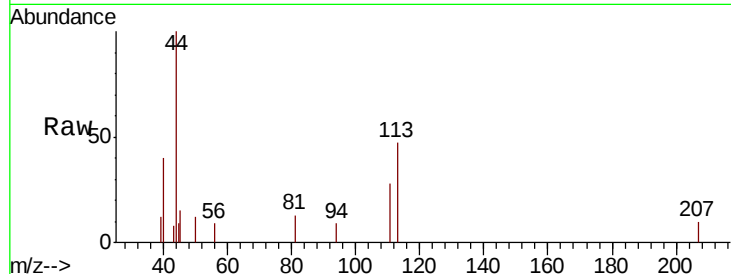




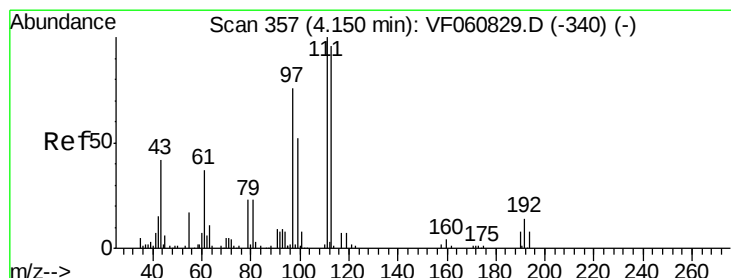
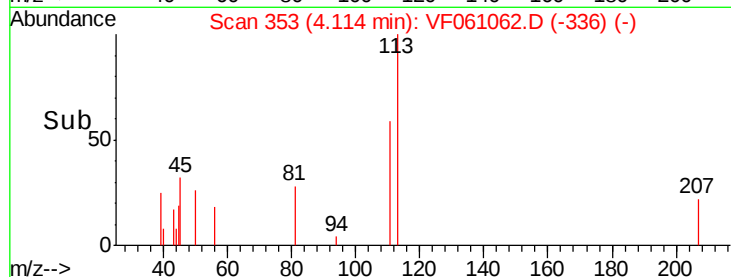
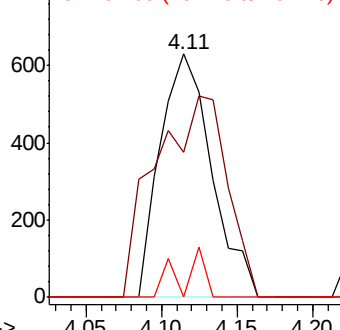
#35  
Dibromofluoromethane  
Concen: 30.277 ug/l  
RT: 4.11 min Scan# 353  
Delta R.T. -0.04 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

Instrument :  
MSVOA\_F  
ClientSampleId :  
VB16202RE

Tot Ion:113 Resp: 1500  
Ion Ratio Lower Upper  
113 100  
111 59.4 83.0 124.6#  
192 0.0 12.3 18.5#

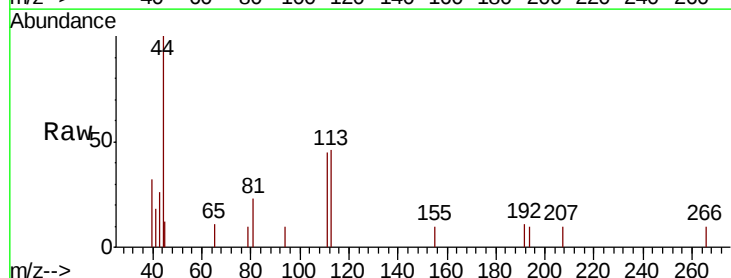


Abundance Ion 113.00 (112.70 to 113.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 192.00 (191.70 to 192.70): V

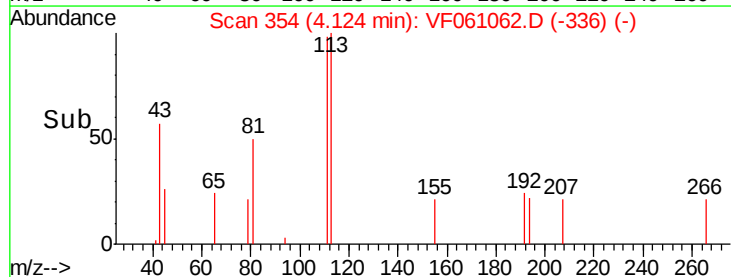
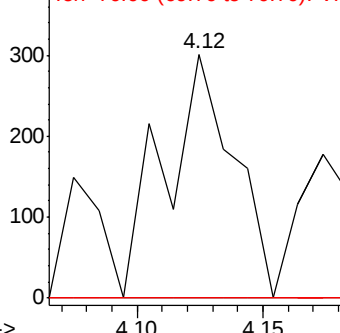


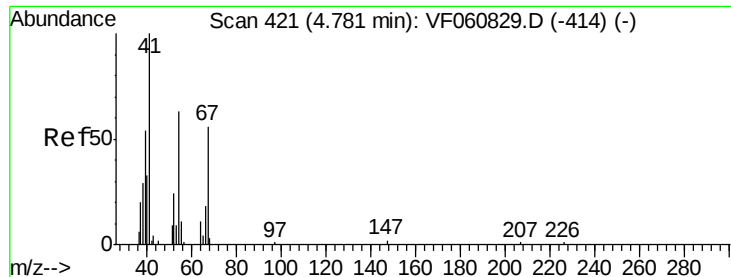
#37  
Ethyl Acetate  
Concen: 20.427 ug/l  
RT: 4.12 min Scan# 354  
Delta R.T. -0.03 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

Tgt Ion: 43 Resp: 575  
Ion Ratio Lower Upper  
43 100  
61 0.0 68.6 103.0#  
70 0.0 9.0 13.4#



Abundance Ion 43.00 (42.70 to 43.70): VF0  
Ion 61.00 (60.70 to 61.70): VF0  
Ion 70.00 (69.70 to 70.70): VF0

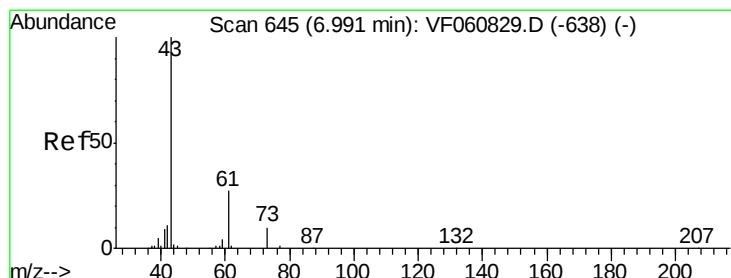
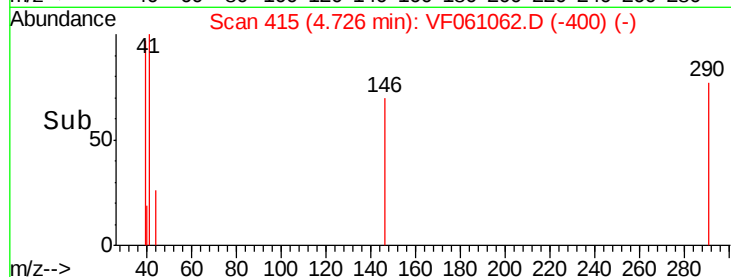
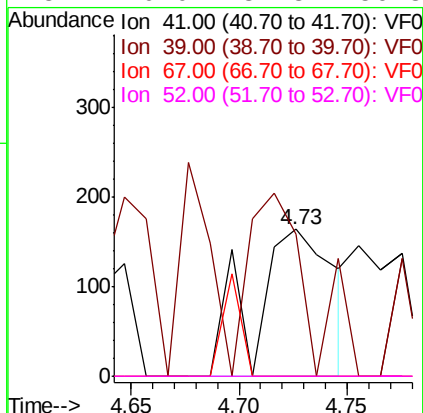
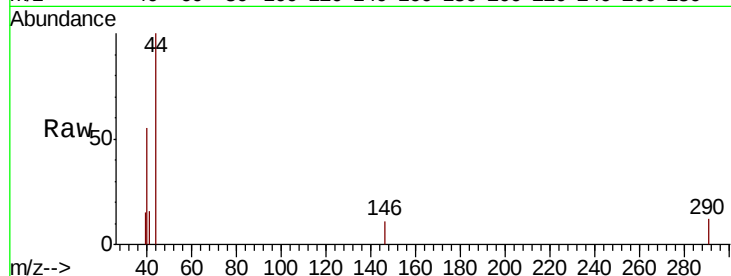




#41  
Methacrylonitrile  
Concen: 26.814 ug/l  
RT: 4.73 min Scan# 415  
Delta R.T. -0.05 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

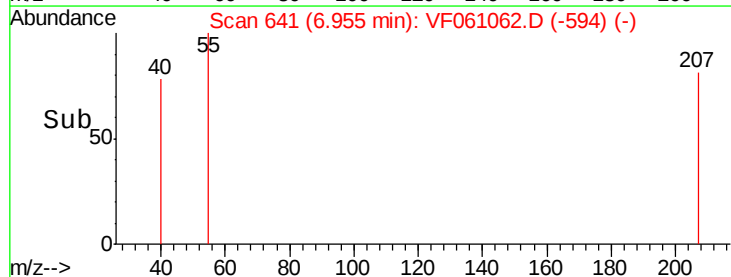
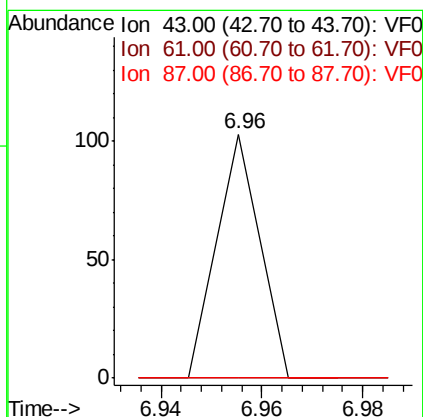
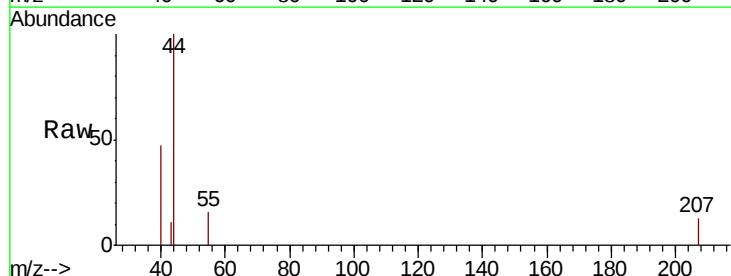
Instrument :  
MSVOA\_F  
ClientSampleId :  
VB16202RE

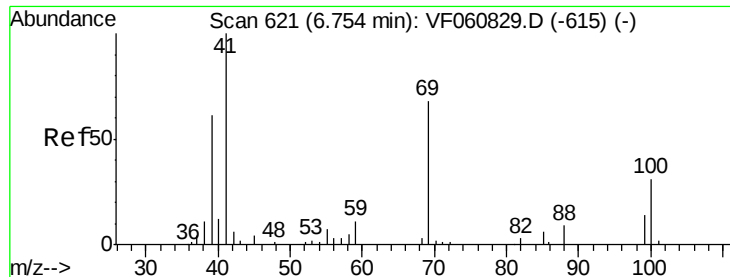
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 41    | Resp: | 417   |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 97.0  | 53.0  | 79.6# |
| 67       | 0.0   | 43.8  | 65.6# |
| 52       | 0.0   | 37.8  | 56.8# |



#43  
Isopropyl Acetate  
Concen: Below Cal  
RT: 6.96 min Scan# 641  
Delta R.T. -0.03 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 61    |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 0.0   | 21.4  | 32.0# |
| 87       | 0.0   | 0.2   | 0.4#  |

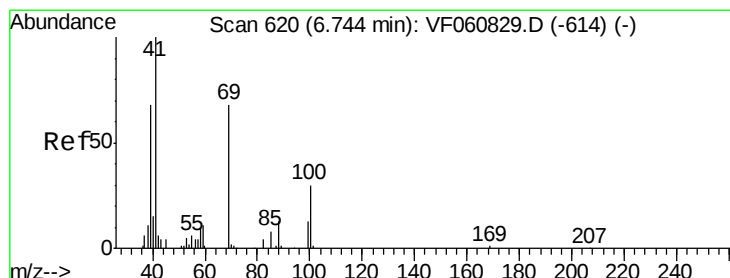
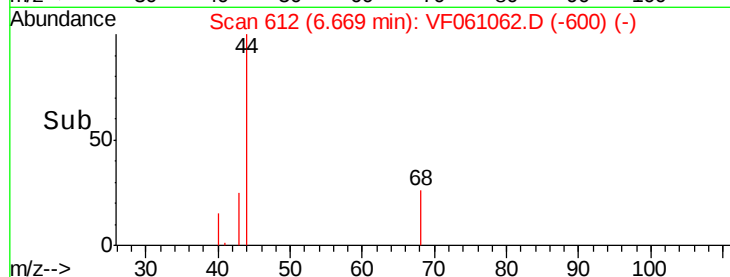
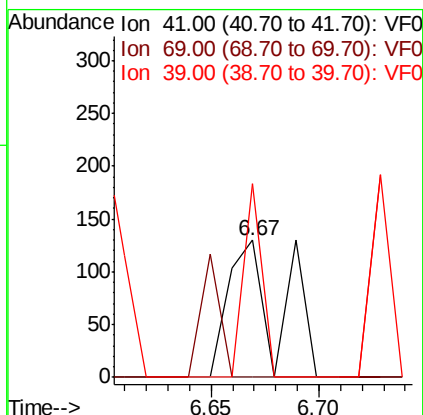
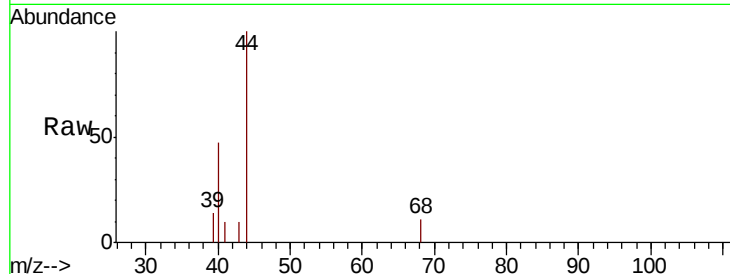




#48  
Methyl methacrylate  
Concen: 8.438 ug/l  
RT: 6.67 min Scan# 612  
Delta R.T. -0.08 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

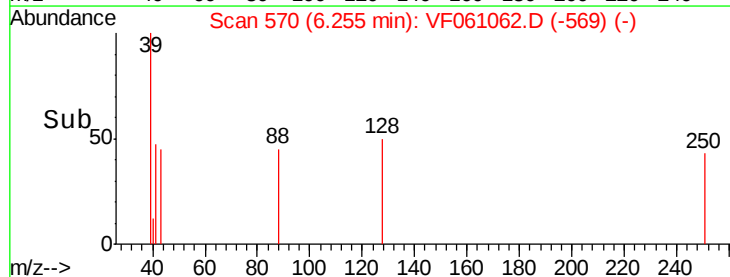
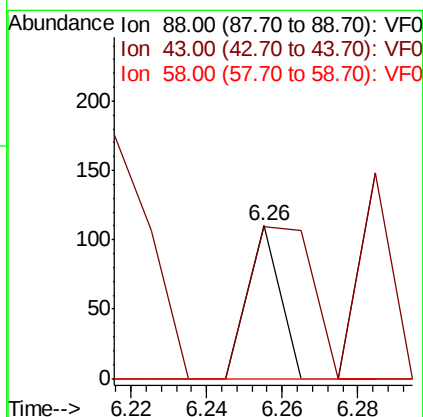
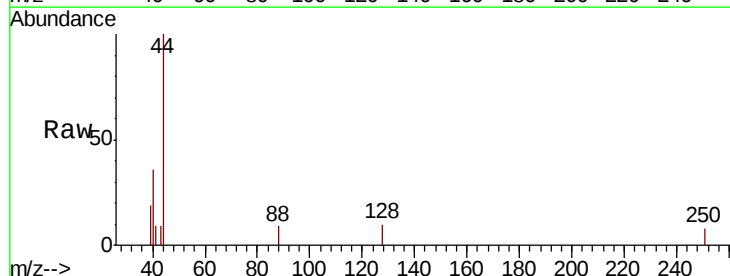
Instrument :  
MSVOA\_F  
ClientSampleId :  
VB16202RE

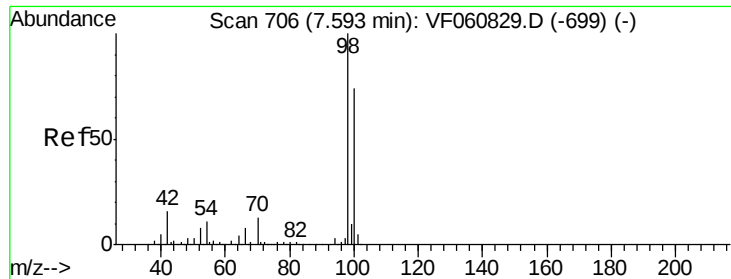
Tot Ion: 41 Resp: 215  
Ion Ratio Lower Upper  
41 100  
69 0.0 53.9 80.9#  
39 140.8 49.0 73.6#



#49  
1,4-Dioxane  
Concen: 348.572 ug/l  
RT: 6.26 min Scan# 570  
Delta R.T. -0.49 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

Tgt Ion: 88 Resp: 65  
Ion Ratio Lower Upper  
88 100  
43 99.1 42.0 63.0#  
58 0.0 61.8 92.8#





#50

Toluene-d8

Concen: 38.283 ug/l

RT: 7.56 min Scan# 702

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

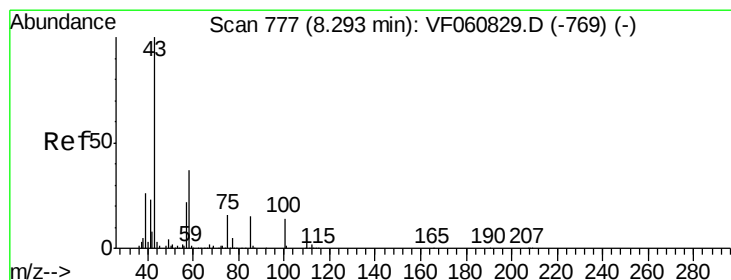
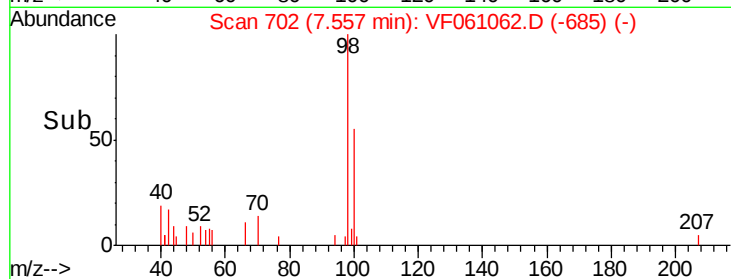
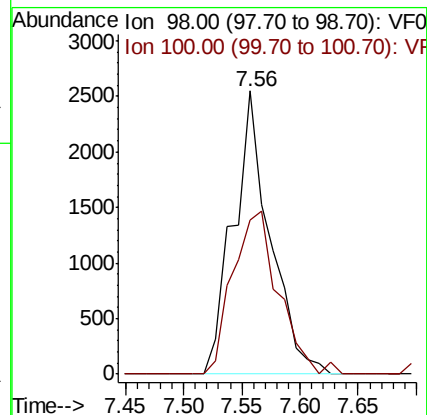
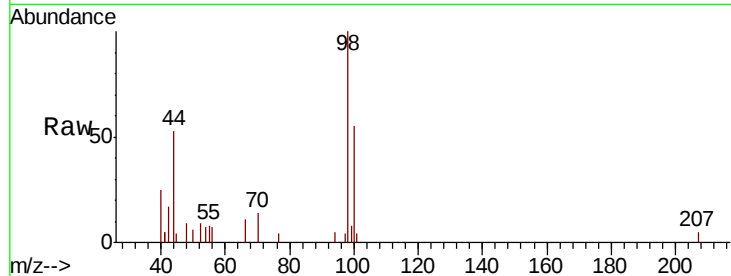
VB16202RE

Tot Ion: 98 Resp: 5587

Ion Ratio Lower Upper

98 100

100 54.5 59.3 88.9#



#51

4-Methyl-2-Pentanone

Concen: 6.626 ug/l

RT: 8.23 min Scan# 770

Delta R.T. -0.07 min

Lab File: VF061062.D

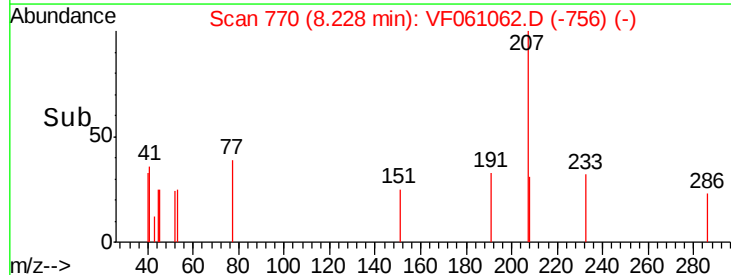
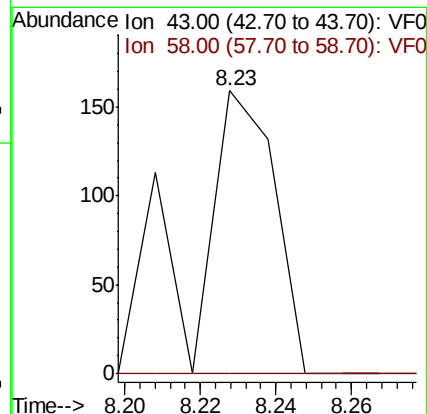
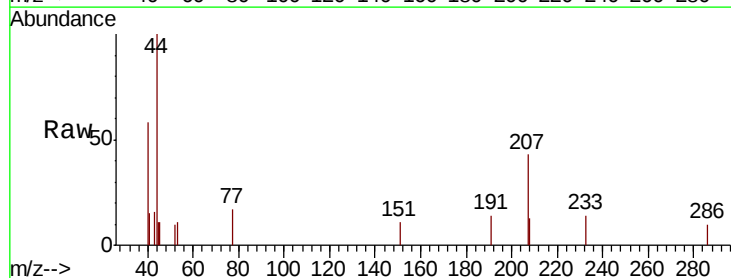
Acq: 18 Dec 2018 14:58

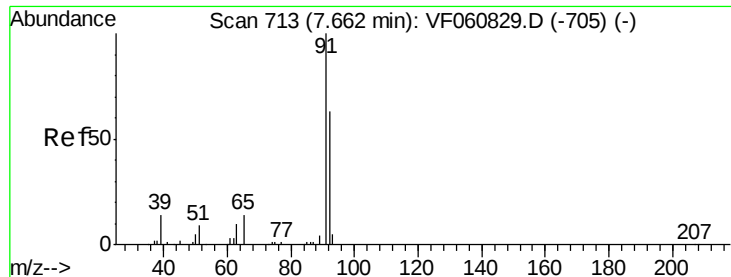
Tgt Ion: 43 Resp: 172

Ion Ratio Lower Upper

43 100

58 0.0 29.7 44.5#





#52

Toluene

Concen: 7.564 ug/l

RT: 7.63 min Scan# 709

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

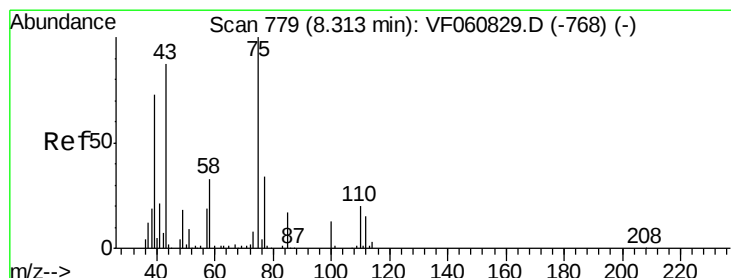
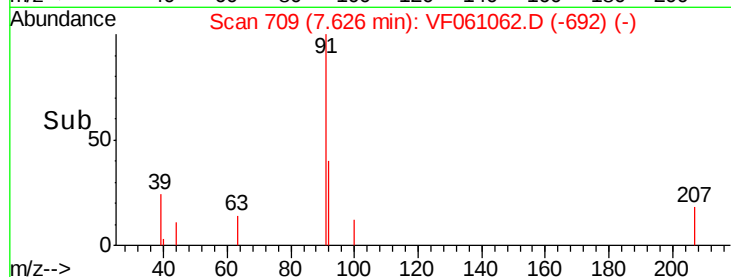
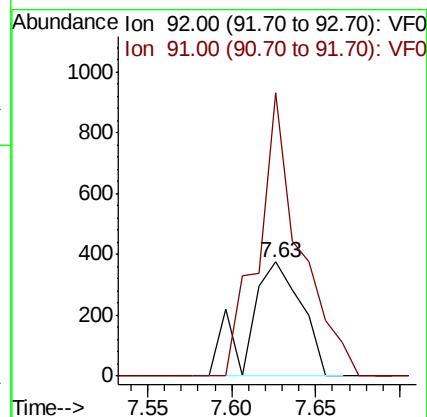
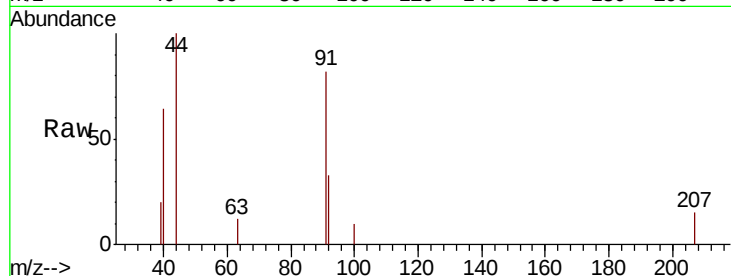
VB16202RE

Tot Ion: 92 Resp: 813

Ion Ratio Lower Upper

92 100

91 248.7 126.2 189.2#



#53

t-1,3-Dichloropropene

Concen: 1.339 ug/l

RT: 8.31 min Scan# 778

Delta R.T. -0.01 min

Lab File: VF061062.D

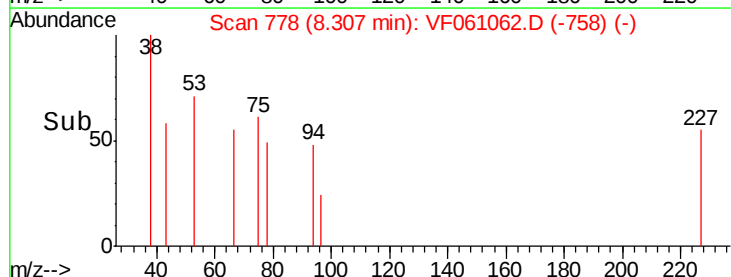
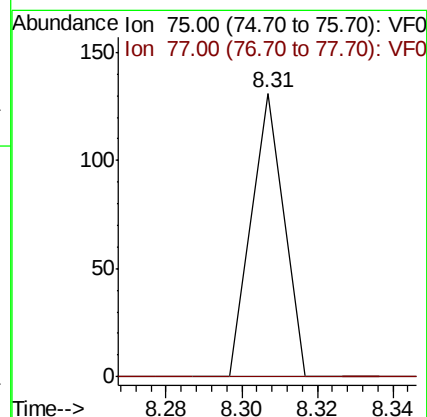
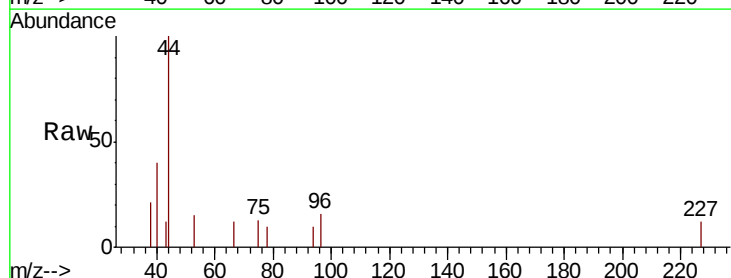
Acq: 18 Dec 2018 14:58

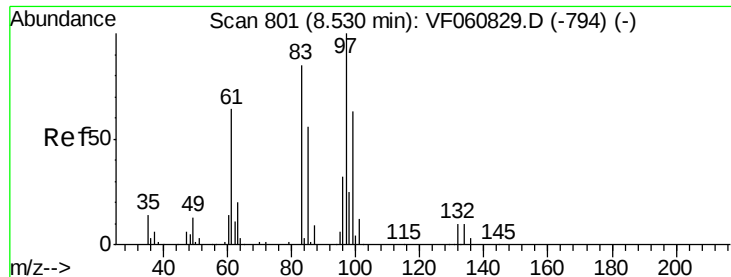
Tgt Ion: 75 Resp: 78

Ion Ratio Lower Upper

75 100

77 0.0 27.4 41.2#





#55

1,1,2-Trichloroethane

Concen: 2.427 ug/l

RT: 8.59 min Scan# 807

Delta R.T. 0.06 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

Tot Ion: 97 Resp: 76

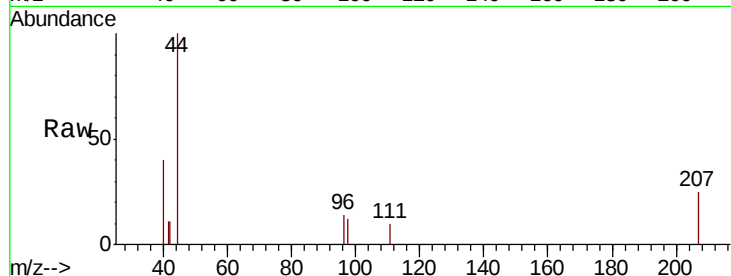
Ion Ratio Lower Upper

97 100

83 0.0 67.8 101.6#

85 0.0 45.0 67.6#

99 0.0 50.5 75.7#

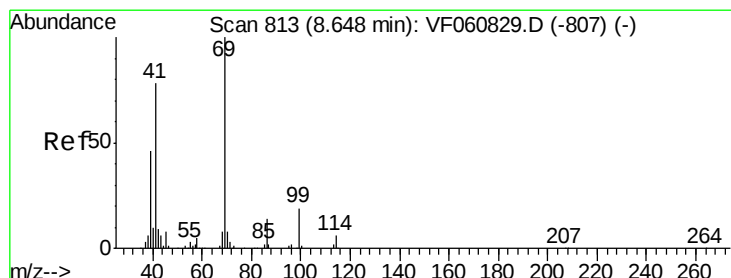
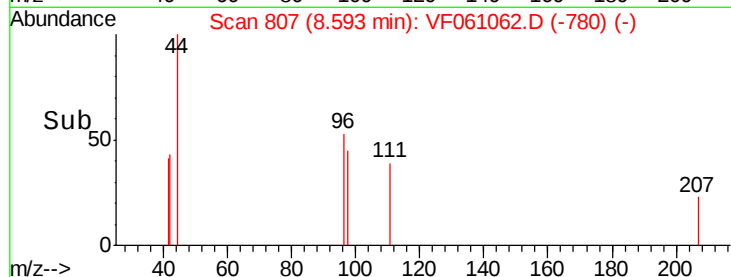
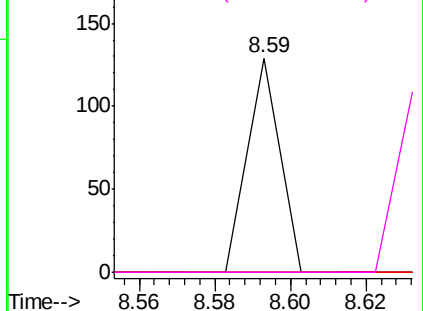


Abundance Ion 97.00 (96.70 to 97.70): VF0

Ion 82.95 (82.65 to 83.65): VF0

Ion 84.95 (84.65 to 85.65): VF0

Ion 98.95 (98.65 to 99.65): VF0



#56

Ethyl methacrylate

Concen: 2.271 ug/l

RT: 8.65 min Scan# 813

Delta R.T. 0.00 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

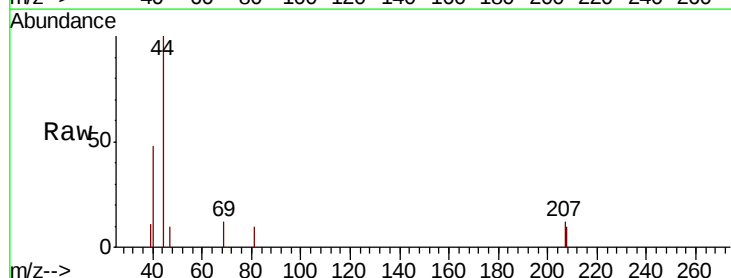
Tgt Ion: 69 Resp: 79

Ion Ratio Lower Upper

69 100

41 0.0 62.6 94.0#

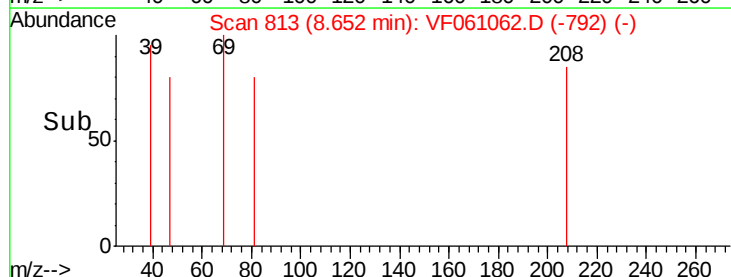
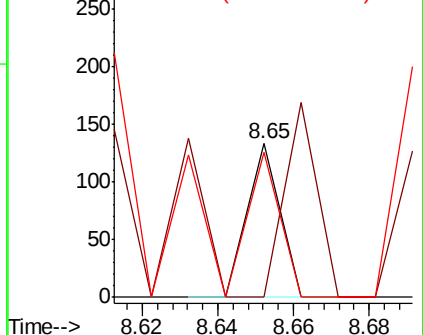
39 94.7 37.8 56.6#

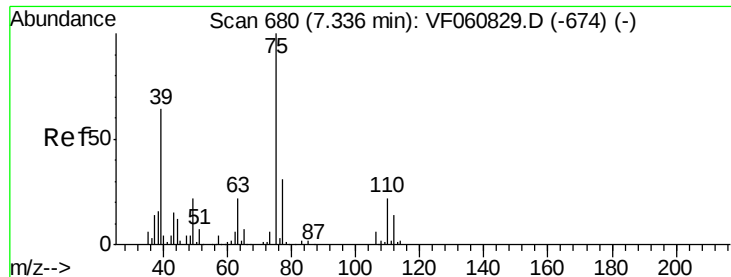


Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0





#58

2-Chloroethyl Vinyl ether

Concen: 25.570 ug/l

RT: 7.17 min Scan# 663

Delta R.T. -0.16 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

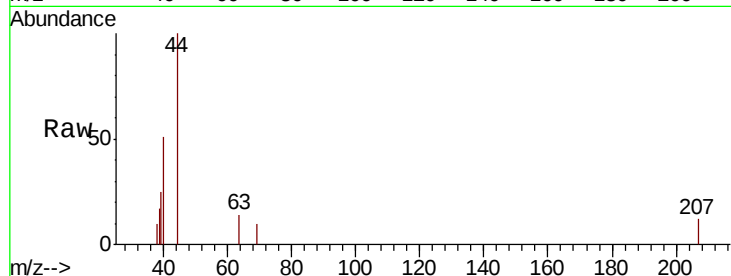
VB16202RE

Tot Ion: 63 Resp: 91

Ion Ratio Lower Upper

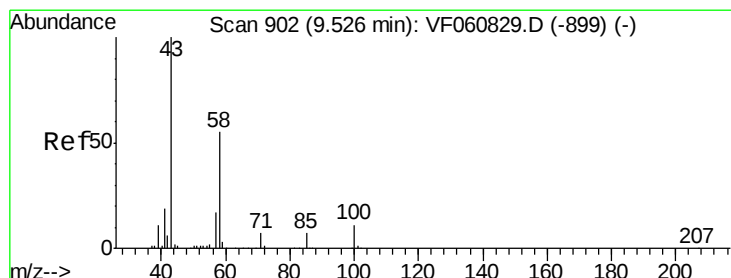
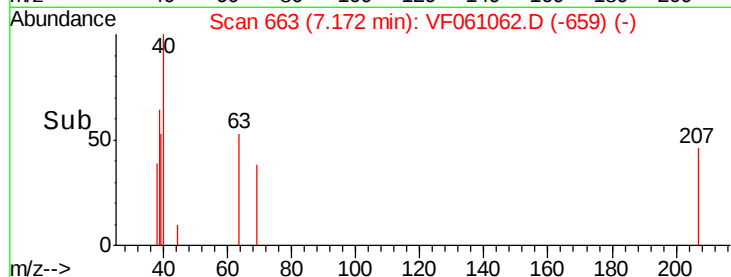
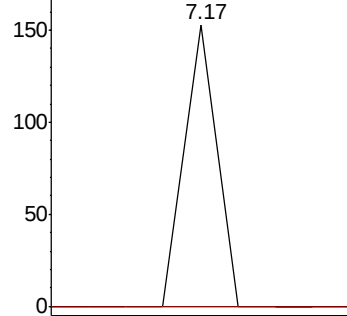
63 100

106 0.0 23.0 34.6#



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): V



#59

2-Hexanone

Concen: 10.159 ug/l

RT: 9.51 min Scan# 900

Delta R.T. -0.02 min

Lab File: VF061062.D

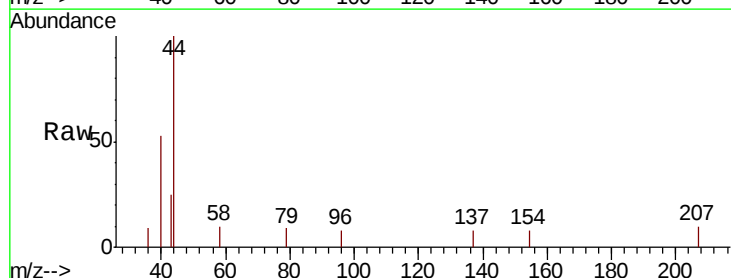
Acq: 18 Dec 2018 14:58

Tgt Ion: 43 Resp: 185

Ion Ratio Lower Upper

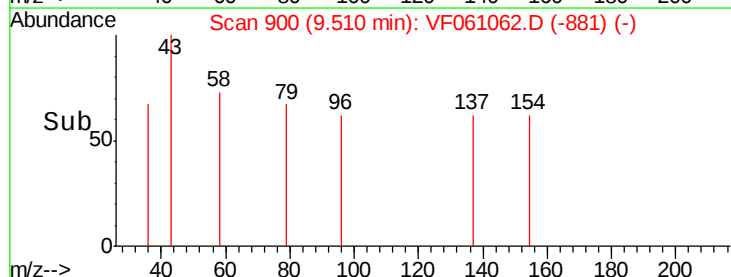
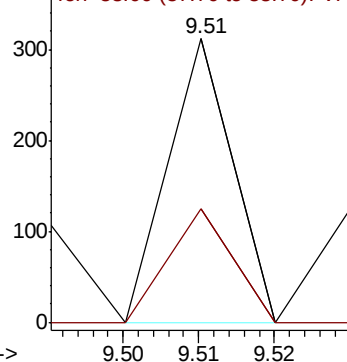
43 100

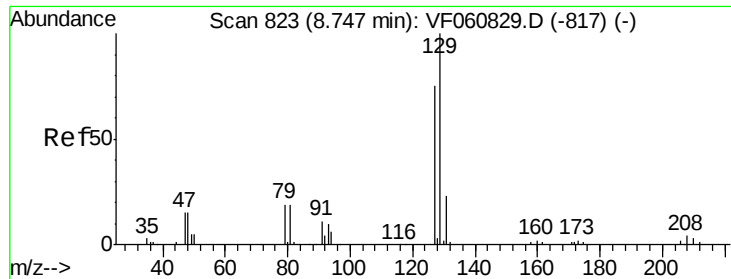
58 40.1 25.6 76.6



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#60

Dibromochloromethane

Concen: 1.414 ug/l

RT: 8.72 min Scan# 820

Delta R.T. -0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

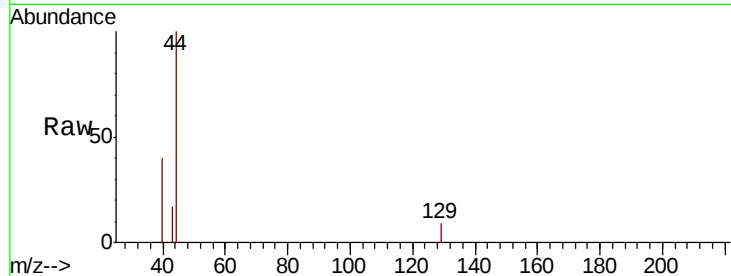
VB16202RE

Tot Ion:129 Resp: 66

Ion Ratio Lower Upper

129 100

127 0.0 37.3 111.9#



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

8.72

100

80

60

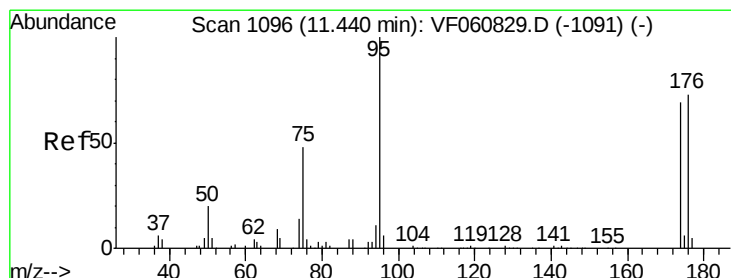
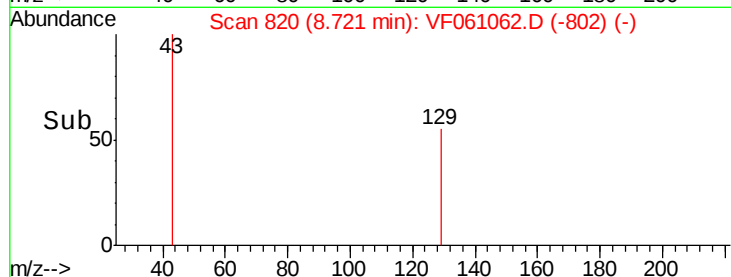
40

20

0

8.70 8.72 8.74

Time-->



#62

4-Bromofluorobenzene

Concen: 22.449 ug/l

RT: 11.41 min Scan# 1093

Delta R.T. -0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

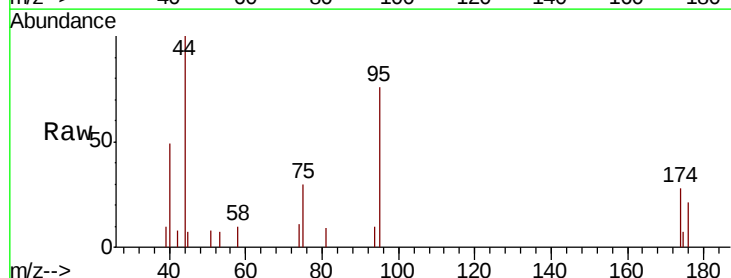
Tgt Ion: 95 Resp: 1489

Ion Ratio Lower Upper

95 100

174 46.6 0.0 138.2

176 27.9 0.0 146.2



Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V

1500

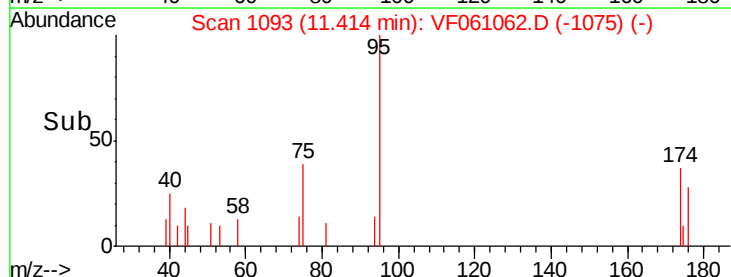
1000

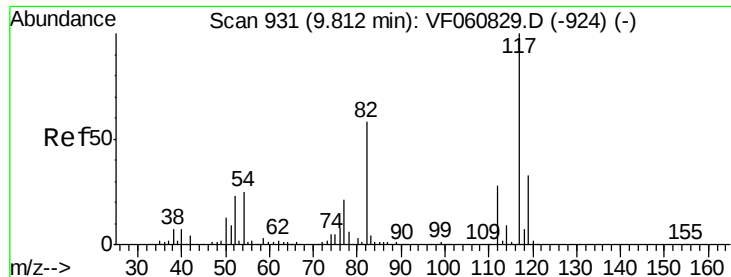
500

0

11.35 11.40 11.45

Time-->

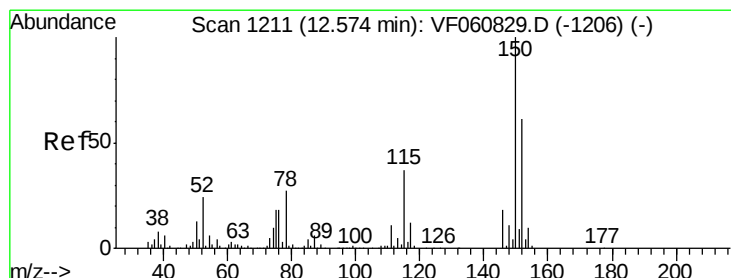
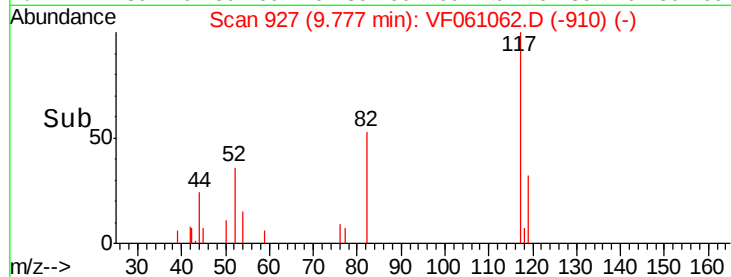
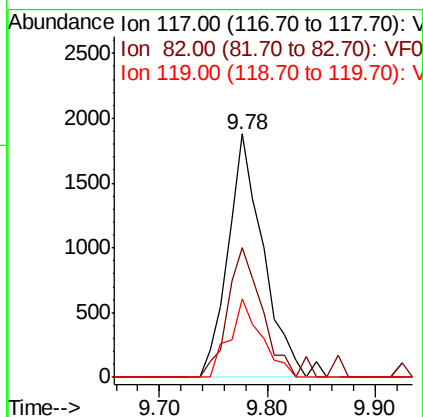
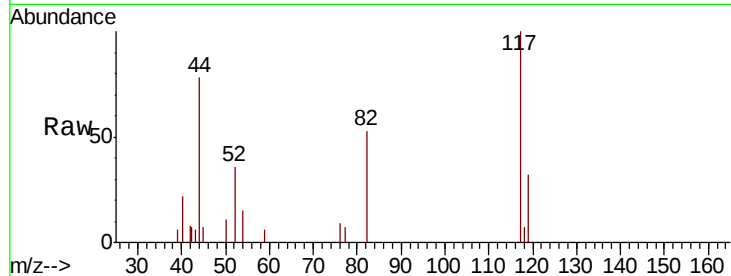




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.78 min Scan# 927  
Delta R.T. -0.04 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

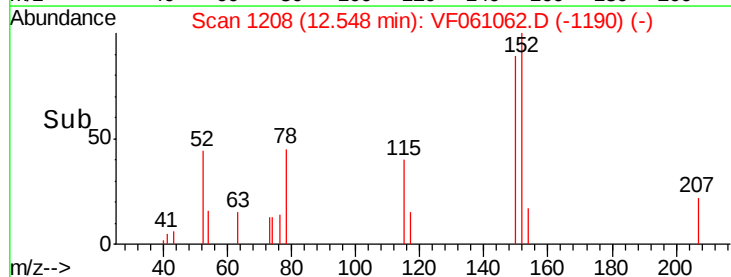
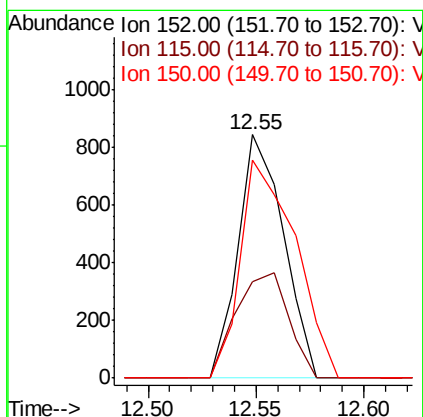
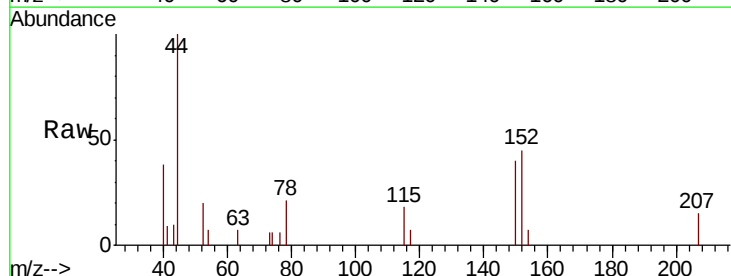
Instrument :  
MSVOA\_F  
ClientSampleId :  
VB16202RE

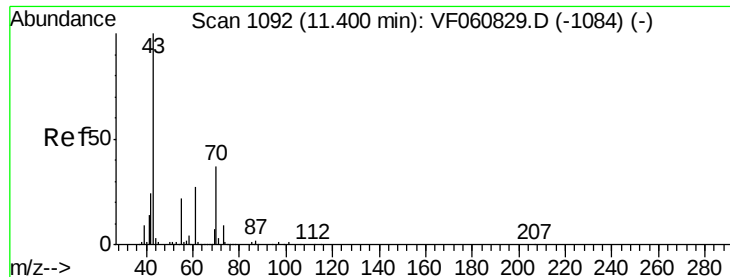
Tot Ion:117 Resp: 4303  
Ion Ratio Lower Upper  
117 100  
82 53.4 46.6 69.8  
119 32.0 26.4 39.6



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.55 min Scan# 1208  
Delta R.T. -0.03 min  
Lab File: VF061062.D  
Acq: 18 Dec 2018 14:58

Tgt Ion:152 Resp: 1235  
Ion Ratio Lower Upper  
152 100  
115 39.9 30.1 90.5  
150 89.3 0.0 327.6





#74

N-amyl acetate

Concen: 17.083 ug/l

RT: 11.38 min Scan# 1090

Delta R.T. -0.02 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

Tot Ion: 43 Resp: 385

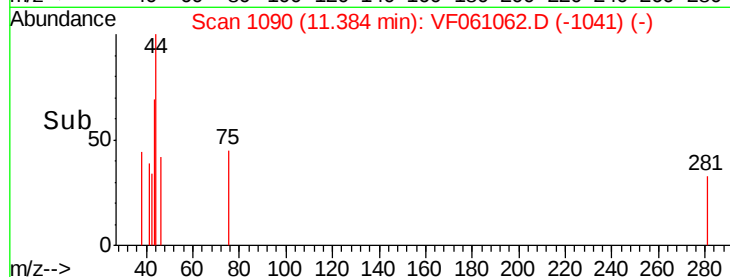
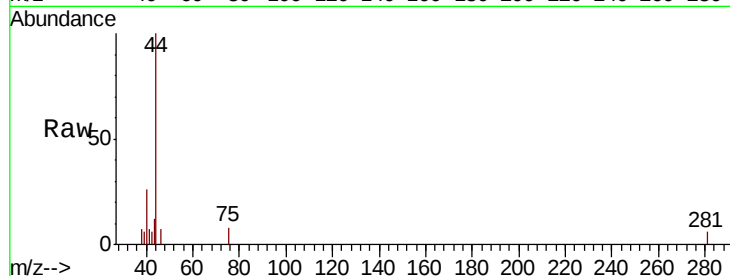
Ion Ratio Lower Upper

43 100

70 0.0 29.6 44.4#

55 0.0 17.2 25.8#

61 0.0 21.8 32.6#

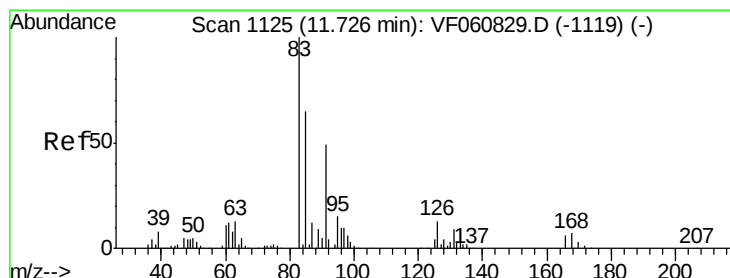
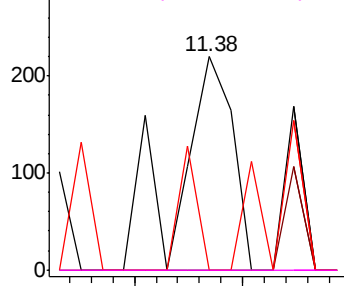


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0



#75

1,1,2,2-Tetrachloroethane

Concen: 5.105 ug/l

RT: 11.64 min Scan# 1116

Delta R.T. -0.08 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

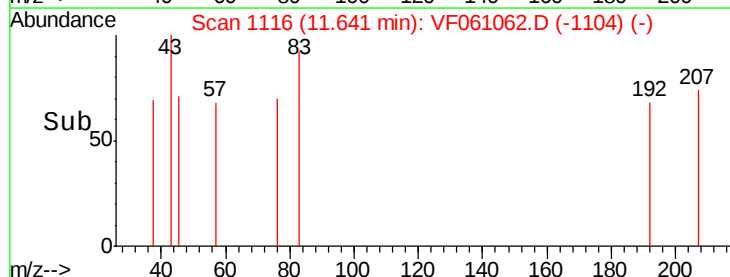
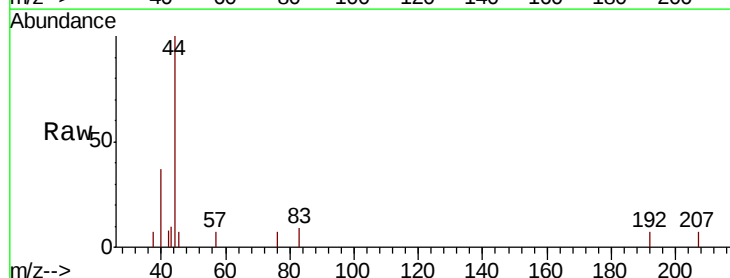
Tgt Ion: 83 Resp: 82

Ion Ratio Lower Upper

83 100

131 0.0 4.7 14.1#

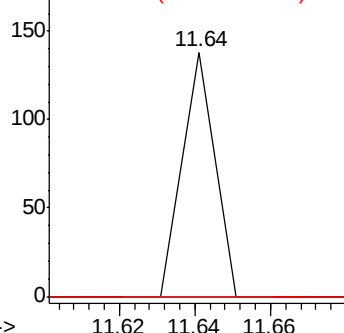
85 0.0 32.6 97.8#

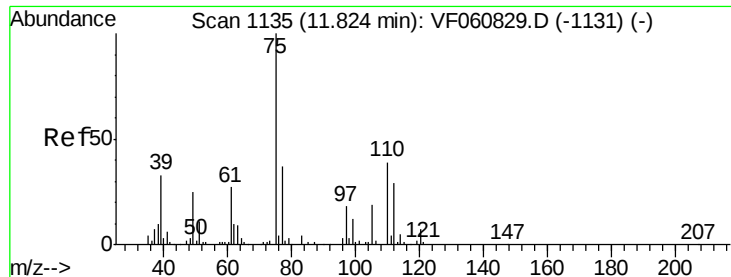


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VF0





#76

1,2,3-Trichloropropane

Concen: 8.394 ug/l

RT: 11.86 min Scan# 1138

Delta R.T. 0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

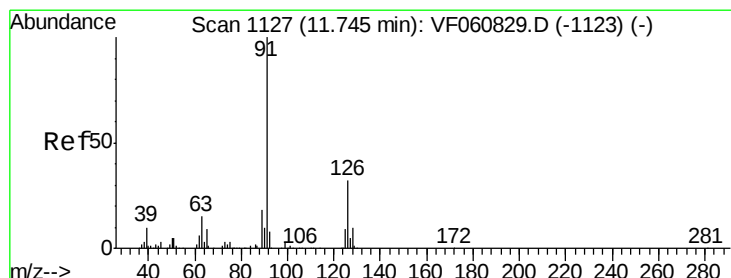
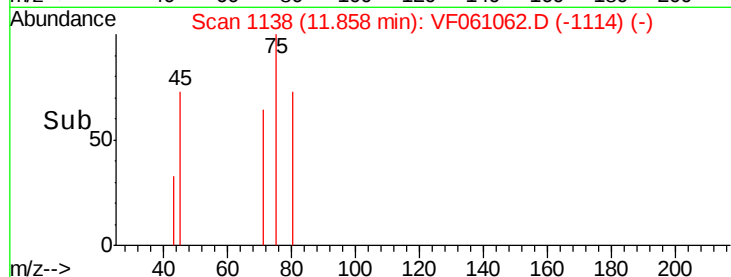
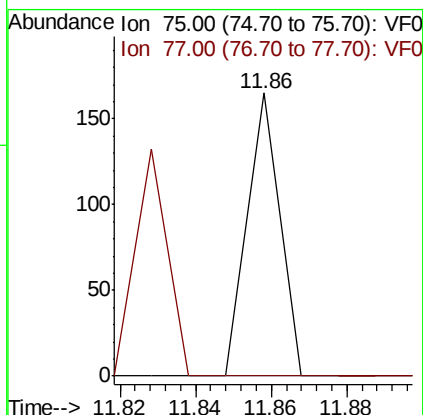
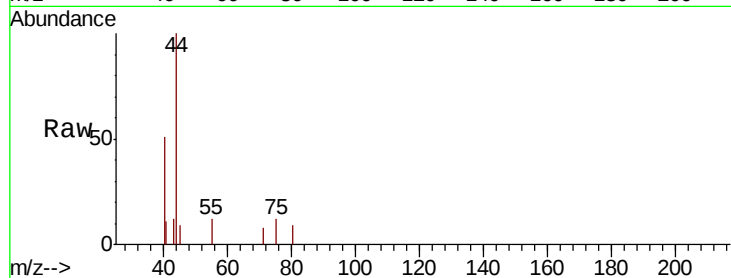
VB16202RE

Tot Ion: 75 Resp: 98

Ion Ratio Lower Upper

75 100

77 0.0 18.4 55.4#



#79

2-Chlorotoluene

Concen: 1.633 ug/l

RT: 11.66 min Scan# 1118

Delta R.T. -0.08 min

Lab File: VF061062.D

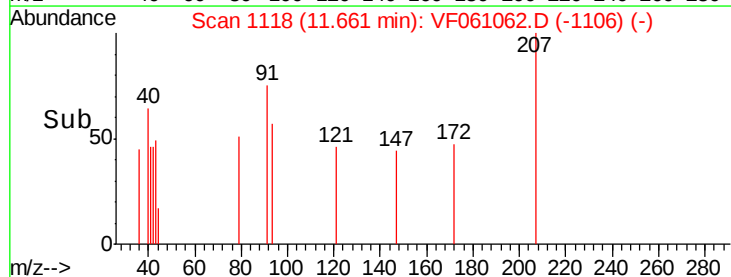
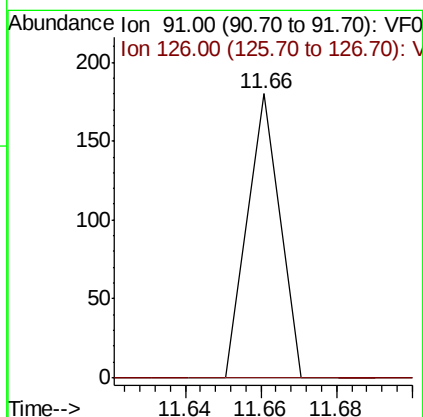
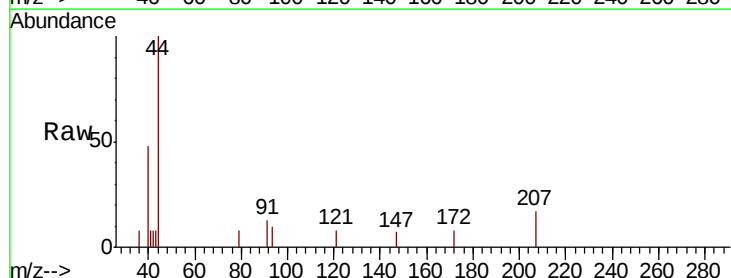
Acq: 18 Dec 2018 14:58

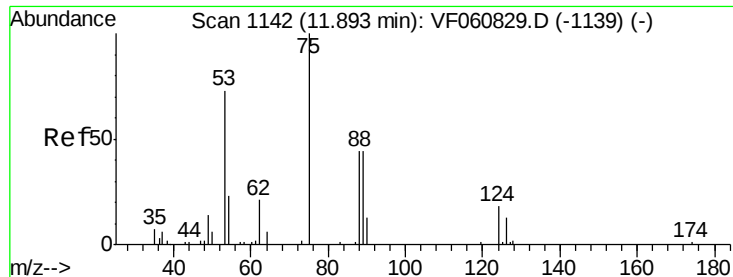
Tgt Ion: 91 Resp: 107

Ion Ratio Lower Upper

91 100

126 0.0 15.9 47.6#





#81

trans-1,4-Dichloro-2-butene

Concen: 17.132 ug/l

RT: 11.86 min Scan# 1138

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

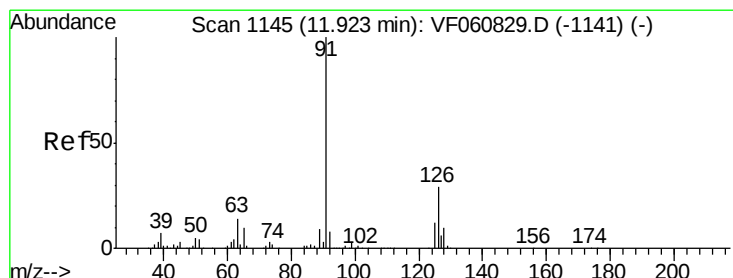
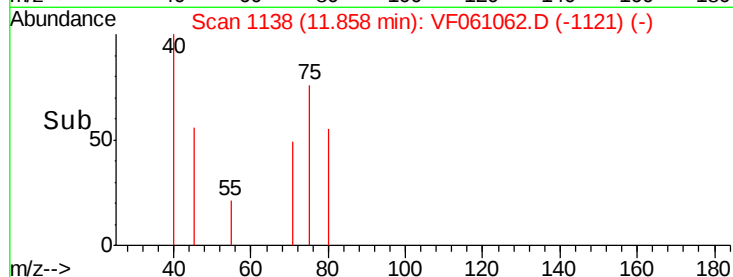
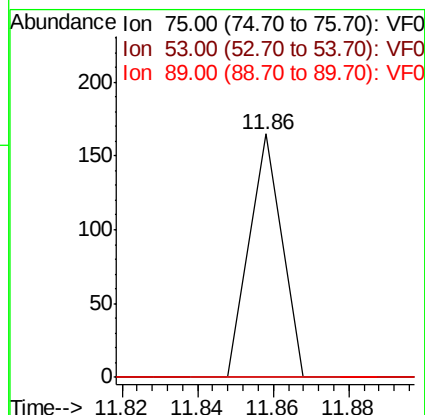
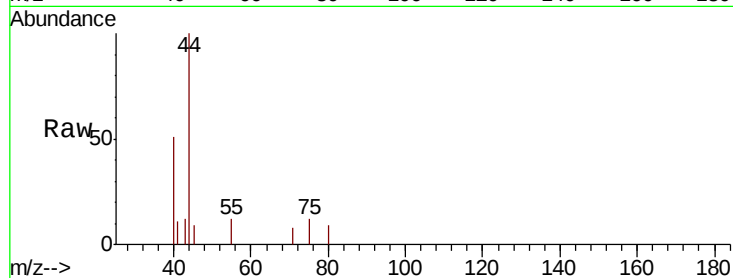
Tot Ion: 75 Resp: 98

Ion Ratio Lower Upper

75 100

53 0.0 65.9 98.9#

89 0.0 38.8 58.2#



#82

4-Chlorotoluene

Concen: 1.015 ug/l

RT: 12.06 min Scan# 1158

Delta R.T. 0.13 min

Lab File: VF061062.D

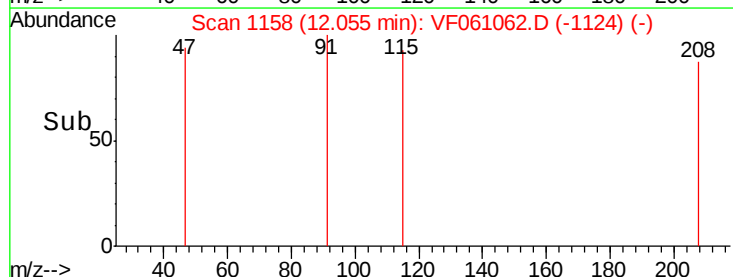
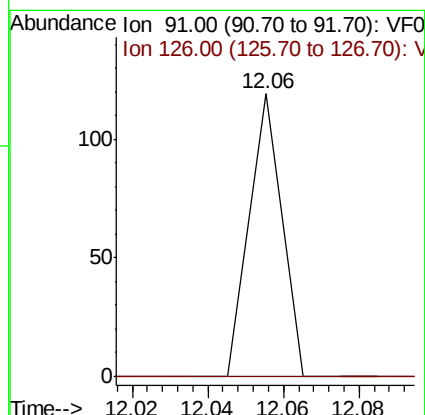
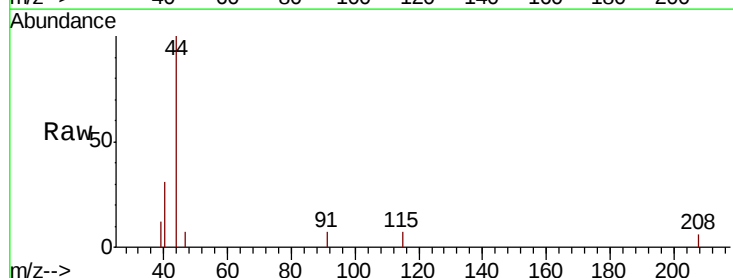
Acq: 18 Dec 2018 14:58

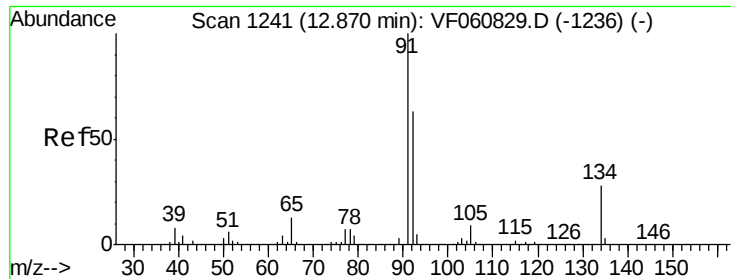
Tgt Ion: 91 Resp: 70

Ion Ratio Lower Upper

91 100

126 0.0 14.8 44.4#





#89

n-Butylbenzene

Concen: 1.900 ug/l

RT: 12.84 min Scan# 1238

Delta R.T. -0.03 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

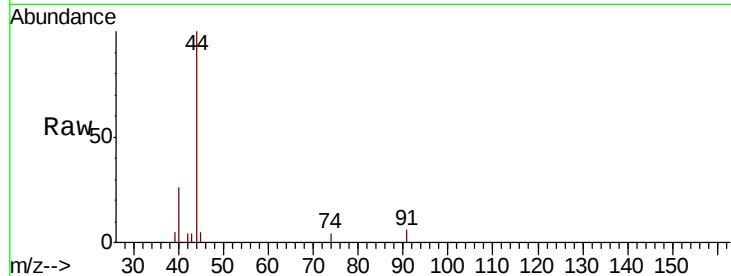
Tot Ion: 91 Resp: 178

Ion Ratio Lower Upper

91 100

92 0.0 31.6 94.7#

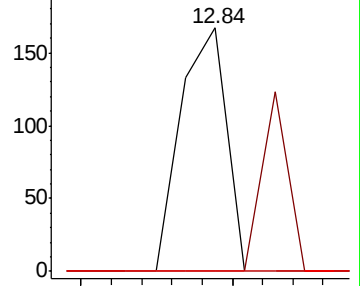
134 0.0 13.8 41.4#



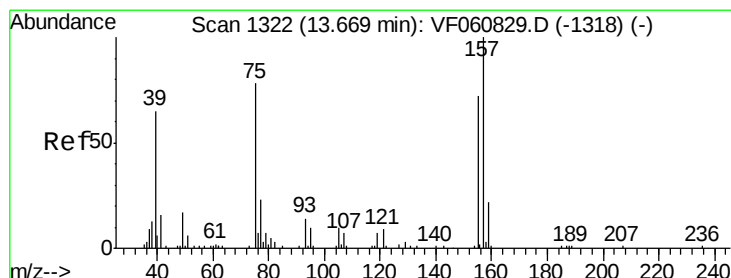
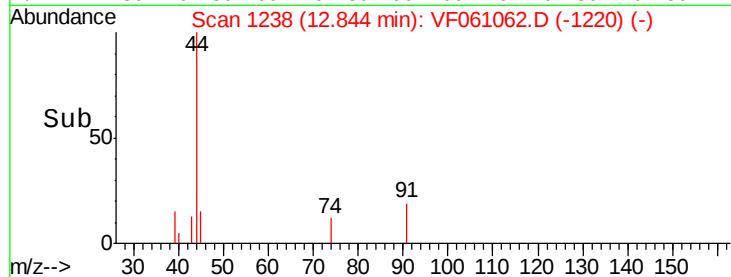
Abundance Ion 91.00 (90.70 to 91.70): VF0

Ion 92.00 (91.70 to 92.70): VF0

Ion 134.00 (133.70 to 134.70): V



Time-->



#92

1,2-Dibromo-3-Chloropropane

Concen: 24.795 ug/l

RT: 13.63 min Scan# 1318

Delta R.T. -0.04 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

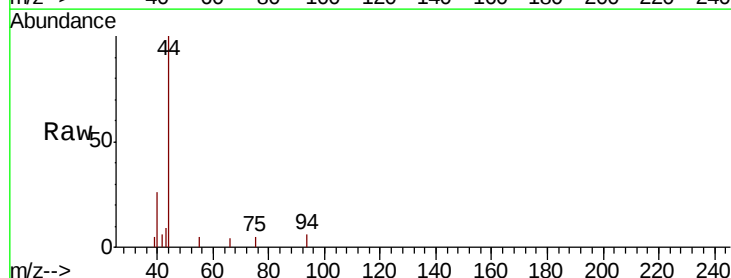
Tgt Ion: 75 Resp: 77

Ion Ratio Lower Upper

75 100

155 0.0 45.6 136.9#

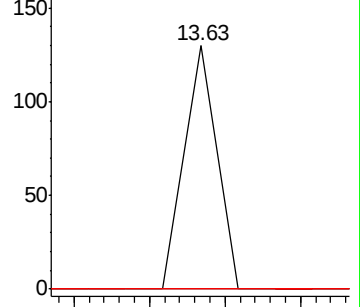
157 0.0 63.8 191.5#



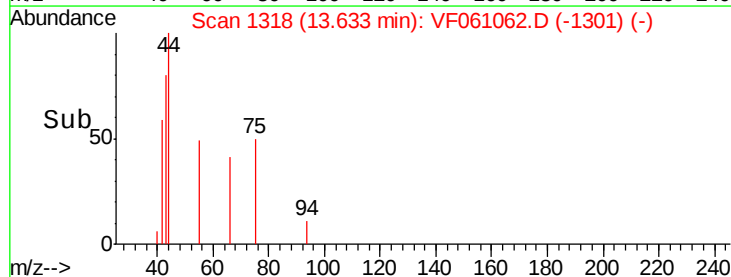
Abundance Ion 75.00 (74.70 to 75.70): VF0

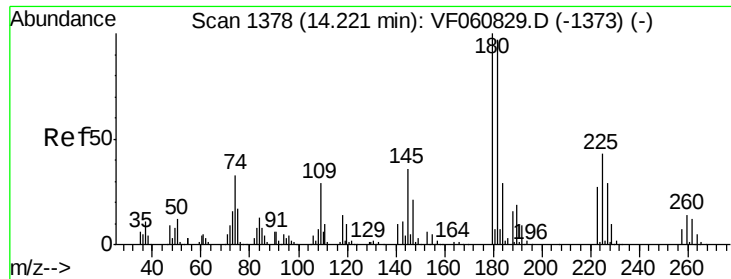
Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V



Time-->





#93

1,2,4-Trichlorobenzene

Concen: 2.971 ug/l

RT: 14.17 min Scan# 1372

Delta R.T. -0.06 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

Instrument :

MSVOA\_F

ClientSampleId :

VB16202RE

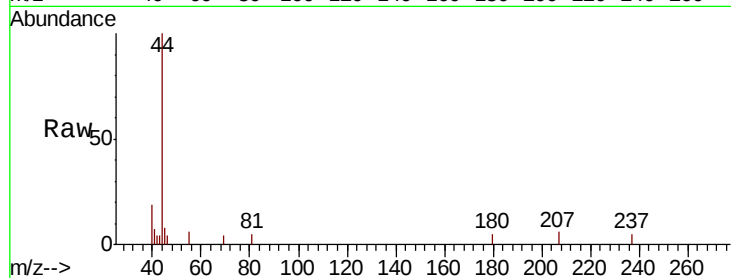
Tot Ion:180 Resp: 80

Ion Ratio Lower Upper

180 100

182 0.0 48.5 145.5#

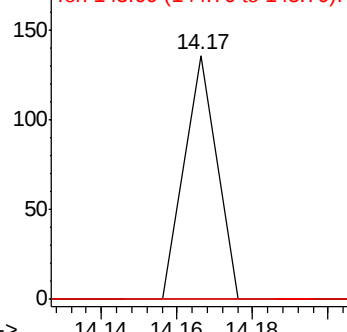
145 0.0 18.1 54.3#



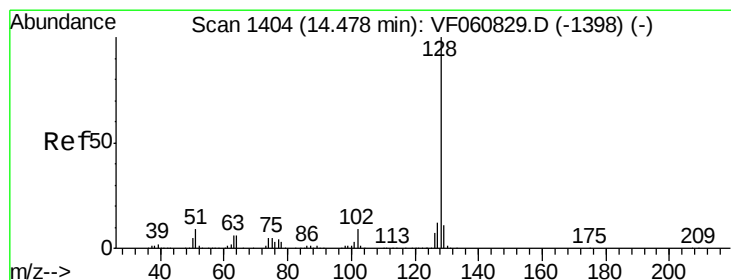
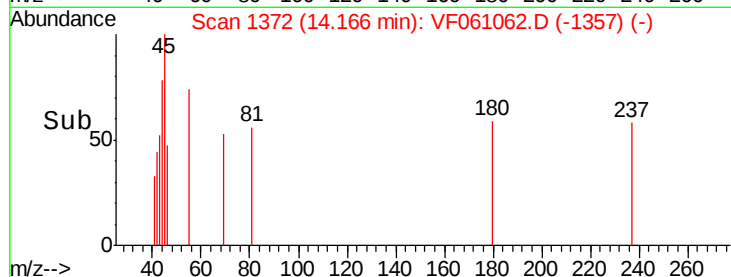
Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V



Time-->



#95

Naphthalene

Concen: 13.456 ug/l

RT: 14.46 min Scan# 1402

Delta R.T. -0.01 min

Lab File: VF061062.D

Acq: 18 Dec 2018 14:58

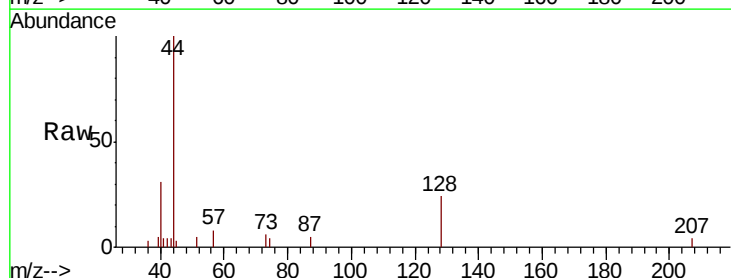
Tgt Ion:128 Resp: 837

Ion Ratio Lower Upper

128 100

127 0.0 9.9 14.9#

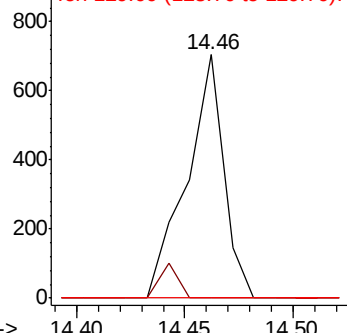
129 0.0 9.1 13.7#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



Time-->

