

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF010919\  
 Data File : VF061322.D  
 Acq On : 10 Jan 2019 3:11  
 Operator : VA/AP  
 Sample : K1082-30RE  
 Misc : 4.19g/5mL/MSVOA-F/SOIL  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SP-1-4RE

Quant Time: Jan 10 06:05:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F010819S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 09 07:13:51 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.87  | 168  | 714      | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.62  | 114  | 1219     | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 9.79  | 117  | 851      | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.58 | 152  | 84       | 50.00 | ug/l  | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.85  | 65   | 68       | 8.56  | ug/l   | 0.00     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 17.12% |          |
| 35) Dibromofluoromethane    | 4.13  | 113  | 183      | 19.62 | ug/l   | 0.02     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 39.24% |          |
| 50) Toluene-d8              | 7.56  | 98   | 956      | 34.64 | ug/l   | 0.00     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 69.28% |          |
| 62) 4-Bromofluorobenzene    | 11.43 | 95   | 134      | 11.12 | ug/l   | 0.02     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 22.24% |          |

| Target Compounds              | R.T. | QIon | Response | Conc     | Units  | Qvalue |
|-------------------------------|------|------|----------|----------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.83 | 85   | 86       | 6.530    | ug/l # | 44     |
| 3) Chloromethane              | 1.08 | 50   | 124      | 10.565   | ug/l # | 40     |
| 5) Bromomethane               | 1.29 | 94   | 369      | 45.236   | ug/l # | 6      |
| 6) Chloroethane               | 1.37 | 64   | 68       | 13.284   | ug/l # | 1      |
| 8) Diethyl Ether              | 1.65 | 74   | 89       | 34.108   | ug/l   | 82     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.77 | 101  | 69       | 7.354    | ug/l # | 23     |
| 11) Tert butyl alcohol        | 2.43 | 59   | 65       | 204.279  | ug/l # | 58     |
| 12) 1,1-Dichloroethene        | 1.74 | 96   | 187      | 24.923   | ug/l # | 1      |
| 13) Acrolein                  | 1.88 | 56   | 346      | 1069.421 | ug/l   | 91     |
| 14) Allyl chloride            | 2.09 | 41   | 268      | 19.542   | ug/l # | 84     |
| 15) Acrylonitrile             | 2.94 | 53   | 144      | 127.661  | ug/l # | 53     |
| 16) Acetone                   | 2.20 | 43   | 2024     | 1094.809 | ug/l # | 55     |
| 17) Carbon Disulfide          | 1.64 | 76   | 80       | 3.228    | ug/l # | 74     |
| 18) Methyl Acetate            | 2.33 | 43   | 748      | 205.648  | ug/l # | 65     |
| 19) Methyl tert-butyl Ether   | 2.39 | 73   | 102      | 7.134    | ug/l # | 1      |
| 20) Methylene Chloride        | 2.18 | 84   | 64       | 8.183    | ug/l # | 1      |
| 21) trans-1,2-Dichloroethene  | 2.30 | 96   | 168      | 21.130   | ug/l # | 1      |
| 22) Diisopropyl ether         | 2.76 | 45   | 991      | 37.350   | ug/l # | 8      |
| 23) Vinyl Acetate             | 3.14 | 43   | 499      | 64.310   | ug/l # | 77     |
| 24) 1,1-Dichloroethane        | 2.86 | 63   | 147      | 9.578    | ug/l # | 87     |
| 25) 2-Butanone                | 4.34 | 43   | 198      | 66.543   | ug/l # | 56     |
| 26) 2,2-Dichloropropane       | 3.52 | 77   | 127      | 12.383   | ug/l # | 60     |
| 29) Tetrahydrofuran           | 4.08 | 42   | 97       | 77.969   | ug/l # | 14     |
| 31) Cyclohexane               | 3.69 | 56   | 81       | 5.031    | ug/l # | 14     |
| 37) Ethyl Acetate             | 4.13 | 43   | 266      | 51.313   | ug/l # | 34     |
| 40) Benzene                   | 4.68 | 78   | 86       | 2.588    | ug/l # | 51     |
| 41) Methacrylonitrile         | 4.76 | 41   | 391      | 135.068  | ug/l # | 24     |
| 42) 1,2-Dichloroethane        | 5.09 | 62   | 63       | 6.089    | ug/l   | 76     |
| 43) Isopropyl Acetate         | 6.97 | 43   | 307      | 44.857   | ug/l # | 45     |
| 44) Trichloroethene           | 5.49 | 130  | 62       | 6.375    | ug/l   | 3      |
| 46) Dibromomethane            | 6.11 | 93   | 61       | 11.756   | ug/l # | 8      |
| 48) Methyl methacrylate       | 6.74 | 41   | 83       | 18.684   | ug/l # | 21     |
| 51) 4-Methyl-2-Pentanone      | 8.28 | 43   | 86       | 16.648   | ug/l # | 38     |
| 52) Toluene                   | 7.64 | 92   | 152      | 7.116    | ug/l # | 37     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF010919\  
 Data File : VF061322.D  
 Acq On : 10 Jan 2019 3:11  
 Operator : VA/AP  
 Sample : K1082-30RE  
 Misc : 4.19g/5mL/MSVOA-F/SOIL  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SP-1-4RE

Quant Time: Jan 10 06:05:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F010819S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 09 07:13:51 2019  
 Response via : Initial Calibration

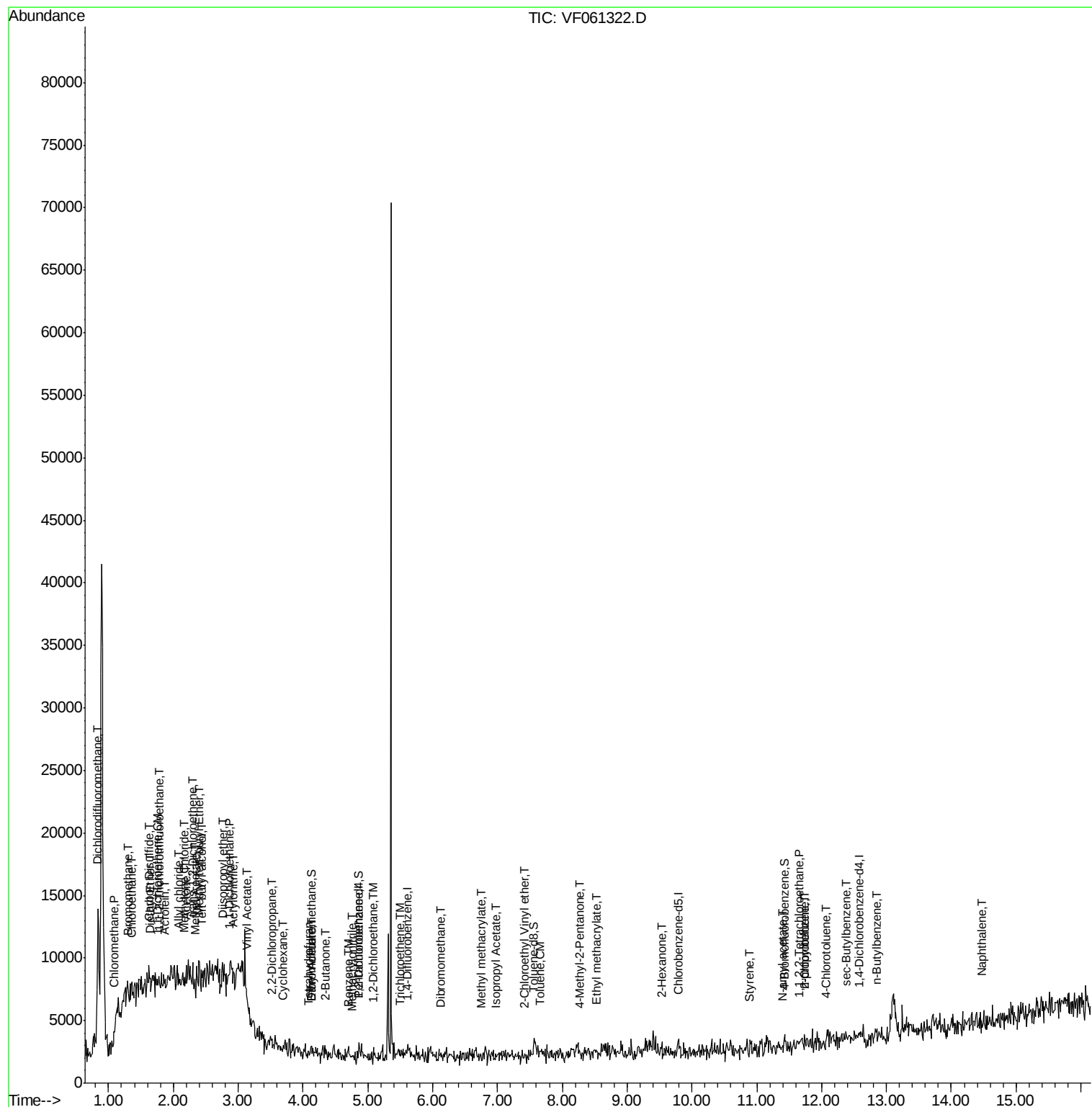
| Internal Standards            | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|---------|--------|----------|
| 56) Ethyl methacrylate        | 8.53  | 69   | 67       | 10.029  | ug/l # | 14       |
| 58) 2-Chloroethyl Vinyl ether | 7.43  | 63   | 93       | 326.665 | ug/l # | 56       |
| 59) 2-Hexanone                | 9.54  | 43   | 307      | 83.887  | ug/l # | 27       |
| 70) Styrene                   | 10.88 | 104  | 75       | 4.361   | ug/l # | 30       |
| 74) N-amyl acetate            | 11.39 | 43   | 176      | 104.747 | ug/l # | 48       |
| 75) 1,1,2,2-Tetrachloroethane | 11.66 | 83   | 86       | 73.380  | ug/l # | 25       |
| 78) n-propylbenzene           | 11.74 | 91   | 130      | 14.751  | ug/l # | 55       |
| 79) 2-Chlorotoluene           | 11.74 | 91   | 130      | 26.476  | ug/l # | 41       |
| 82) 4-Chlorotoluene           | 12.05 | 91   | 69       | 13.830  | ug/l # | 42       |
| 85) sec-Butylbenzene          | 12.39 | 105  | 76       | 9.109   | ug/l # | 57       |
| 89) n-Butylbenzene            | 12.86 | 91   | 65       | 9.322   | ug/l # | 27       |
| 95) Naphthalene               | 14.47 | 128  | 175      | 49.232  | ug/l # | 70       |

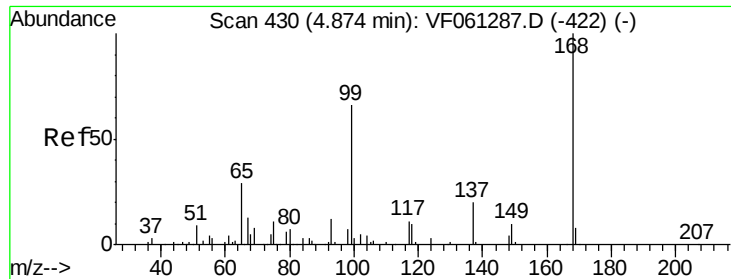
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF010919\  
Data File : VF061322.D  
Acq On : 10 Jan 2019 3:11  
Operator : VA/AP  
Sample : K1082-30RE  
Misc : 4.19g/5mL/MSVOA-F/SOIL  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
SP-1-4RE

Quant Time: Jan 10 06:05:25 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F010819S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 09 07:13:51 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.87 min Scan# 430

Delta R.T. -0.00 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

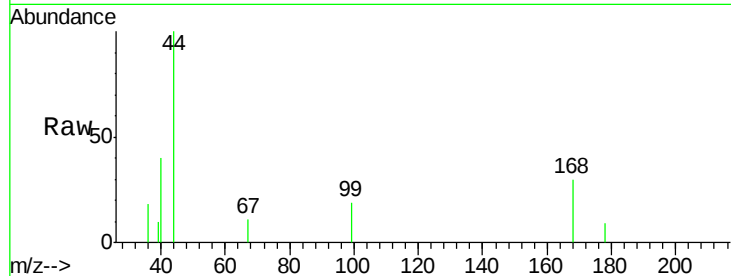
SP-1-4RE

Tot Ion:168 Resp: 714

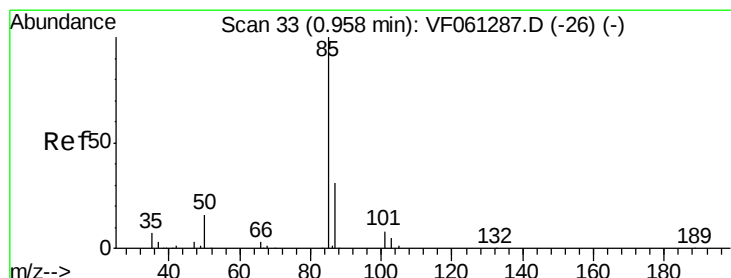
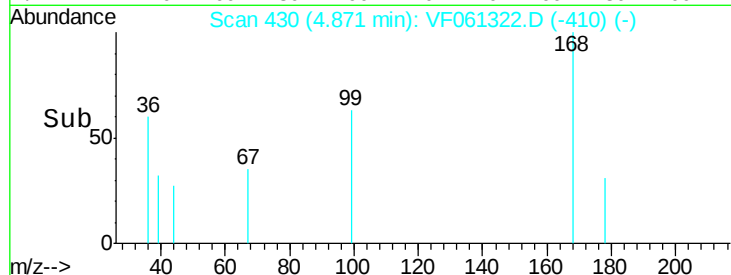
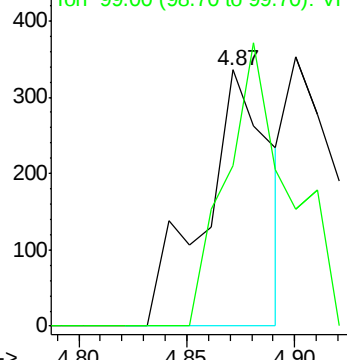
Ion Ratio Lower Upper

168 100

99 62.5 52.7 79.1



Abundance Ion 168.00 (167.70 to 168.70): VF0



#2

Dichlorodifluoromethane

Concen: 6.530 ug/l

RT: 0.83 min Scan# 20

Delta R.T. -0.13 min

Lab File: VF061322.D

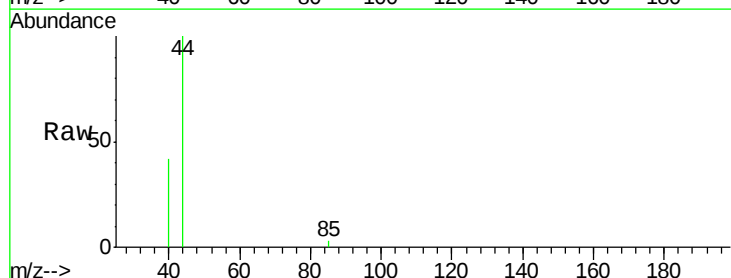
Acq: 10 Jan 2019 3:11

Tgt Ion: 85 Resp: 86

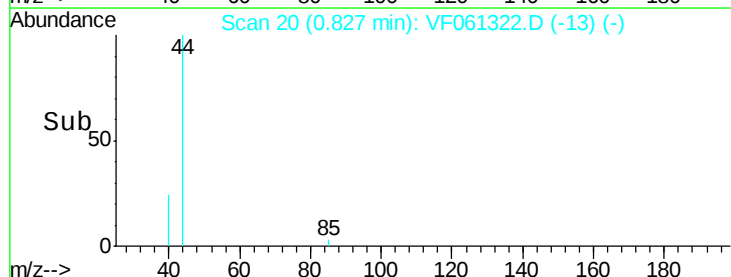
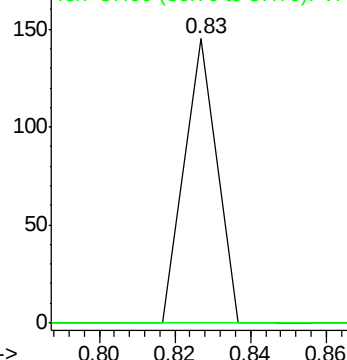
Ion Ratio Lower Upper

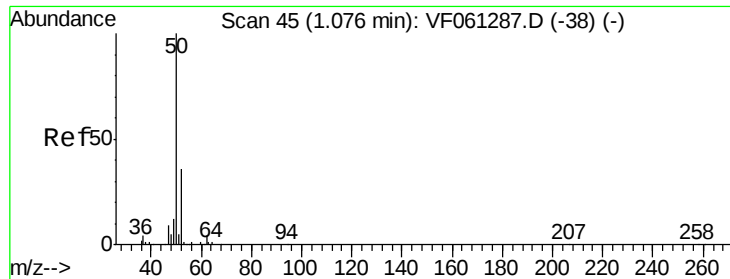
85 100

87 0.0 15.4 46.2#



Abundance Ion 85.00 (84.70 to 85.70): VF0





#3

Chloromethane

Concen: 10.565 ug/l

RT: 1.08 min Scan# 46

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

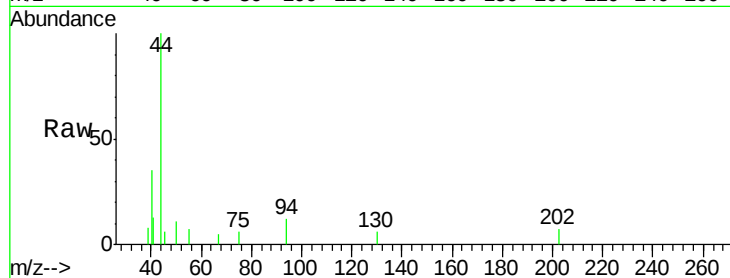
SP-1-4RE

Tot Ion: 50 Resp: 124

Ion Ratio Lower Upper

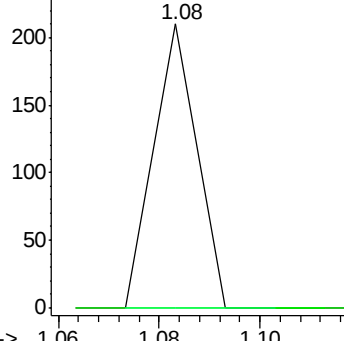
50 100

52 0.0 28.2 42.2#

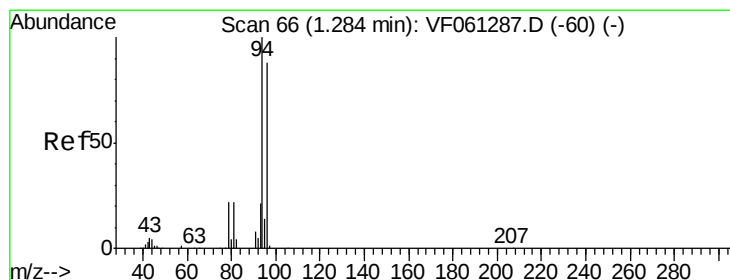
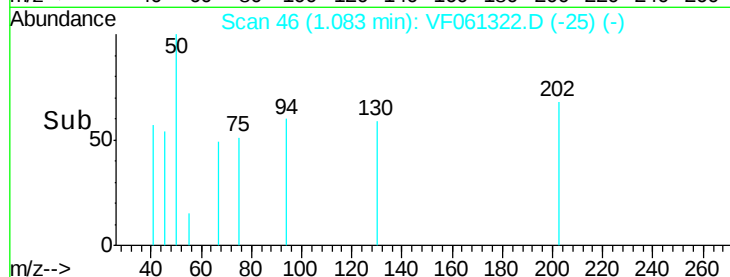


Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



Time-->



#5

Bromomethane

Concen: 45.236 ug/l

RT: 1.29 min Scan# 67

Delta R.T. 0.01 min

Lab File: VF061322.D

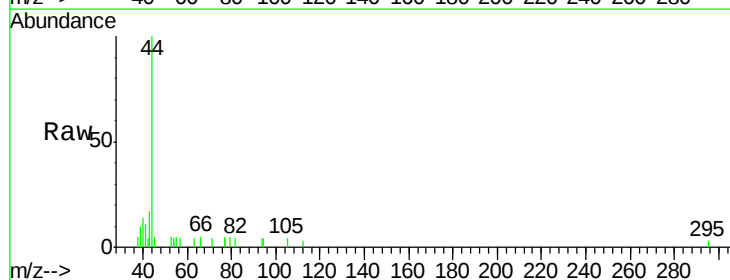
Acq: 10 Jan 2019 3:11

Tgt Ion: 94 Resp: 369

Ion Ratio Lower Upper

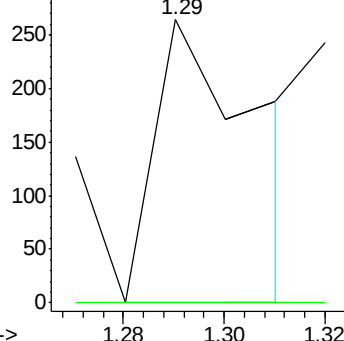
94 100

96 0.0 70.2 105.4#

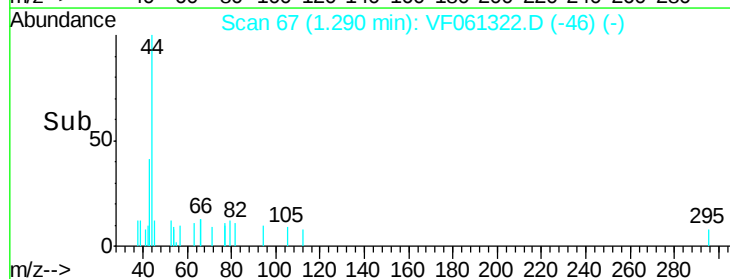


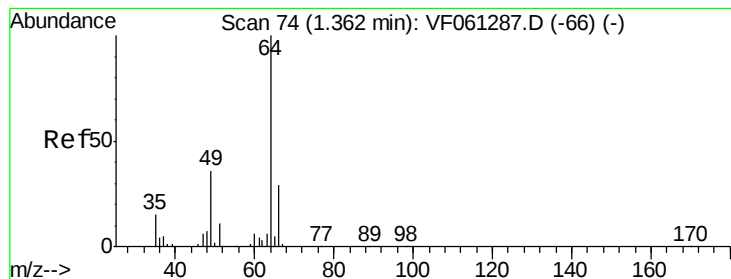
Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0



Time-->





#6

Chloroethane

Concen: 13.284 ug/l

RT: 1.37 min Scan# 75

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

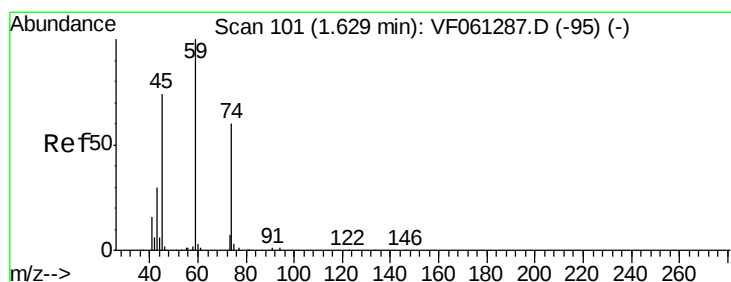
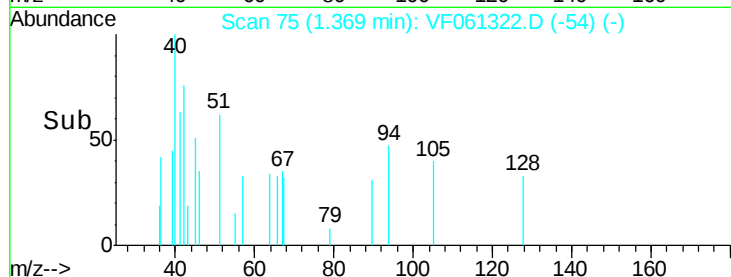
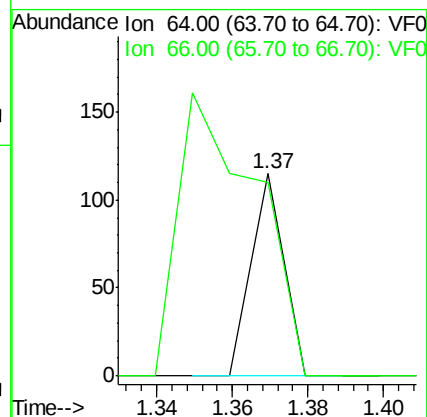
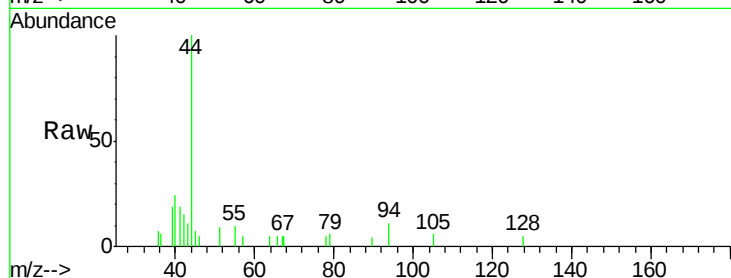
SP-1-4RE

Tot Ion: 64 Resp: 68

Ion Ratio Lower Upper

64 100

66 95.7 23.4 35.0#



#8

Diethyl Ether

Concen: 34.108 ug/l

RT: 1.65 min Scan# 103

Delta R.T. 0.02 min

Lab File: VF061322.D

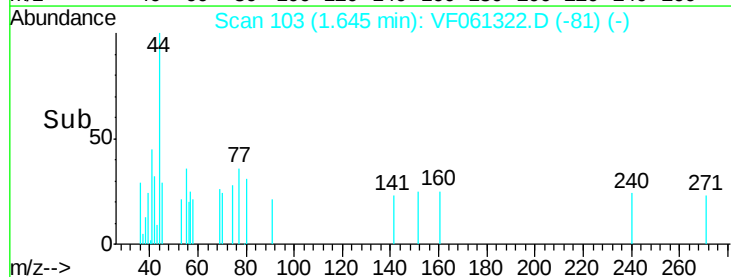
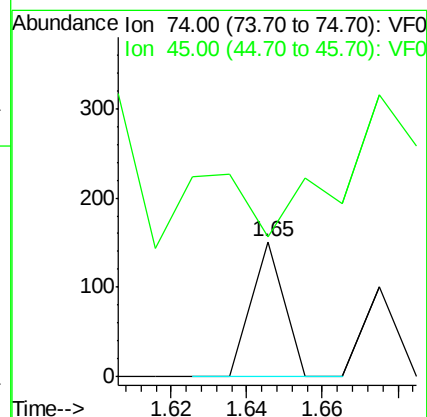
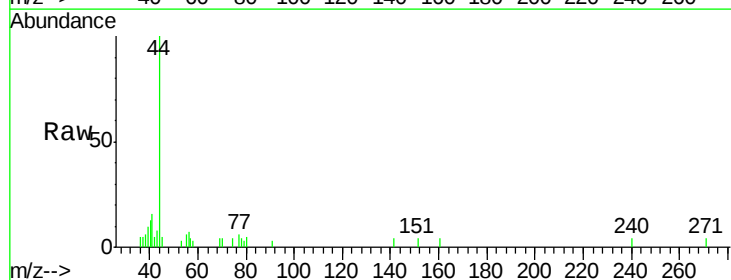
Acq: 10 Jan 2019 3:11

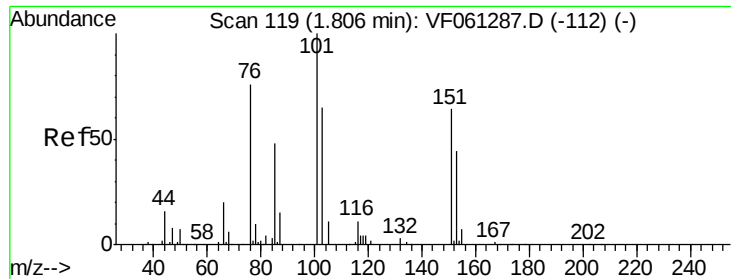
Tgt Ion: 74 Resp: 89

Ion Ratio Lower Upper

74 100

45 103.3 62.1 186.3





#9

1,1,2-Trichlorotrifluoroethane

Concen: 7.354 ug/l

RT: 1.77 min Scan# 116

Delta R.T. -0.03 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

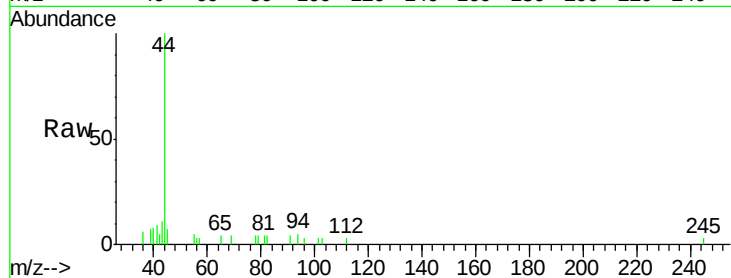
Tot Ion:101 Resp: 69

Ion Ratio Lower Upper

101 100

85 0.0 38.4 57.6#

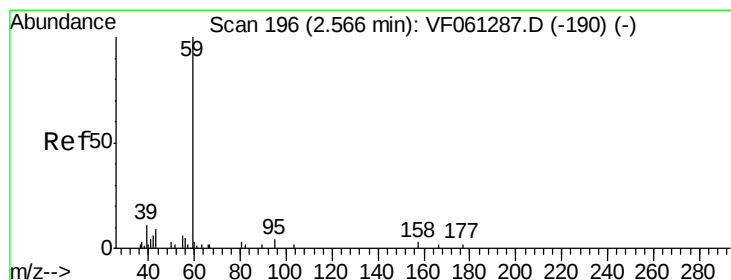
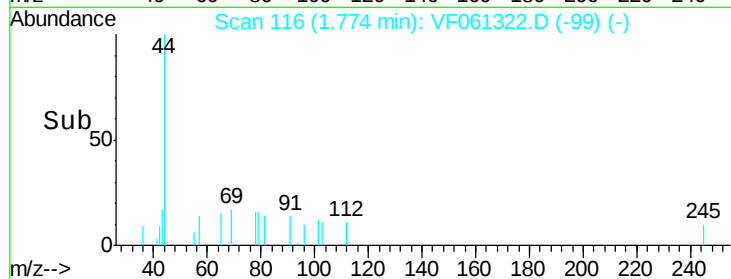
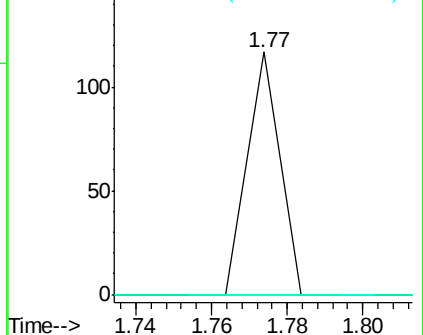
151 0.0 51.4 77.2#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VF0

Ion 151.00 (150.70 to 151.70): V



#11

Tert butyl alcohol

Concen: 204.279 ug/l

RT: 2.43 min Scan# 183

Delta R.T. -0.13 min

Lab File: VF061322.D

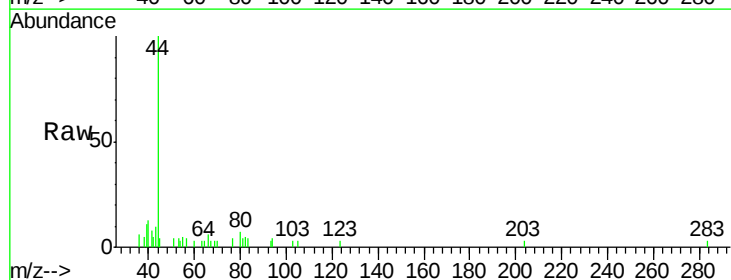
Acq: 10 Jan 2019 3:11

Tgt Ion: 59 Resp: 65

Ion Ratio Lower Upper

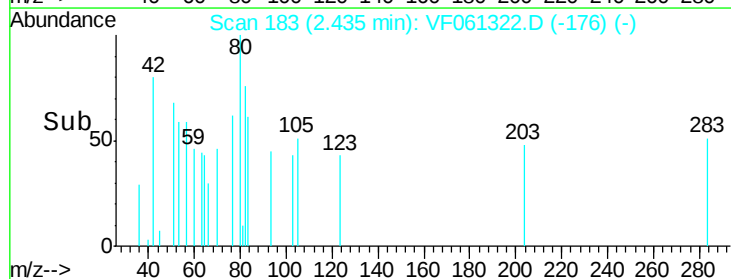
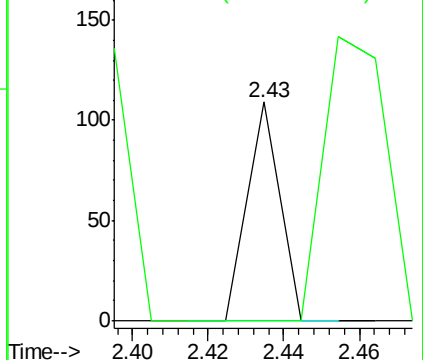
59 100

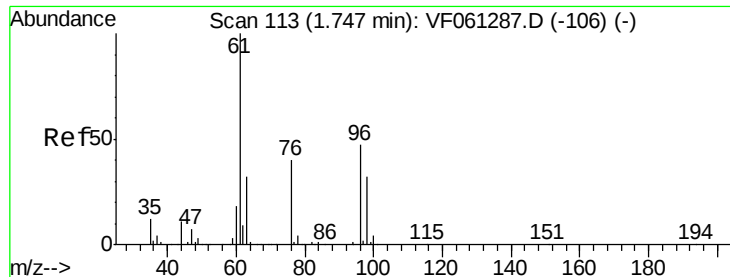
57 0.0 15.1 22.7#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0





#12

1,1-Dichloroethene

Concen: 24.923 ug/l

RT: 1.74 min Scan# 113

Delta R.T. -0.00 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

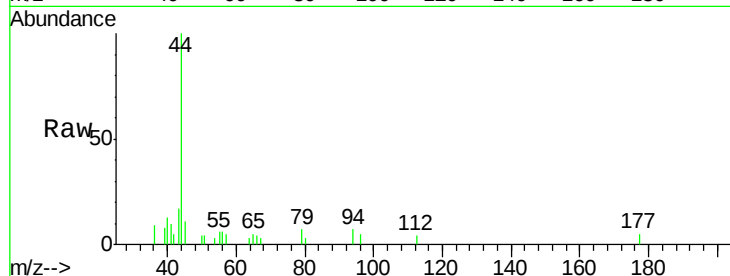
Tot Ion: 96 Resp: 187

Ion Ratio Lower Upper

96 100

61 0.0 171.8 257.8#

98 0.0 54.2 81.4#



Abundance Ion 96.00 (95.70 to 96.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 98.00 (97.70 to 98.70): VF0

1.74

1.72 1.74 1.76 1.78

1.70

1.72

1.74

1.76

1.78

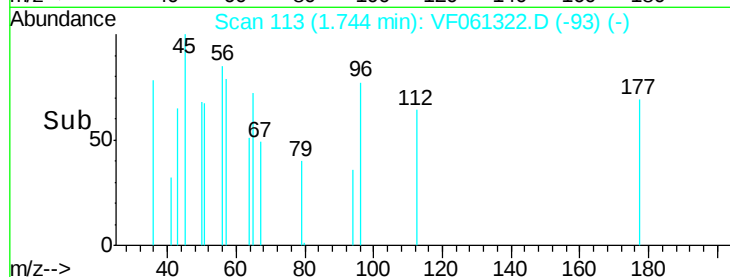
1.70

1.72

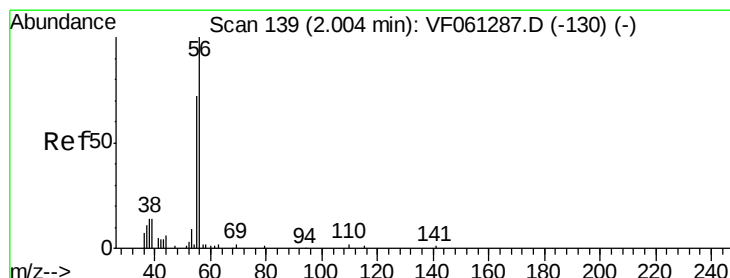
1.74

1.76

1.78



Time-->



#13

Acrolein

Concen: 1069.421 ug/l

RT: 1.88 min Scan# 127

Delta R.T. -0.12 min

Lab File: VF061322.D

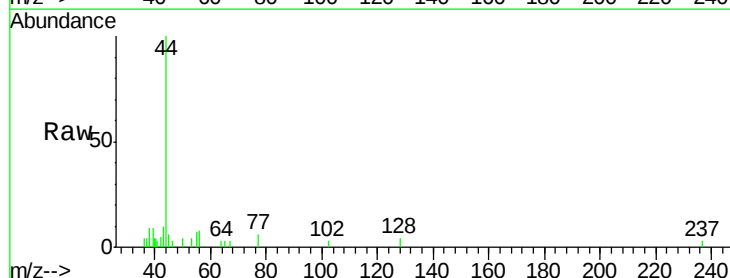
Acq: 10 Jan 2019 3:11

Tgt Ion: 56 Resp: 346

Ion Ratio Lower Upper

56 100

55 82.0 59.4 89.0



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

1.88

1.85 1.90

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

1.85

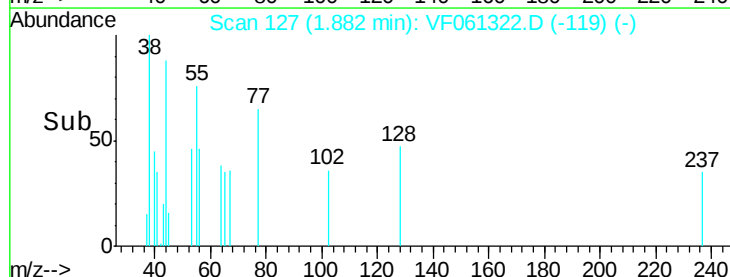
1.85

1.85

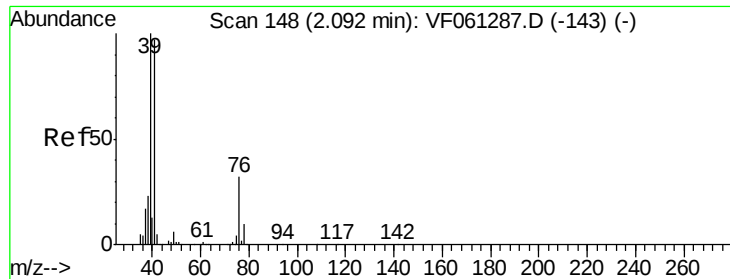
1.85

1.85

1.85



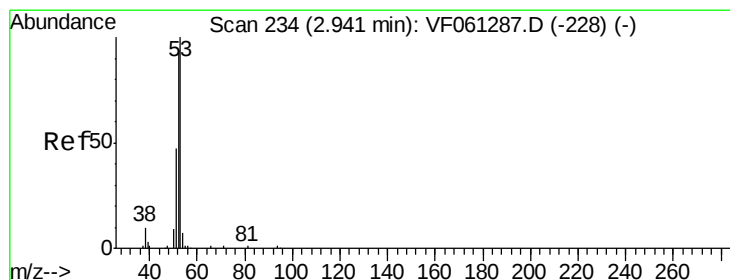
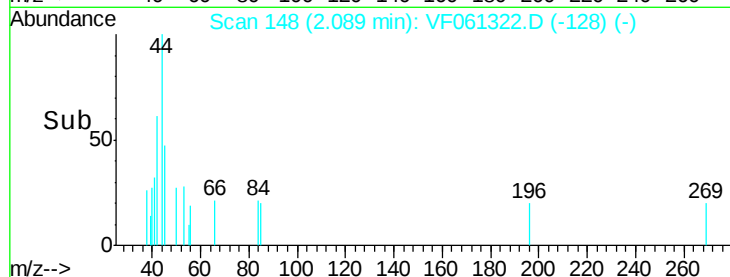
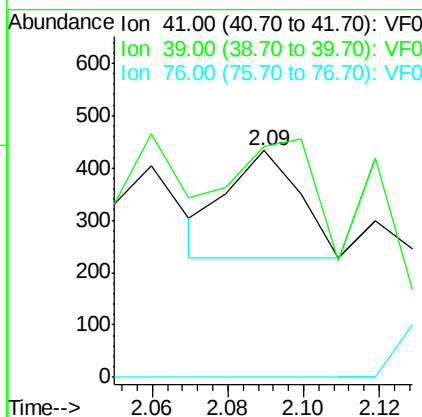
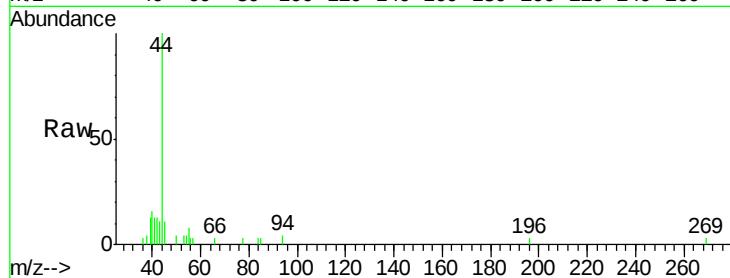
Time-->



#14  
Allvl chloride  
Concen: 19.542 ug/l  
RT: 2.09 min Scan# 148  
Delta R.T. -0.00 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

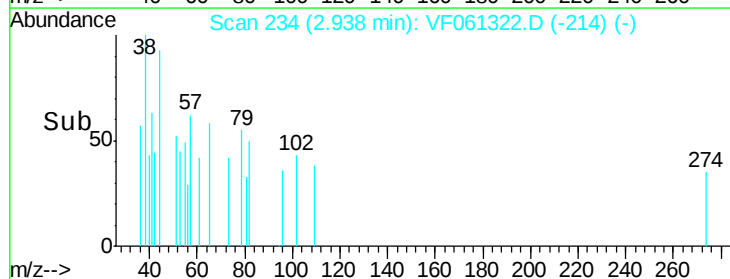
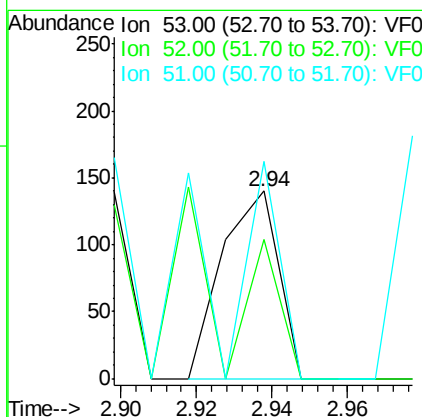
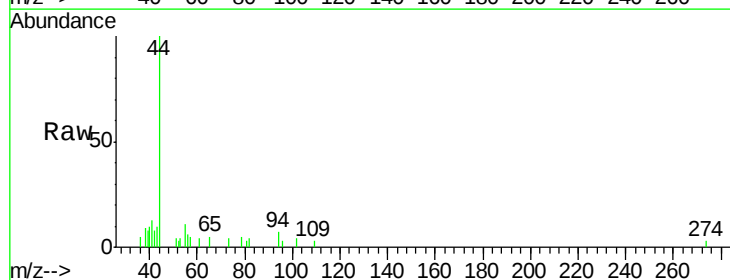
Instrument :  
MSVOA\_F  
ClientSampleId :  
SP-1-4RE

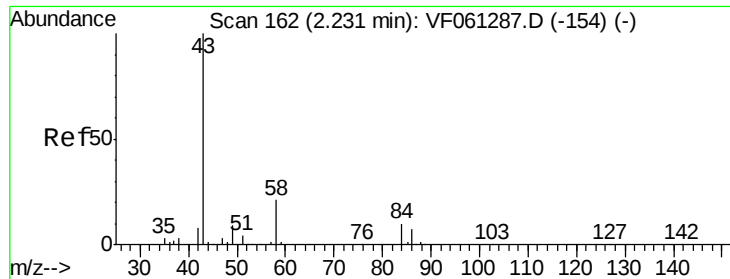
Tot Ion: 41 Resp: 268  
Ion Ratio Lower Upper  
41 100  
39 101.6 82.6 123.8  
76 0.0 26.9 40.3#



#15  
Acrylonitrile  
Concen: 127.661 ug/l  
RT: 2.94 min Scan# 234  
Delta R.T. -0.00 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

Tgt Ion: 53 Resp: 144  
Ion Ratio Lower Upper  
53 100  
52 74.3 74.6 111.8#  
51 115.7 37.8 56.6#





#16

Acetone

Concen: 1094.809 ug/l

RT: 2.20 min Scan# 159

Delta R.T. -0.03 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

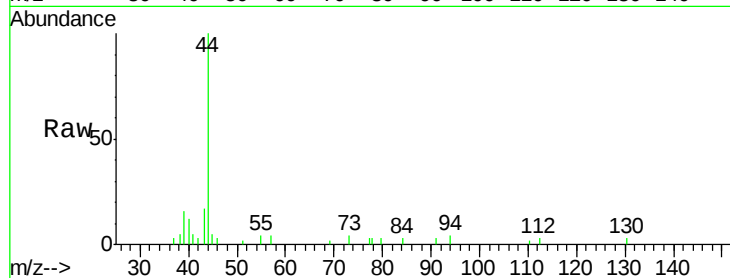
SP-1-4RE

Tot Ion: 43 Resp: 2024

Ion Ratio Lower Upper

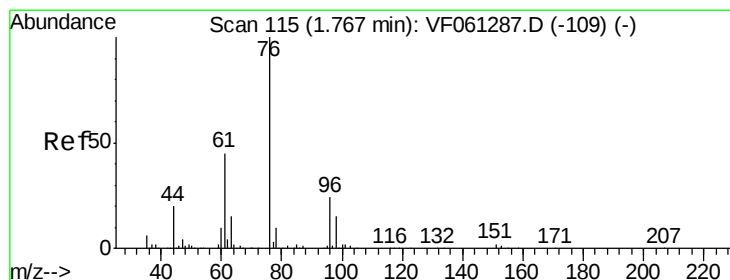
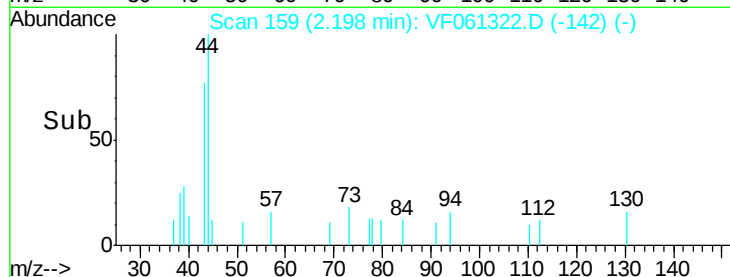
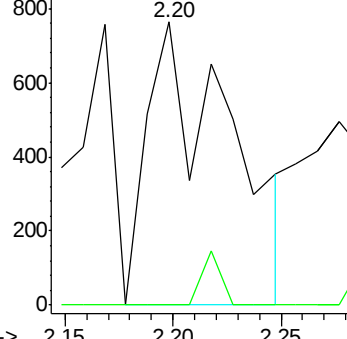
43 100

58 0.0 16.6 25.0#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#17

Carbon Disulfide

Concen: 3.228 ug/l

RT: 1.64 min Scan# 102

Delta R.T. -0.13 min

Lab File: VF061322.D

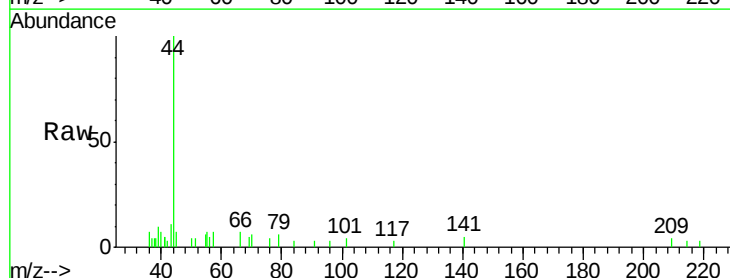
Acq: 10 Jan 2019 3:11

Tgt Ion: 76 Resp: 80

Ion Ratio Lower Upper

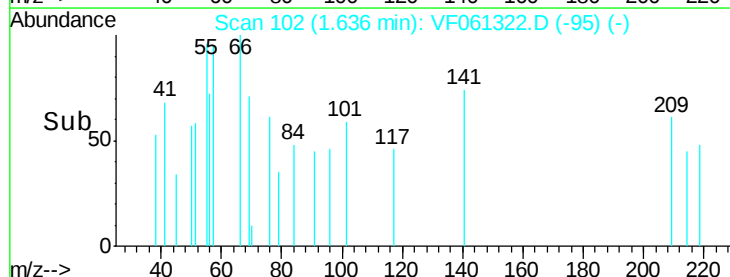
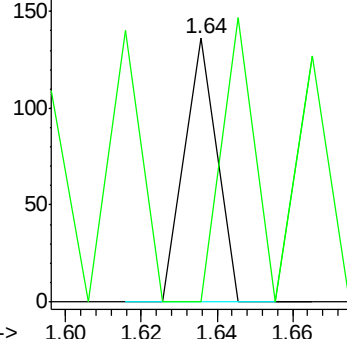
76 100

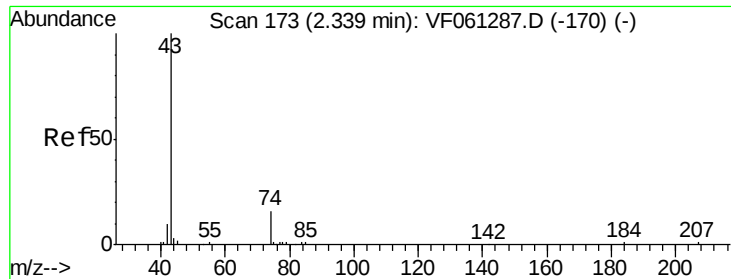
78 0.0 7.8 11.6#



Abundance Ion 76.00 (75.70 to 76.70): VF0

Ion 78.00 (77.70 to 78.70): VF0

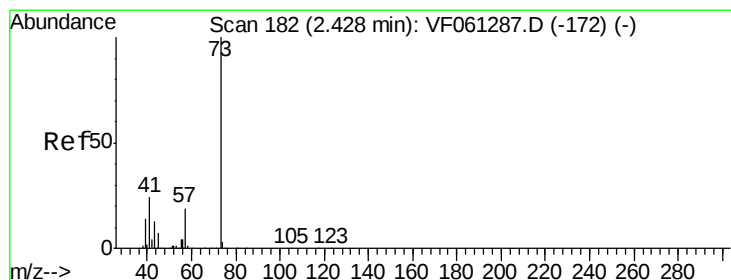
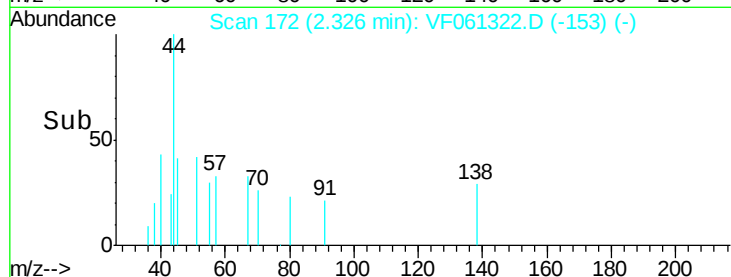
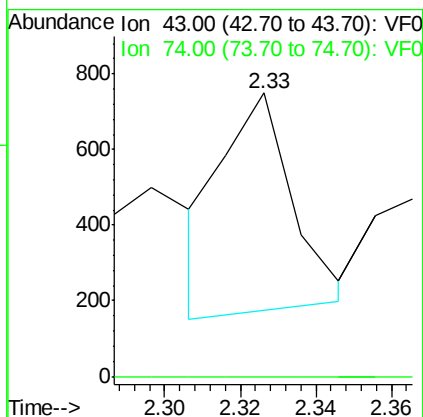
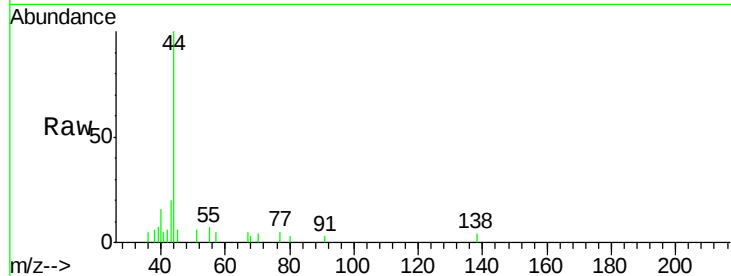




#18  
Methyl Acetate  
Concen: 205.648 ug/l  
RT: 2.33 min Scan# 172  
Delta R.T. -0.01 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

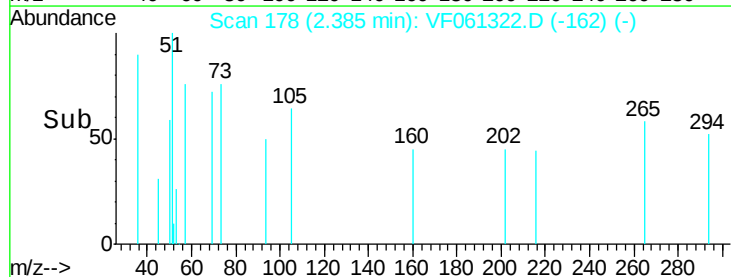
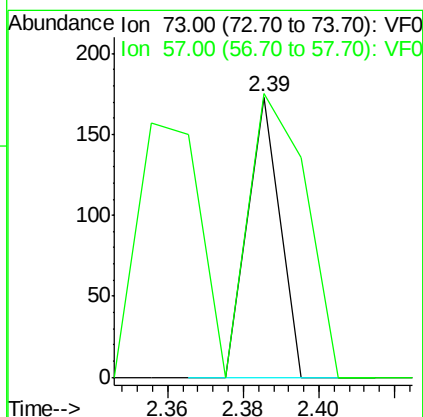
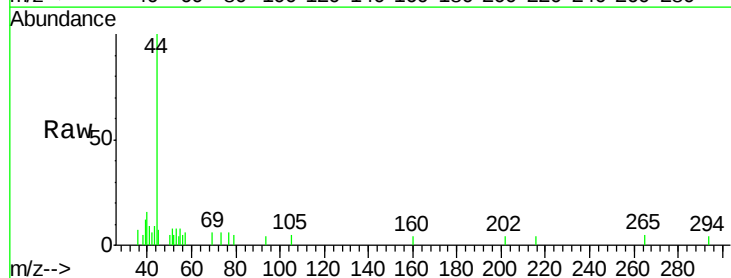
Instrument :  
MSVOA\_F  
ClientSampleId :  
SP-1-4RE

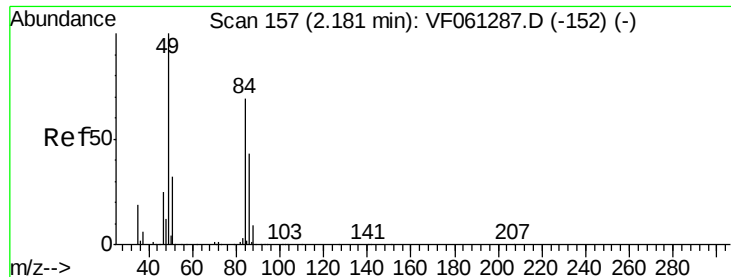
Tot Ion: 43 Resp: 748  
Ion Ratio Lower Upper  
43 100  
74 0.0 11.6 17.4#



#19  
Methyl tert-butyl Ether  
Concen: 7.134 ug/l  
RT: 2.39 min Scan# 178  
Delta R.T. -0.04 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

Tgt Ion: 73 Resp: 102  
Ion Ratio Lower Upper  
73 100  
57 101.2 15.5 23.3#





#20

Methylene Chloride

Concen: 8.183 ug/l

RT: 2.18 min Scan# 157

Delta R.T. -0.00 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampled :

SP-1-4RE

Tot Ion: 84 Resp: 64

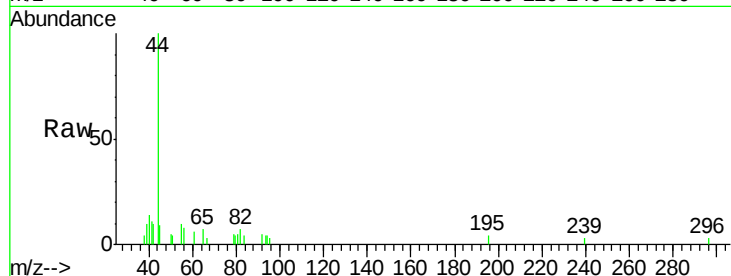
Ion Ratio Lower Upper

84 100

49 0.0 116.6 175.0#

51 126.9 37.7 56.5#

86 0.0 49.8 74.8#

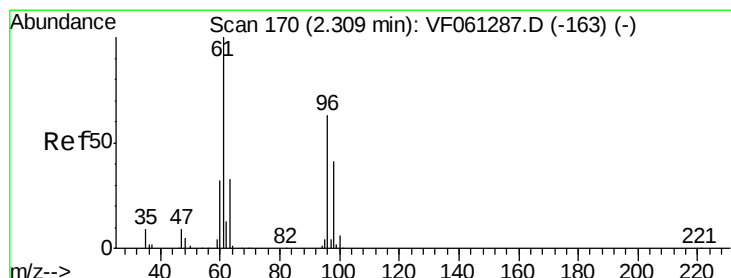
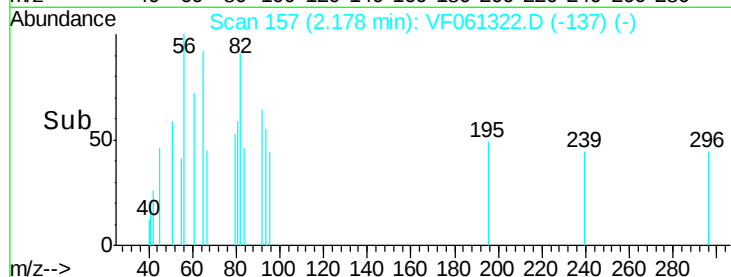
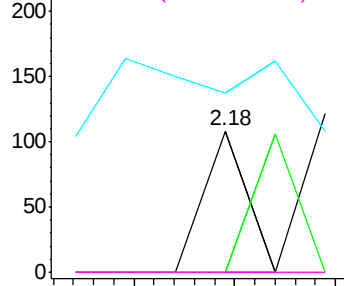


Abundance Ion 84.00 (83.70 to 84.70): VF0

Ion 49.00 (48.70 to 49.70): VF0

Ion 51.00 (50.70 to 51.70): VF0

Ion 86.00 (85.70 to 86.70): VF0



#21

trans-1,2-Dichloroethene

Concen: 21.130 ug/l

RT: 2.30 min Scan# 169

Delta R.T. -0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

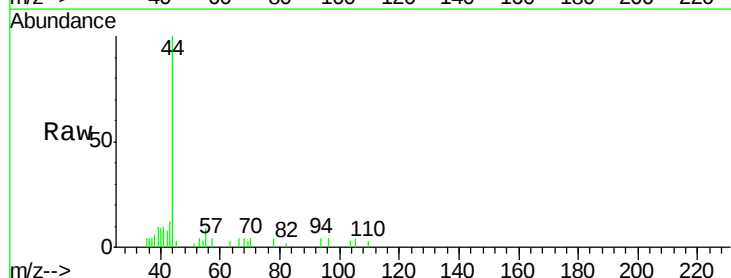
Tgt Ion: 96 Resp: 168

Ion Ratio Lower Upper

96 100

61 0.0 127.0 190.4#

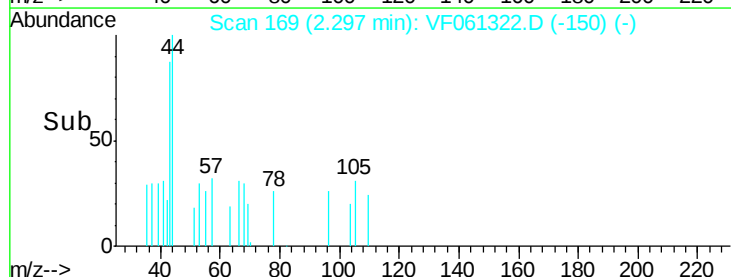
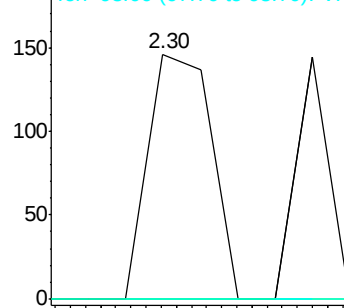
98 0.0 51.7 77.5#

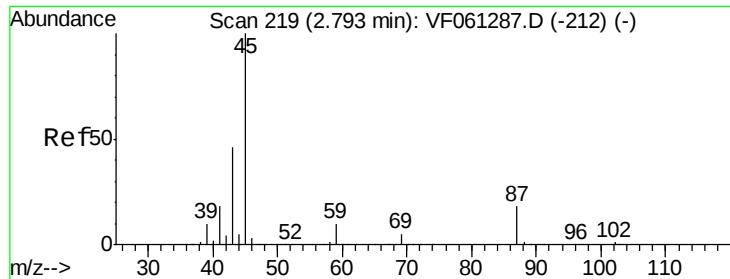


Abundance Ion 96.00 (95.70 to 96.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 98.00 (97.70 to 98.70): VF0





#22

Diisopropyl ether

Concen: 37.350 ug/l

RT: 2.76 min Scan# 216

Delta R.T. -0.03 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

Tot Ion: 45 Resp: 991

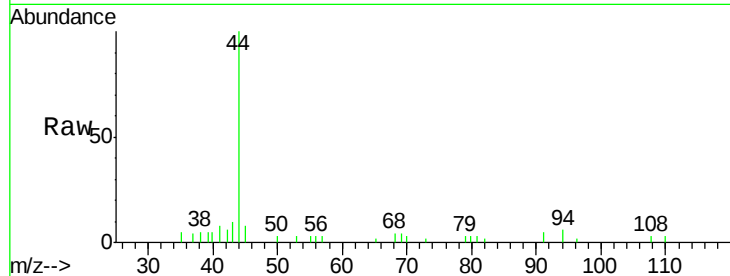
Ion Ratio Lower Upper

45 100

43 130.9 37.4 56.2#

87 0.0 14.2 21.2#

59 0.0 8.2 12.2#

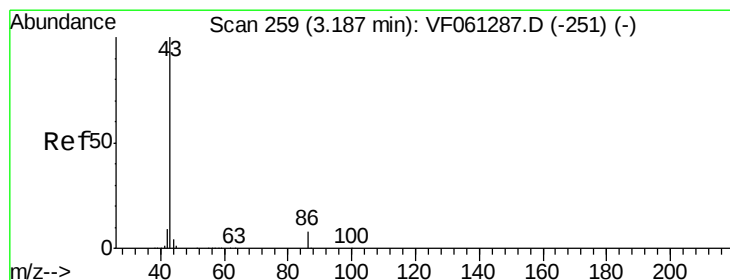
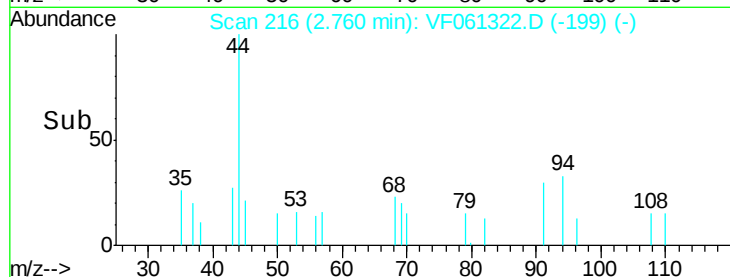
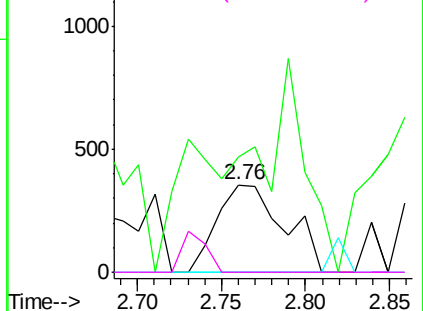


Abundance Ion 45.00 (44.70 to 45.70): VF0

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: 64.310 ug/l

RT: 3.14 min Scan# 255

Delta R.T. -0.04 min

Lab File: VF061322.D

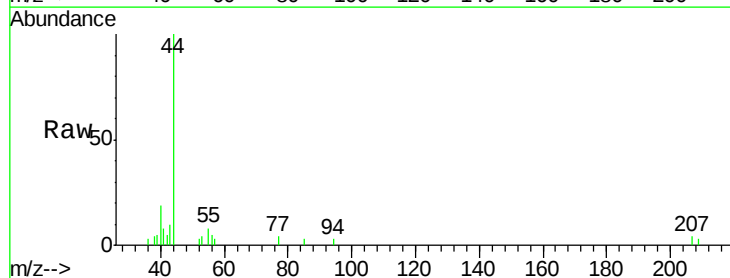
Acq: 10 Jan 2019 3:11

Tgt Ion: 43 Resp: 499

Ion Ratio Lower Upper

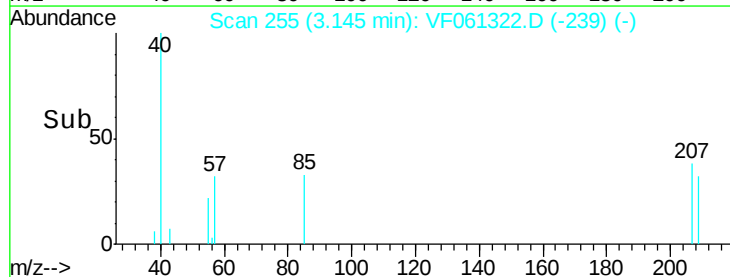
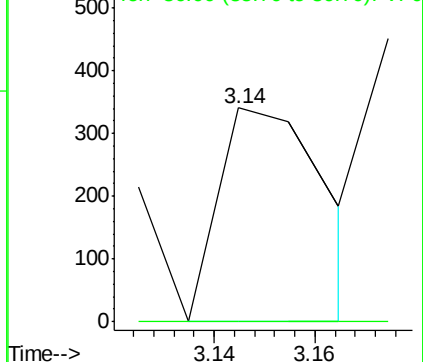
43 100

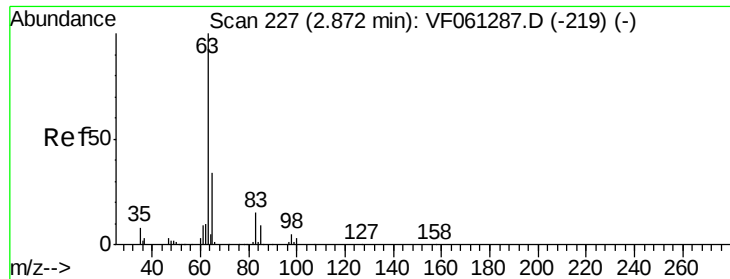
86 0.0 6.5 9.7#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0





#24

1,1-Dichloroethane

Concen: 9.578 ug/l

RT: 2.86 min Scan# 226

Delta R.T. -0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

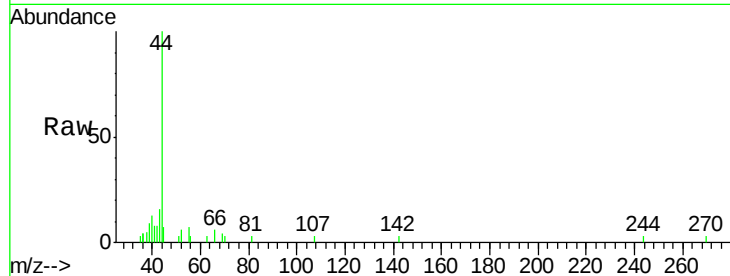
Tot Ion: 63 Resp: 147

Ion Ratio Lower Upper

63 100

98 0.0 2.5 7.6#

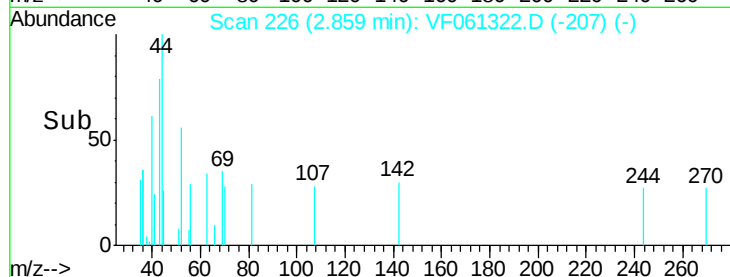
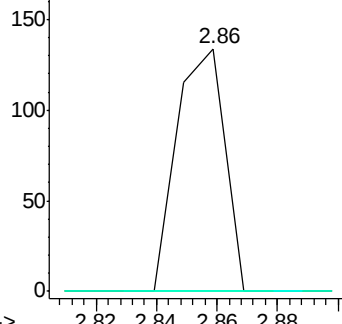
100 0.0 1.7 5.0#



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



#25

2-Butanone

Concen: 66.543 ug/l

RT: 4.34 min Scan# 376

Delta R.T. 0.01 min

Lab File: VF061322.D

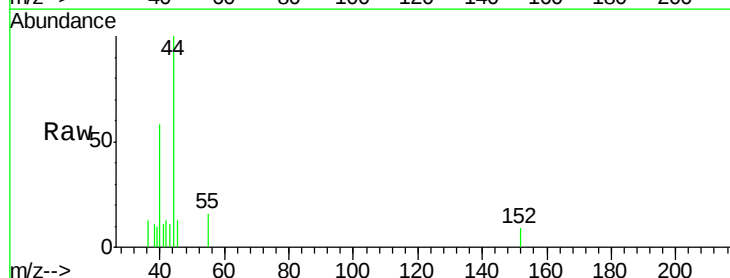
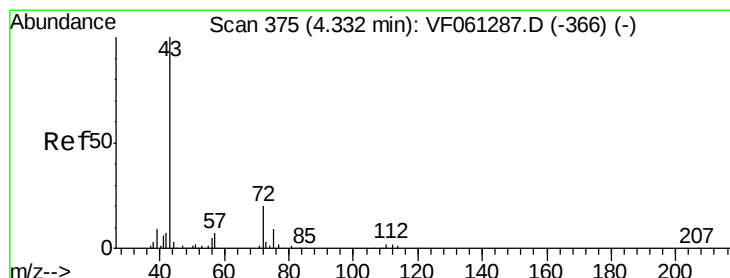
Acq: 10 Jan 2019 3:11

Tgt Ion: 43 Resp: 198

Ion Ratio Lower Upper

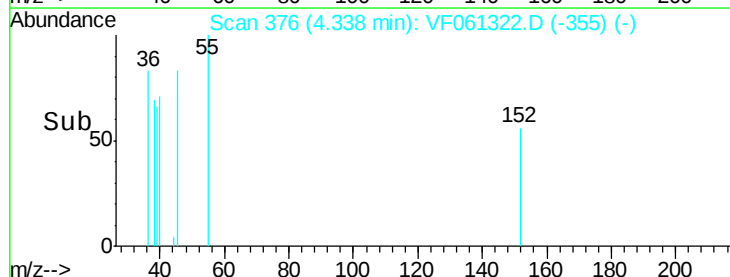
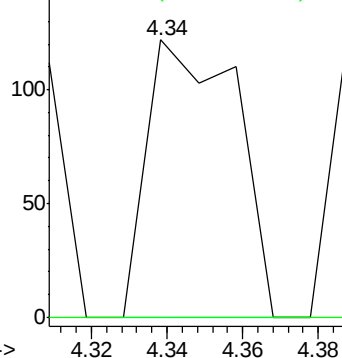
43 100

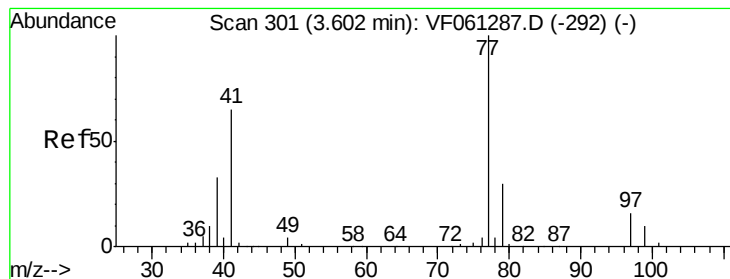
72 0.0 16.5 24.7#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0





#26

2,2-Dichloropropane

Concen: 12.383 ug/l

RT: 3.52 min Scan# 293

Delta R.T. -0.08 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

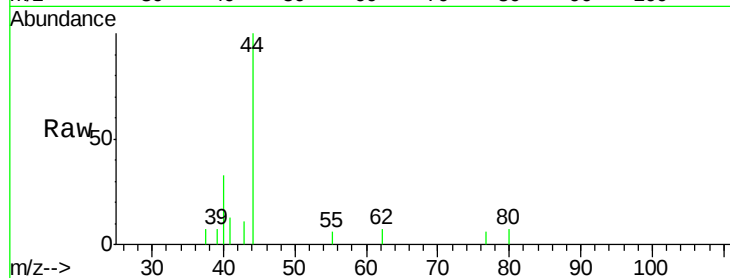
SP-1-4RE

Tot Ion: 77 Resp: 127

Ion Ratio Lower Upper

77 100

97 0.0 8.6 25.9#

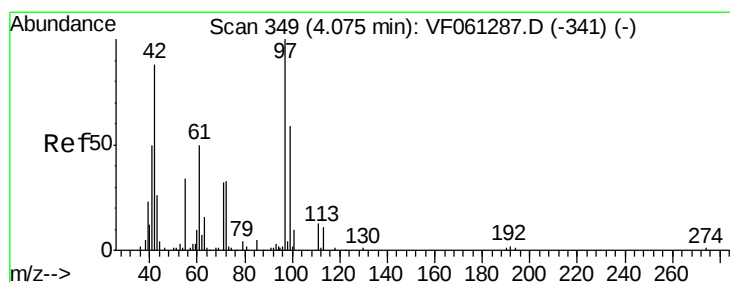
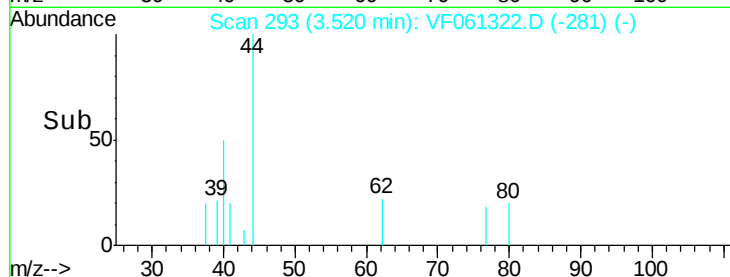


Abundance Ion 77.00 (76.70 to 77.70): VF0

Ion 97.00 (96.70 to 97.70): VF0

3.52

Time-->



#29

Tetrahydrofuran

Concen: 77.969 ug/l

RT: 4.08 min Scan# 350

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

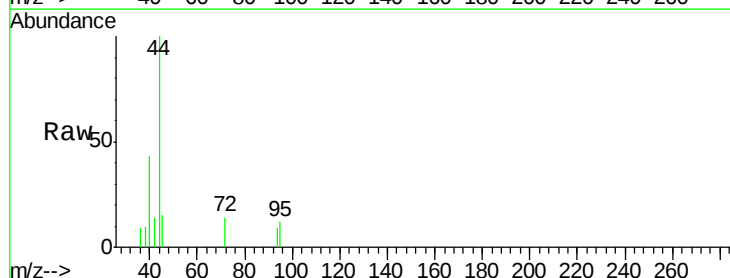
Tgt Ion: 42 Resp: 97

Ion Ratio Lower Upper

42 100

72 100.0 32.3 48.5#

71 81.4 29.5 44.3#



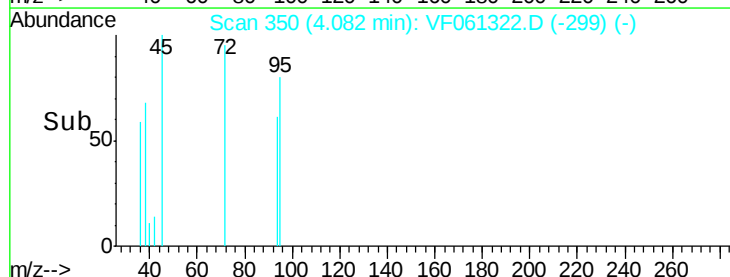
Abundance Ion 42.00 (41.70 to 42.70): VF0

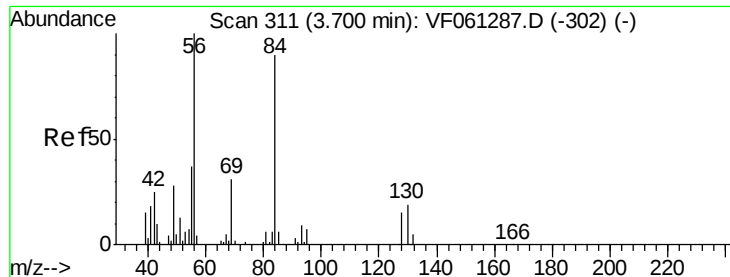
Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0

4.08

Time-->

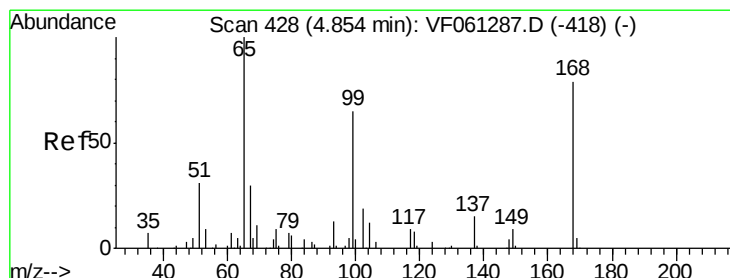
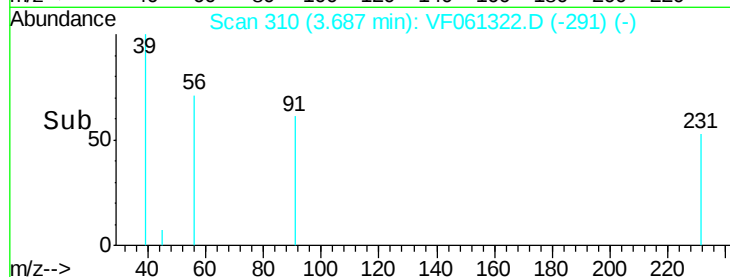
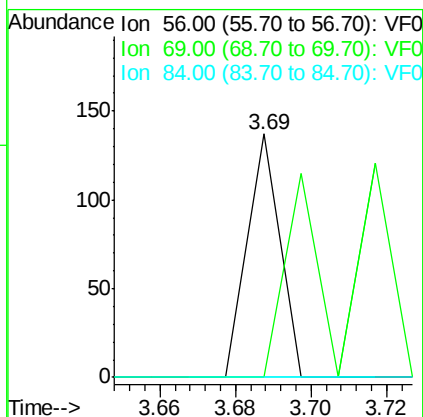
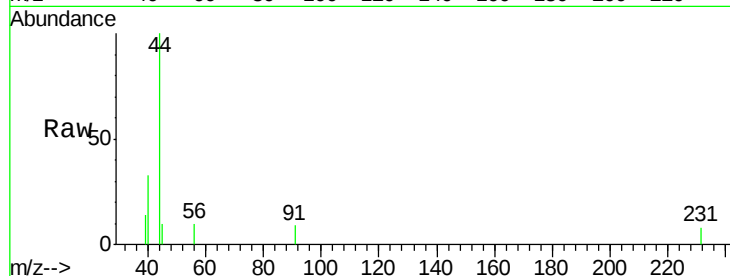




#31  
Cyclohexane  
Concen: 5.031 ug/l  
RT: 3.69 min Scan# 310  
Delta R.T. -0.01 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

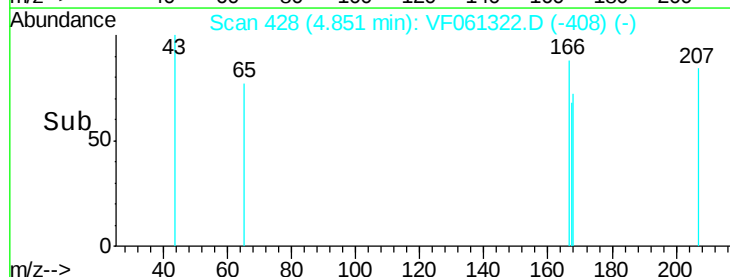
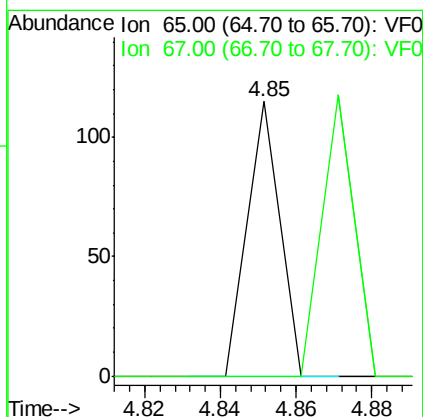
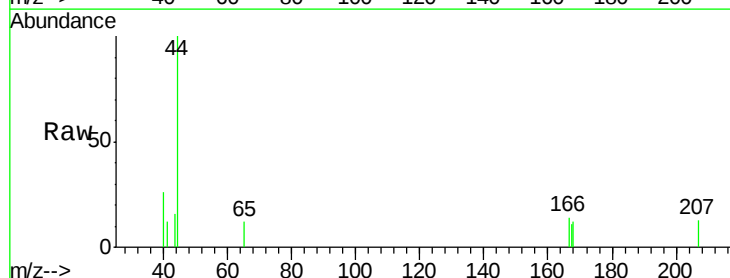
Instrument :  
MSVOA\_F  
ClientSampleId :  
SP-1-4RE

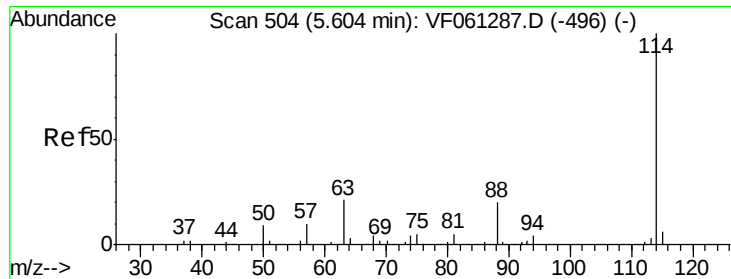
| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 56      | 100   |       |        |
| 69      | 0.0   | 24.7  | 37.1#  |
| 84      | 0.0   | 72.2  | 108.4# |



#33  
1,2-Dichloroethane-d4  
Concen: 8.556 ug/l  
RT: 4.85 min Scan# 428  
Delta R.T. -0.00 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 65      | 100   |       |       |
| 67      | 0.0   | 0.0   | 98.2  |

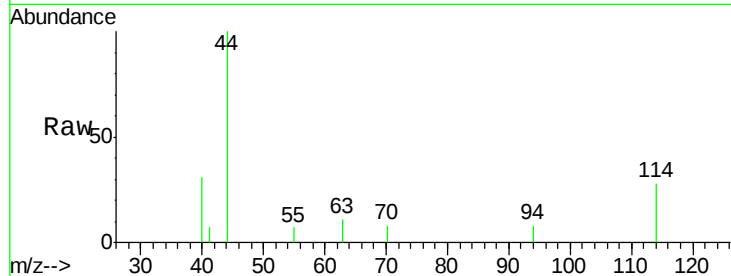




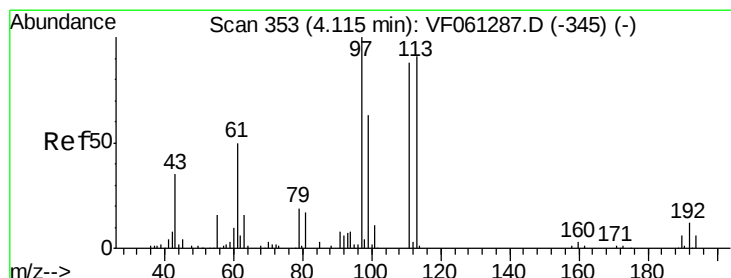
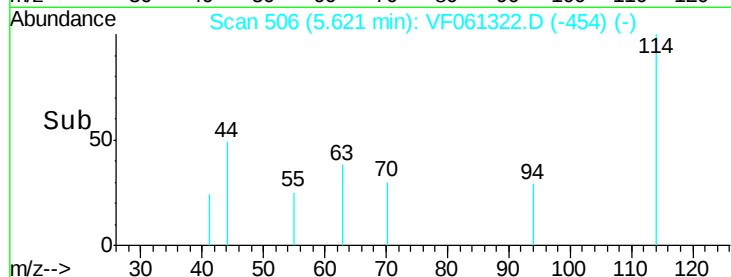
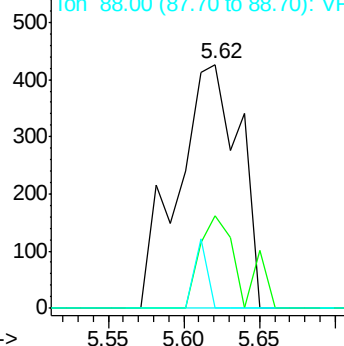
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.62 min Scan# 506  
 Delta R.T. 0.02 min  
 Lab File: VF061322.D  
 Acq: 10 Jan 2019 3:11

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SP-1-4RE

Tot Ion:114 Resp: 1219  
 Ion Ratio Lower Upper  
 114 100  
 63 38.0 0.0 42.8  
 88 0.0 0.0 40.0

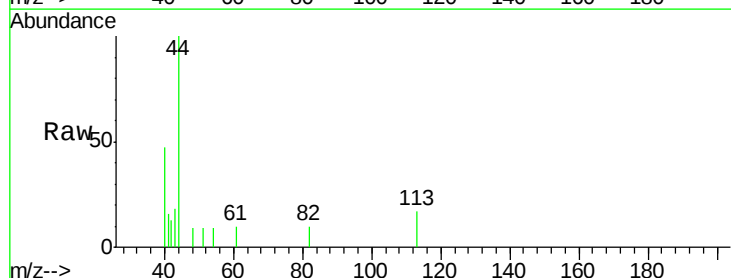


Abundance Ion 114.00 (113.70 to 114.70): V  
 Ion 63.00 (62.70 to 63.70): VF0  
 Ion 88.00 (87.70 to 88.70): VF0

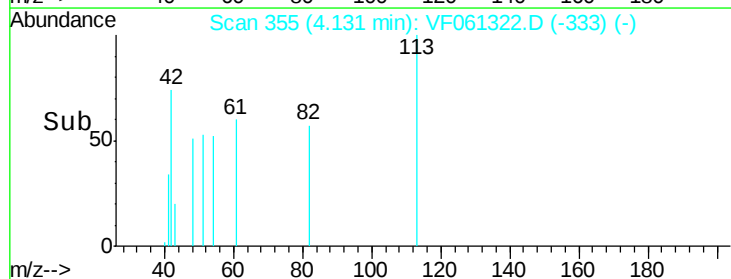
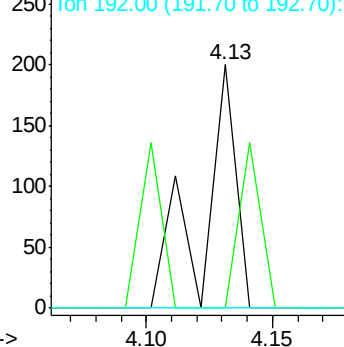


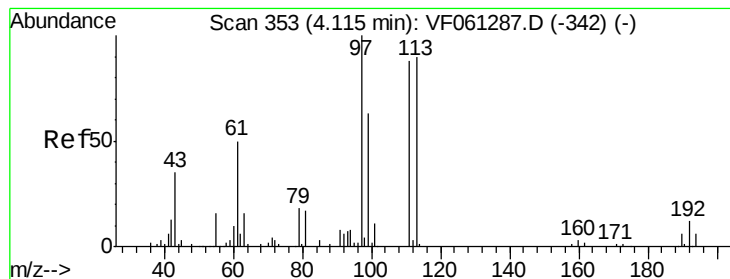
#35  
 Dibromofluoromethane  
 Concen: 19.620 ug/l  
 RT: 4.13 min Scan# 355  
 Delta R.T. 0.02 min  
 Lab File: VF061322.D  
 Acq: 10 Jan 2019 3:11

Tgt Ion:113 Resp: 183  
 Ion Ratio Lower Upper  
 113 100  
 111 0.0 78.0 117.0#  
 192 0.0 10.6 16.0#



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: 51.313 ug/l

RT: 4.13 min Scan# 355

Delta R.T. 0.02 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

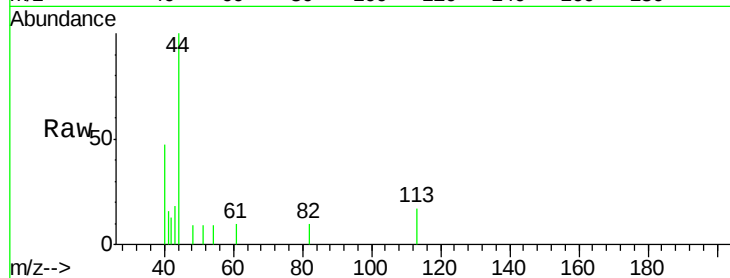
Tot Ion: 43 Resp: 266

Ion Ratio Lower Upper

43 100

61 56.7 113.3 169.9#

70 0.0 9.4 14.0#



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

250

200

150

100

50

0

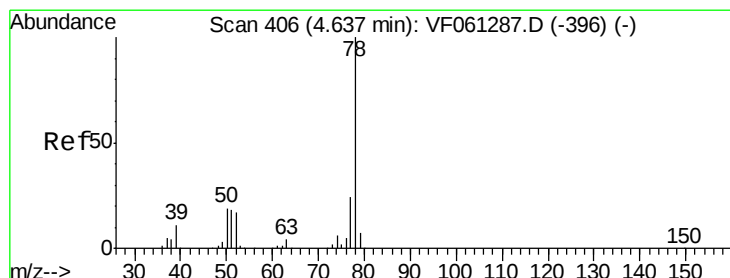
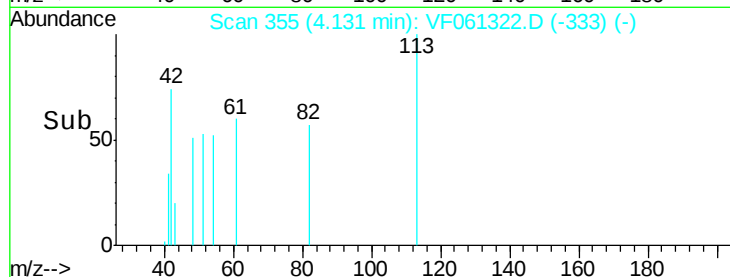
4.10

4.12

4.14

4.16

Time-->



#40

Benzene

Concen: 2.588 ug/l

RT: 4.68 min Scan# 411

Delta R.T. 0.05 min

Lab File: VF061322.D

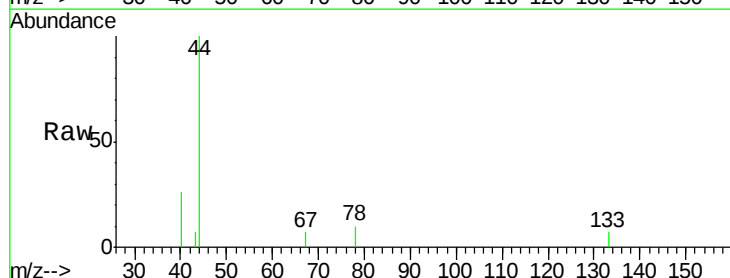
Acq: 10 Jan 2019 3:11

Tgt Ion: 78 Resp: 86

Ion Ratio Lower Upper

78 100

77 0.0 19.1 28.7#



Abundance Ion 78.10 (77.80 to 78.80): VF0

Ion 77.00 (76.70 to 77.70): VF0

150

100

50

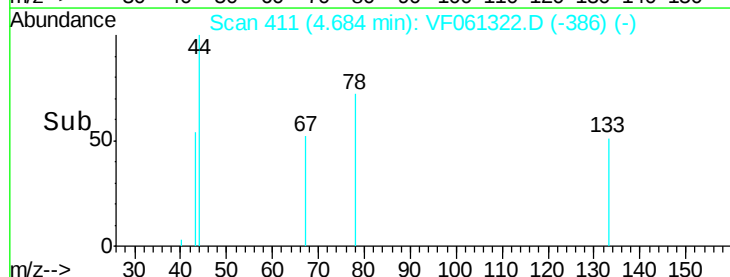
0

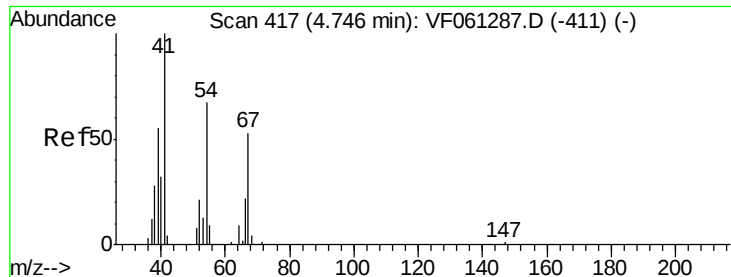
4.66

4.68

4.70

Time-->

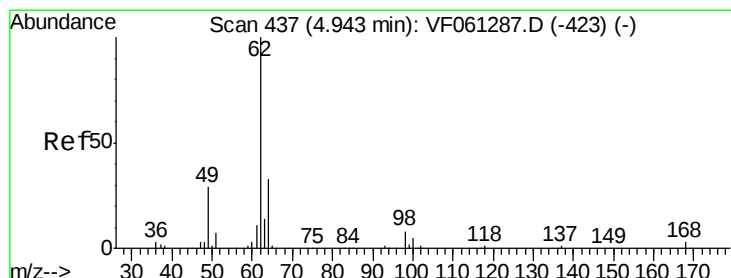
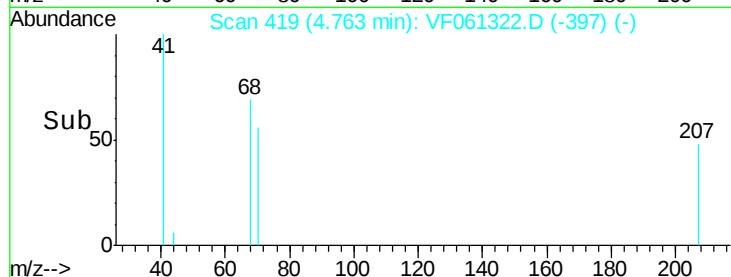
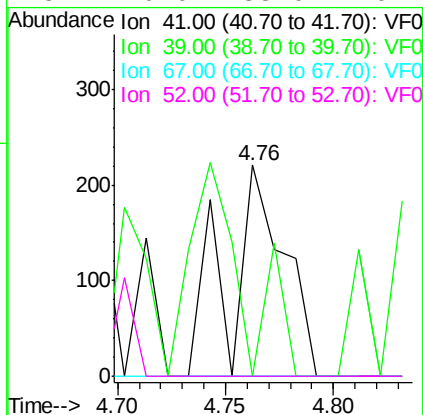
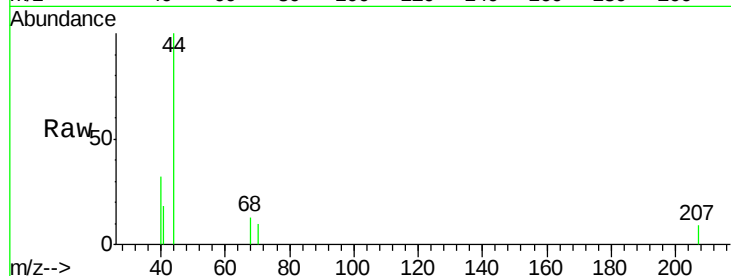




#41  
Methacrylonitrile  
Concen: 135.068 ug/l  
RT: 4.76 min Scan# 419  
Delta R.T. 0.02 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

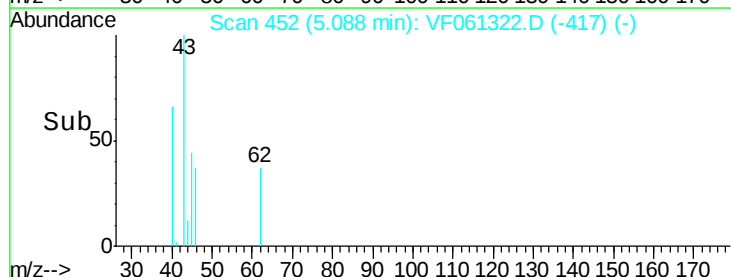
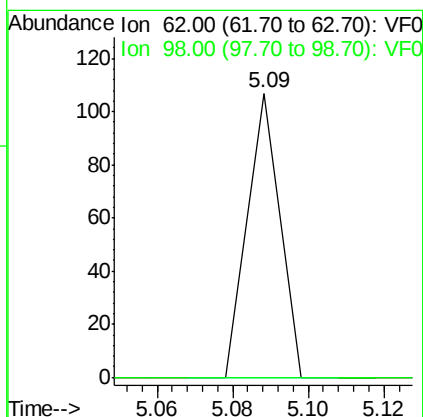
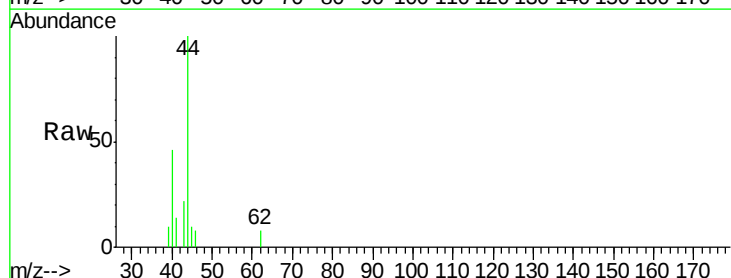
Instrument :  
MSVOA\_F  
ClientSampleId :  
SP-1-4RE

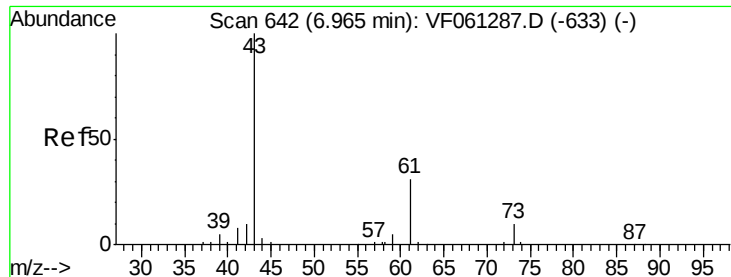
Tot Ion: 41 Resp: 391  
Ion Ratio Lower Upper  
41 100  
39 0.0 52.7 79.1#  
67 0.0 41.4 62.2#  
52 0.0 33.0 49.4#



#42  
1,2-Dichloroethane  
Concen: 6.089 ug/l  
RT: 5.09 min Scan# 452  
Delta R.T. 0.14 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

Tgt Ion: 62 Resp: 63  
Ion Ratio Lower Upper  
62 100  
98 0.0 0.0 16.8



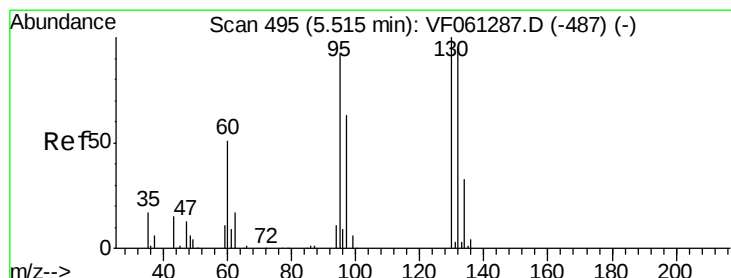
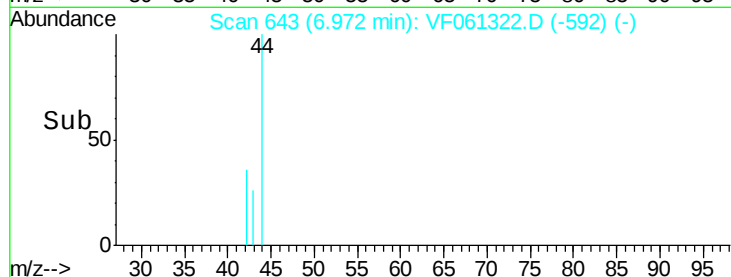
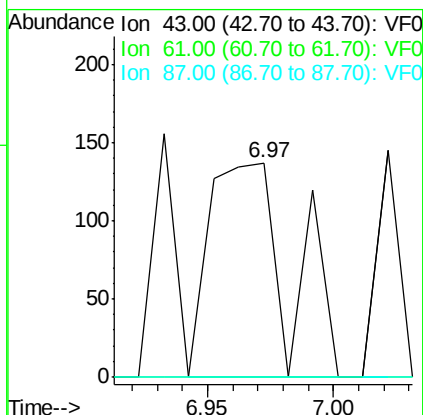
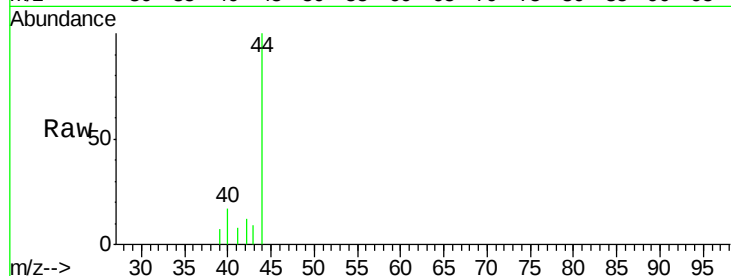


#43

Isopropyl Acetate  
 Concen: 44.857 ug/l  
 RT: 6.97 min Scan# 643  
 Delta R.T. 0.01 min  
 Lab File: VF061322.D  
 Acq: 10 Jan 2019 3:11

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SP-1-4RE

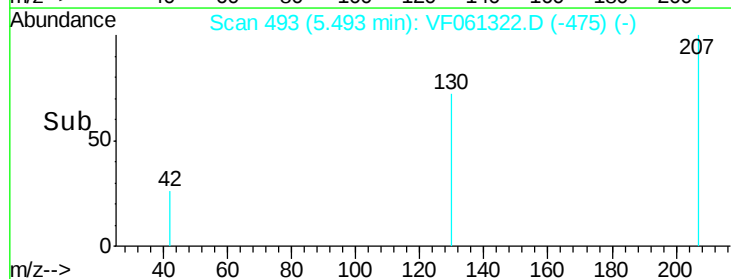
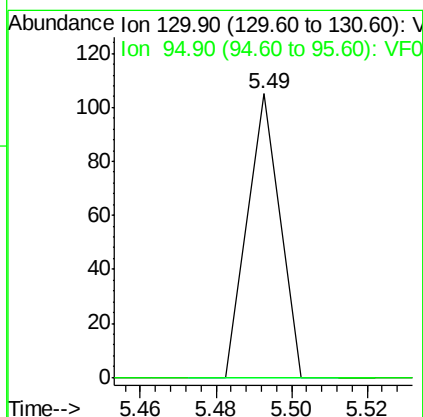
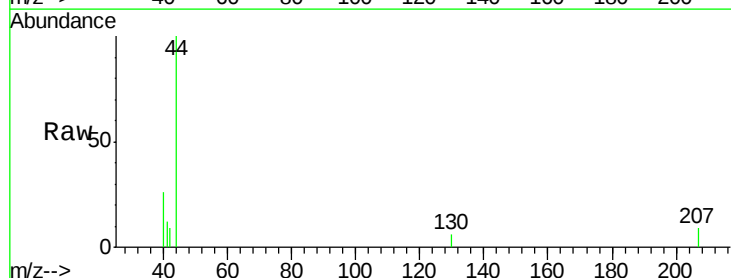
Tot Ion: 43 Resp: 307  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 24.3 36.5#  
 87 0.0 0.2 0.4#

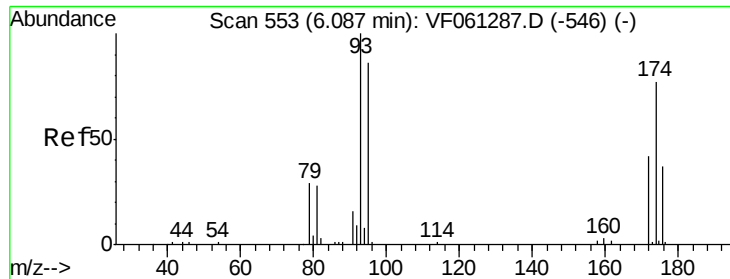


#44

Trichloroethene  
 Concen: 6.375 ug/l  
 RT: 5.49 min Scan# 493  
 Delta R.T. -0.02 min  
 Lab File: VF061322.D  
 Acq: 10 Jan 2019 3:11

Tgt Ion: 130 Resp: 62  
 Ion Ratio Lower Upper  
 130 100  
 95 0.0 0.0 184.4





#46

Dibromomethane

Concen: 11.756 ug/l

RT: 6.11 min Scan# 556

Delta R.T. 0.03 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampled :

SP-1-4RE

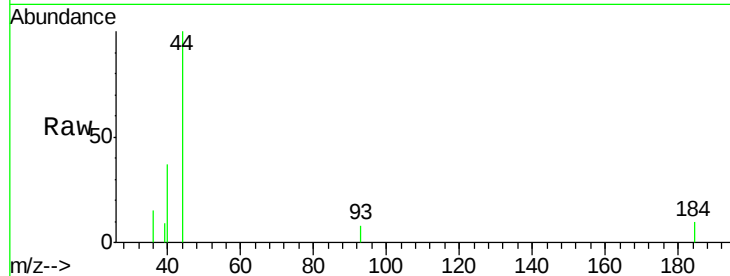
Tot Ion: 93 Resp: 61

Ion Ratio Lower Upper

93 100

95 0.0 68.8 103.2#

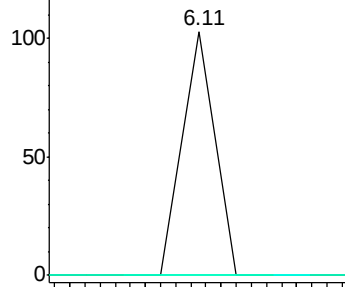
174 0.0 62.9 94.3#



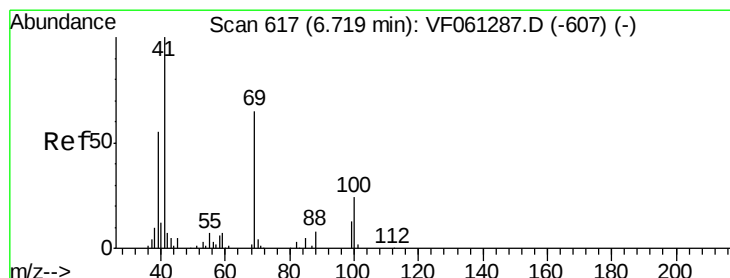
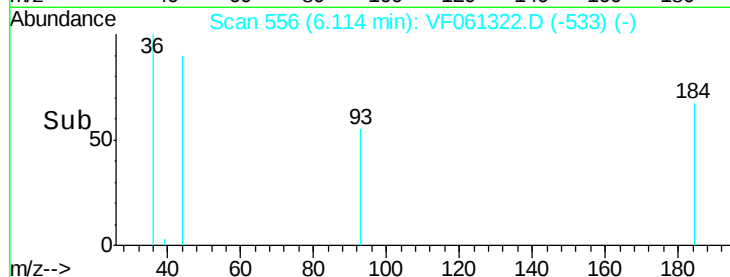
Abundance Ion 93.00 (92.70 to 93.70): VF0

Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V



Time-->



#48

Methyl methacrylate

Concen: 18.684 ug/l

RT: 6.74 min Scan# 619

Delta R.T. 0.02 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

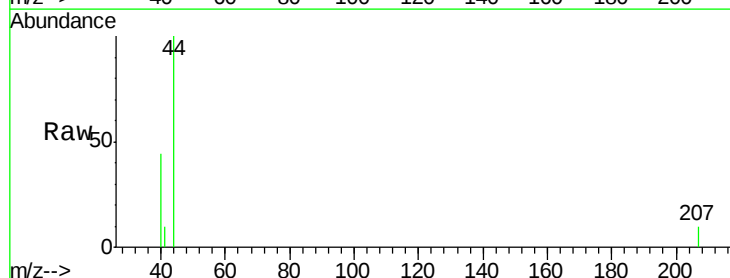
Tgt Ion: 41 Resp: 83

Ion Ratio Lower Upper

41 100

69 0.0 51.5 77.3#

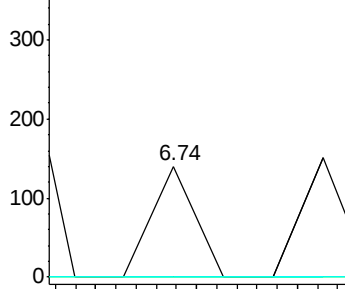
39 0.0 44.1 66.1#



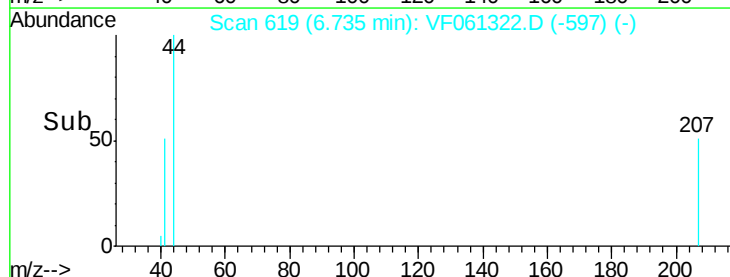
Abundance Ion 41.00 (40.70 to 41.70): VF0

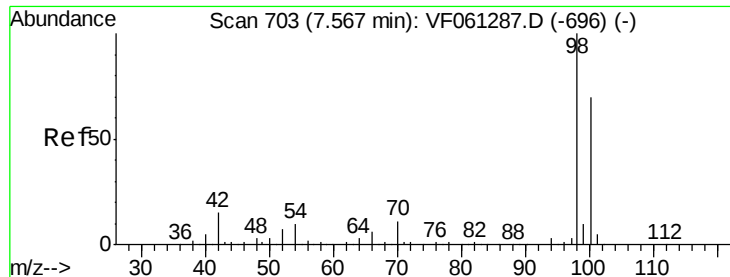
Ion 69.00 (68.70 to 69.70): VF0

Ion 39.00 (38.70 to 39.70): VF0



Time-->





#50

Toluene-d8

Concen: 34.635 ug/l

RT: 7.56 min Scan# 703

Delta R.T. -0.00 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

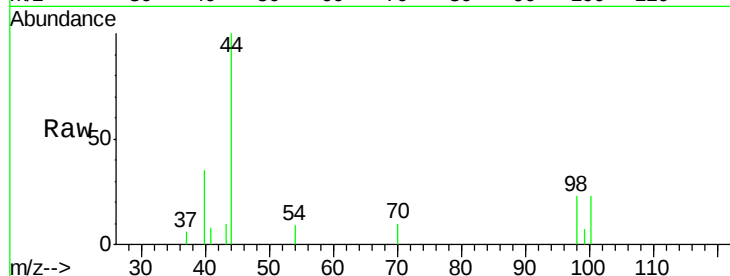
SP-1-4RE

Tot Ion: 98 Resp: 956

Ion Ratio Lower Upper

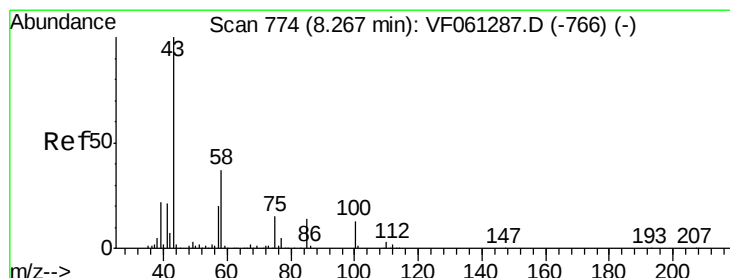
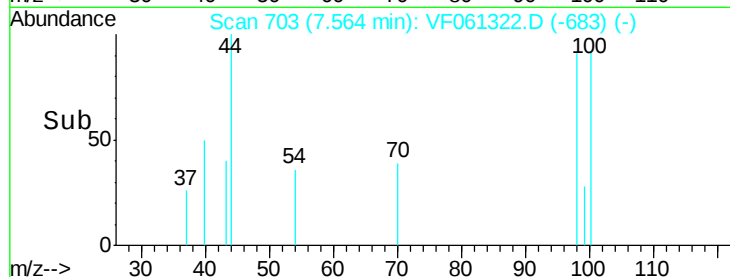
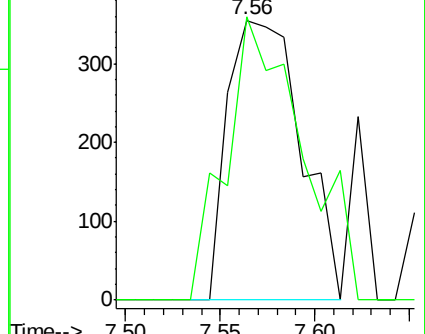
98 100

100 101.1 55.6 83.4#



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0



#51

4-Methyl-2-Pentanone

Concen: 16.648 ug/l

RT: 8.28 min Scan# 776

Delta R.T. 0.02 min

Lab File: VF061322.D

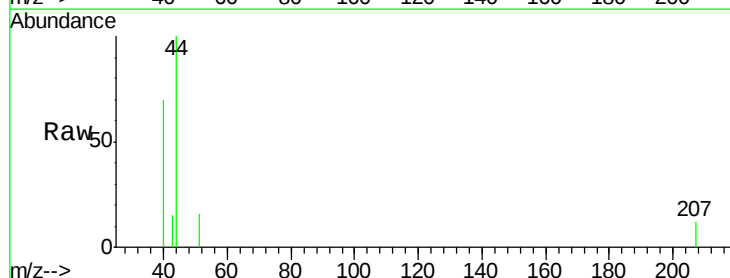
Acq: 10 Jan 2019 3:11

Tgt Ion: 43 Resp: 86

Ion Ratio Lower Upper

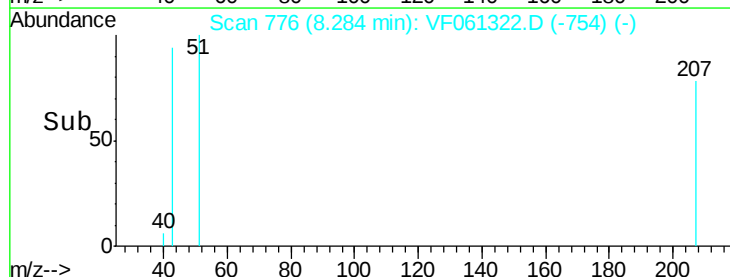
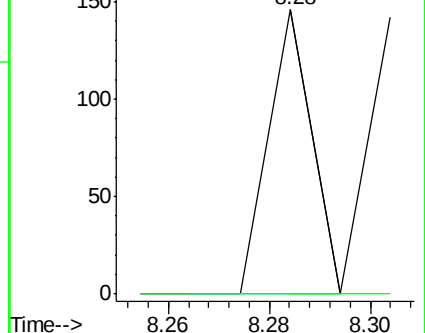
43 100

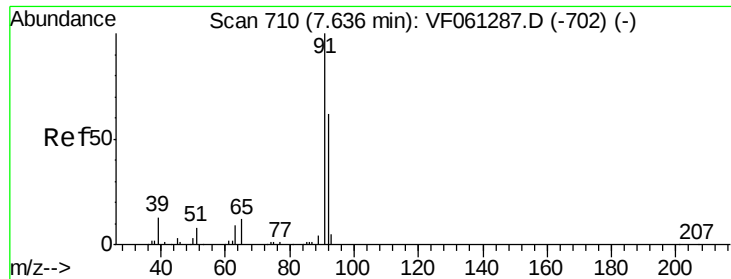
58 0.0 29.6 44.4#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#52

Toluene

Concen: 7.116 ug/l

RT: 7.64 min Scan# 711

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

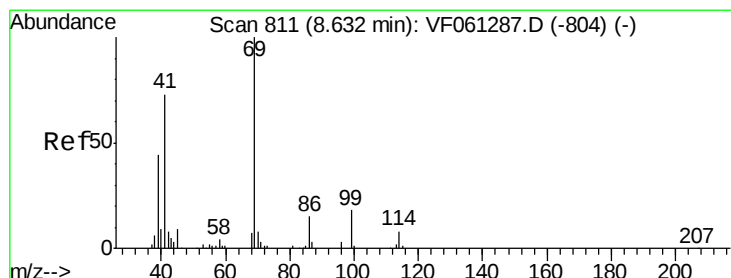
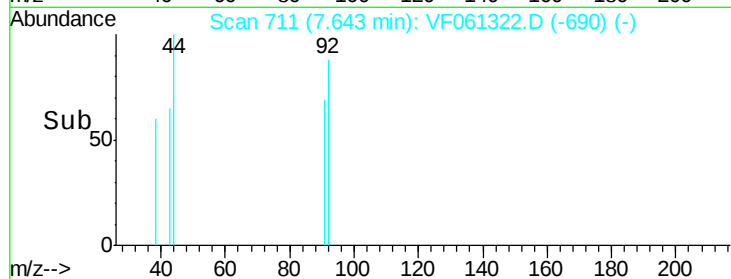
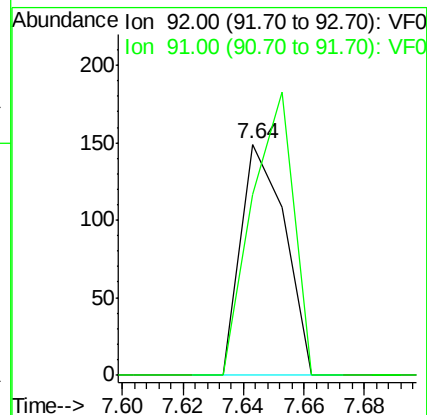
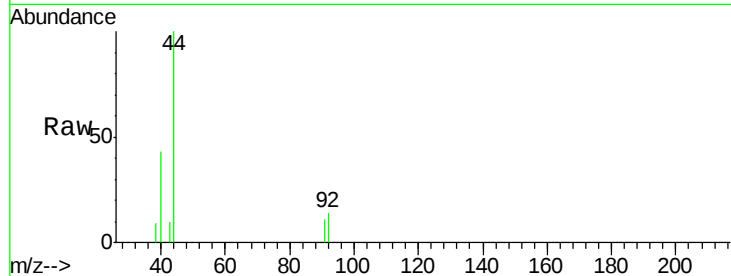
SP-1-4RE

Tot Ion: 92 Resp: 152

Ion Ratio Lower Upper

92 100

91 78.5 129.2 193.8#



#56

Ethyl methacrylate

Concen: 10.029 ug/l

RT: 8.53 min Scan# 801

Delta R.T. -0.10 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

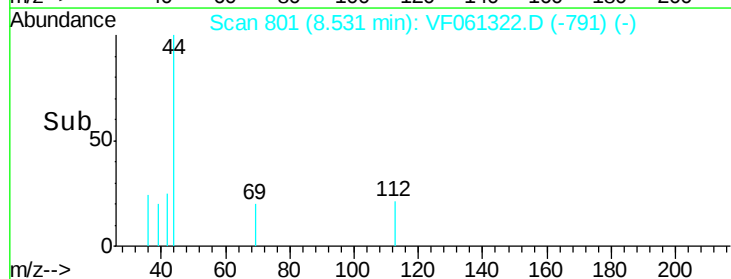
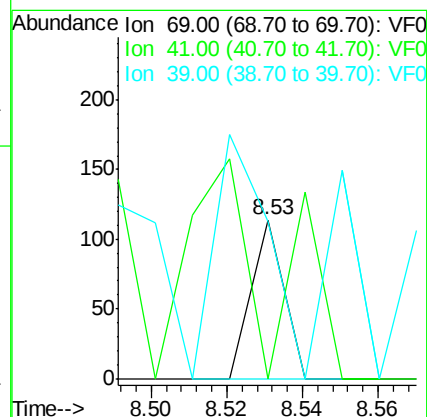
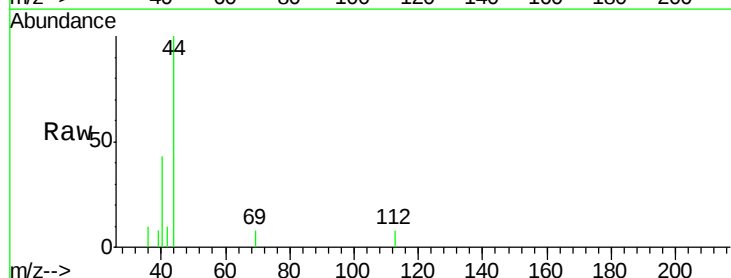
Tgt Ion: 69 Resp: 67

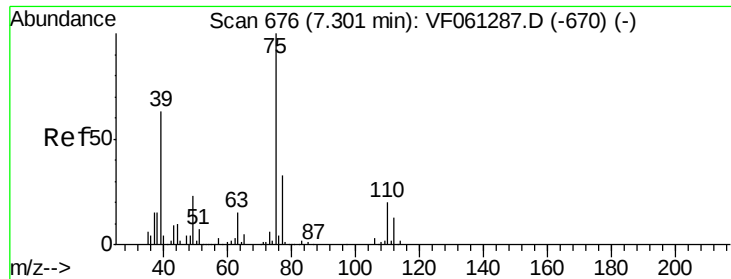
Ion Ratio Lower Upper

69 100

41 0.0 59.0 88.4#

39 99.1 35.3 52.9#





#58

2-Chloroethyl Vinyl ether

Concen: 326.665 ug/l

RT: 7.43 min Scan# 689

Delta R.T. 0.13 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

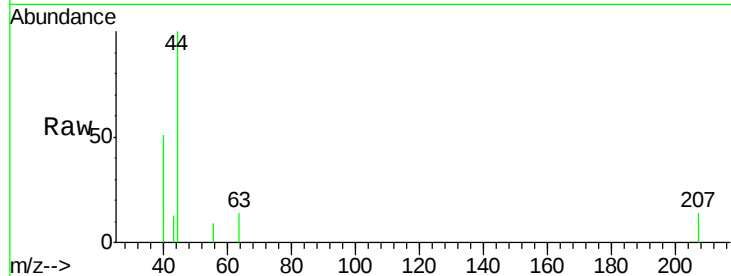
SP-1-4RE

Tot Ion: 63 Resp: 93

Ion Ratio Lower Upper

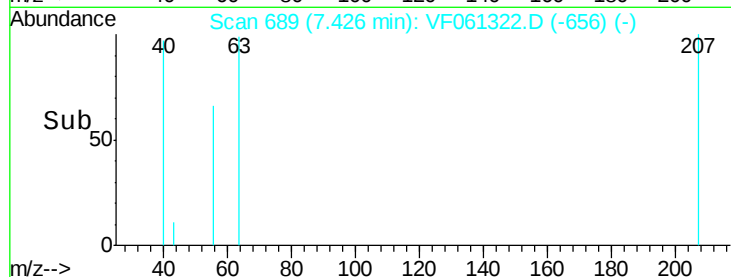
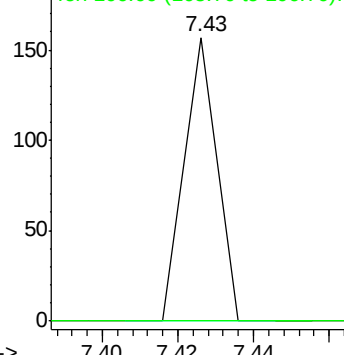
63 100

106 0.0 16.5 24.7#

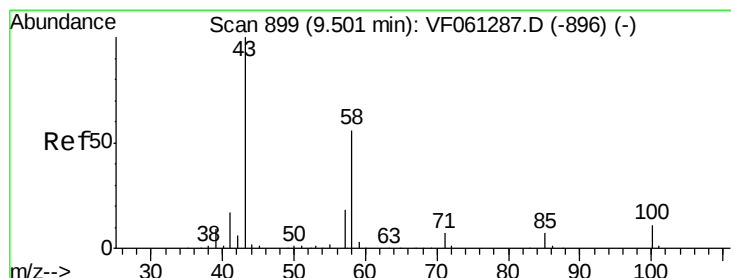


Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): VF0



Time-->



#59

2-Hexanone

Concen: 83.887 ug/l

RT: 9.54 min Scan# 903

Delta R.T. 0.04 min

Lab File: VF061322.D

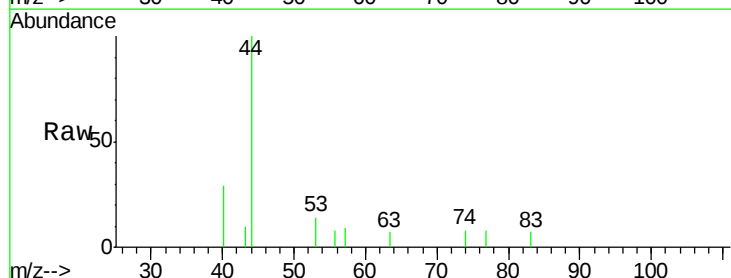
Acq: 10 Jan 2019 3:11

Tgt Ion: 43 Resp: 307

Ion Ratio Lower Upper

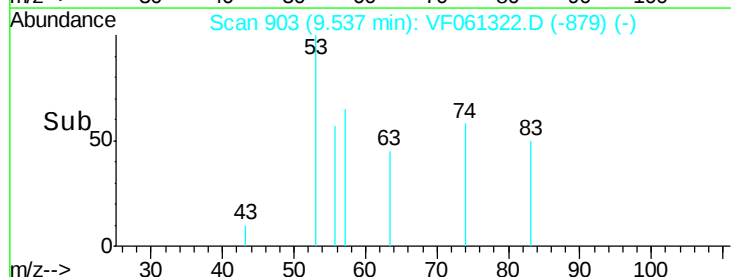
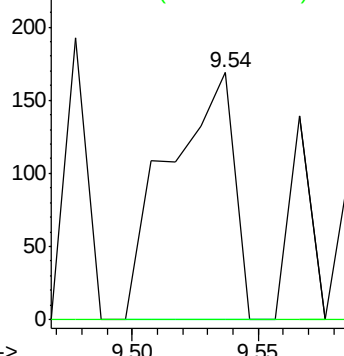
43 100

58 0.0 25.6 76.8#

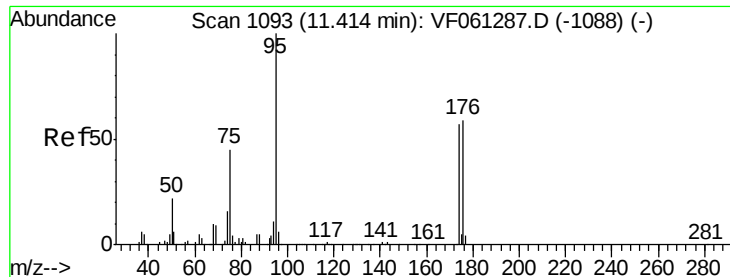


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



Time-->



#62

4-Bromofluorobenzene

Concen: 11.118 ug/l

RT: 11.43 min Scan# 1095

Delta R.T. 0.02 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

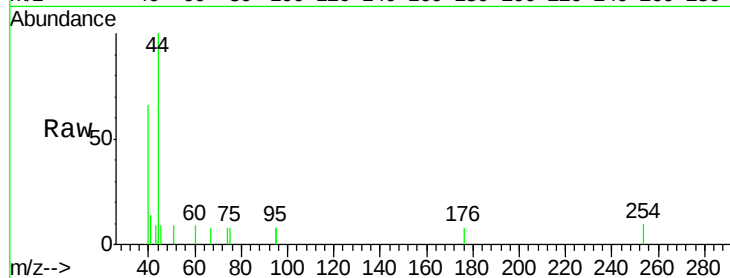
Tot Ion: 95 Resp: 134

Ion Ratio Lower Upper

95 100

174 0.0 0.0 114.2

176 50.4 0.0 117.8



Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): VF0

Ion 176.00 (175.70 to 176.70): VF0

11.43

250

200

150

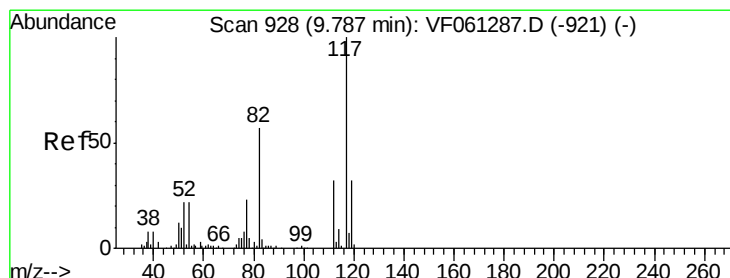
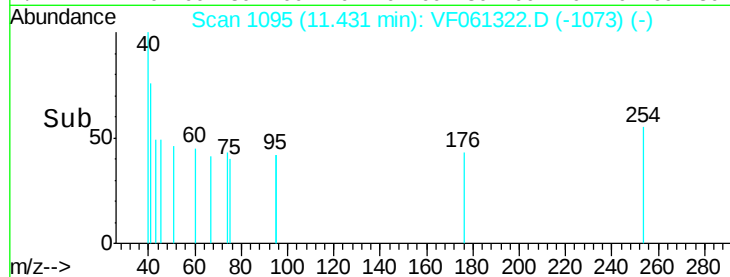
100

50

0

11.40 11.42 11.44 11.46

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.79 min Scan# 929

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

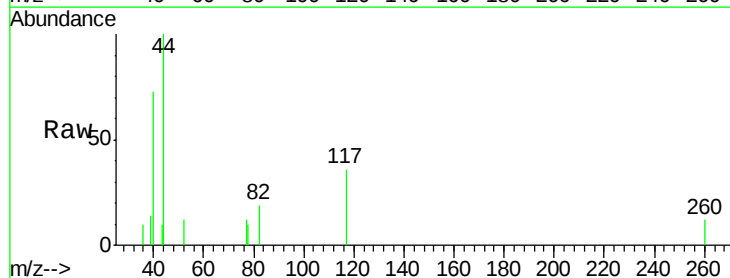
Tgt Ion: 117 Resp: 851

Ion Ratio Lower Upper

117 100

82 52.2 45.3 67.9

119 0.0 25.4 38.0#



Abundance Ion 117.00 (116.70 to 117.70): VF0

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): VF0

9.79

500

400

300

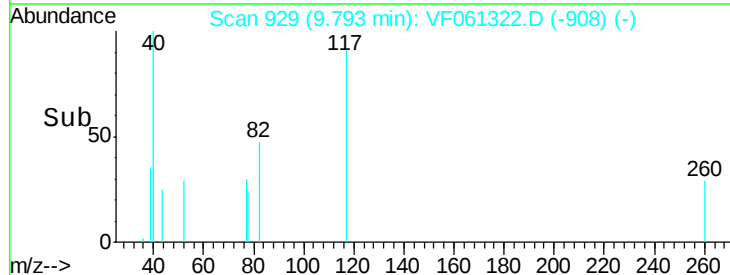
200

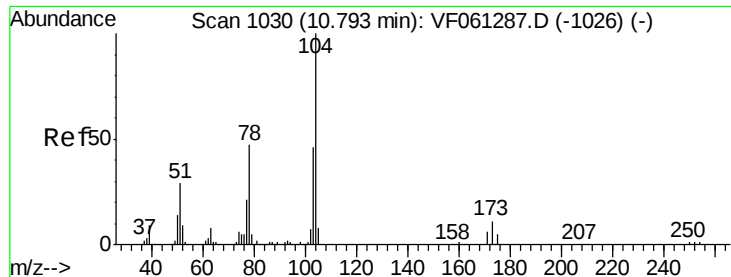
100

0

9.75 9.80 9.85

Time-->





#70

Stvrene

Concen: 4.361 ug/l

RT: 10.88 min Scan# 1039

Delta R.T. 0.09 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

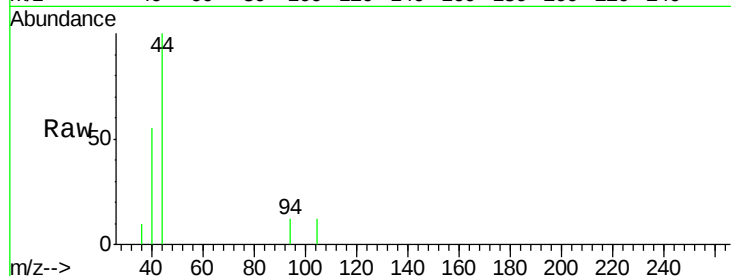
Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

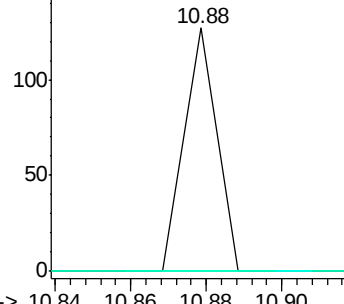
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 104   | Resp: | 75    |
| Ion      | Ratio | Lower | Upper |
| 104      | 100   |       |       |
| 78       | 0.0   | 38.0  | 57.0# |
| 103      | 0.0   | 36.7  | 55.1# |



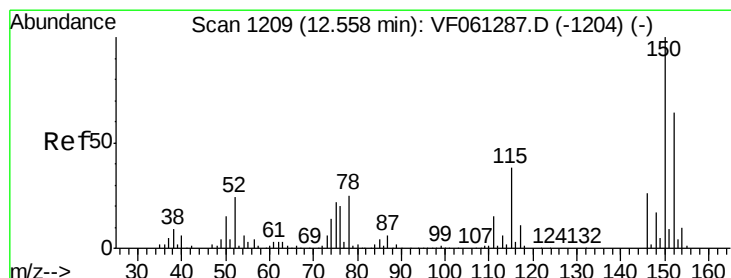
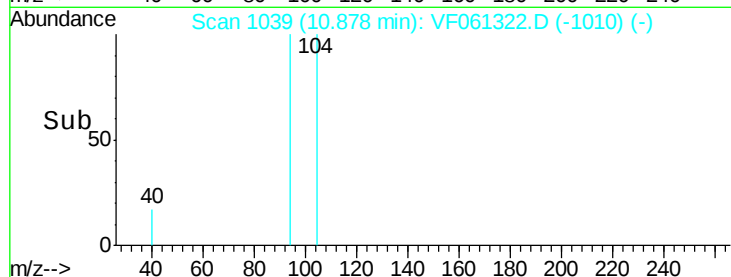
Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VF0

Ion 103.00 (102.70 to 103.70): V



Time--> 10.84 10.86 10.88 10.90



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

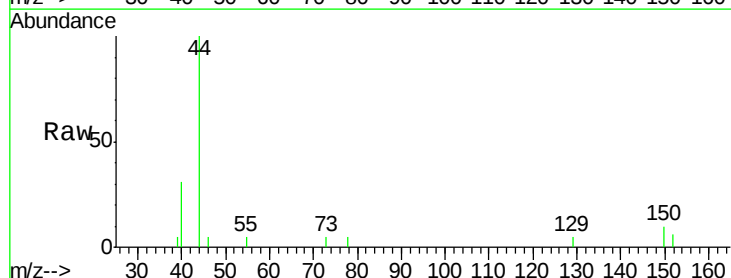
RT: 12.58 min Scan# 1211

Delta R.T. 0.02 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

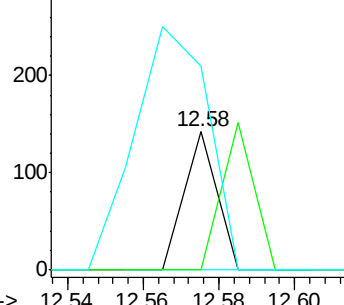
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 152   | Resp: | 84    |
| Ion      | Ratio | Lower | Upper |
| 152      | 100   |       |       |
| 115      | 0.0   | 29.6  | 88.9# |
| 150      | 147.9 | 0.0   | 315.4 |



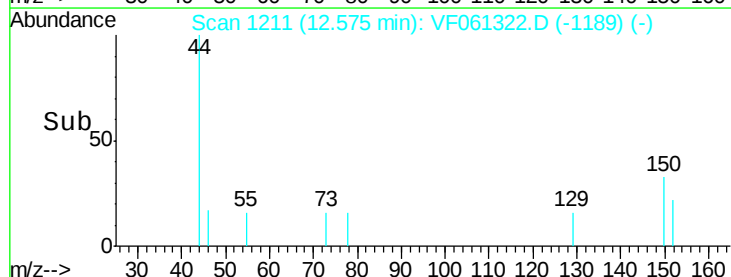
Abundance Ion 152.00 (151.70 to 152.70): V

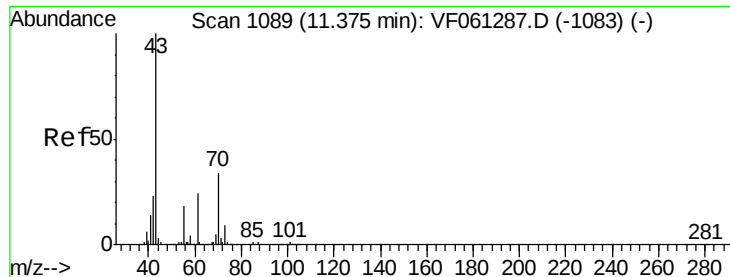
Ion 115.00 (114.70 to 115.70): V

Ion 150.00 (149.70 to 150.70): V



Time--> 12.54 12.56 12.58 12.60





#74

N-amvl acetate

Concen: 104.747 ug/l

RT: 11.39 min Scan# 1091

Delta R.T. 0.02 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

Tot Ion: 43 Resp: 176

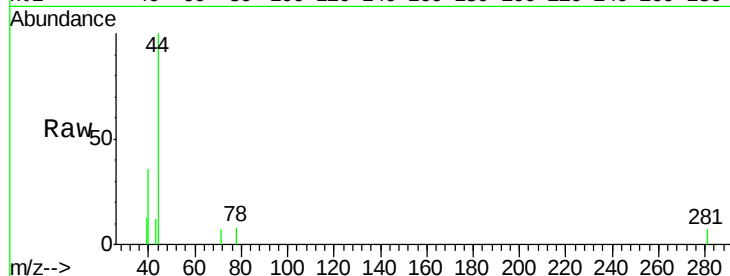
Ion Ratio Lower Upper

43 100

70 0.0 27.4 41.0#

55 0.0 14.7 22.1#

61 0.0 19.0 28.4#

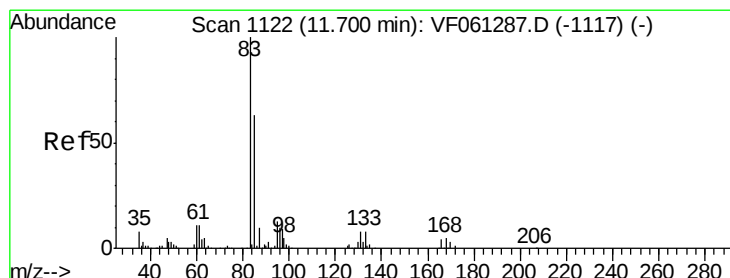
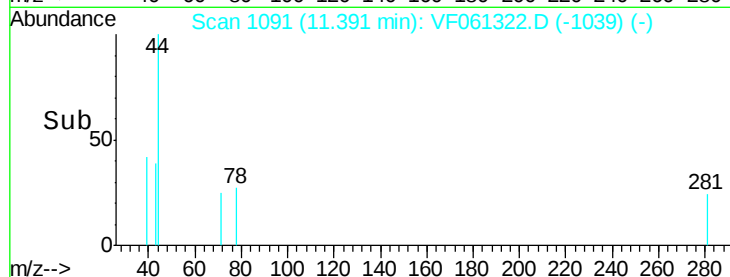
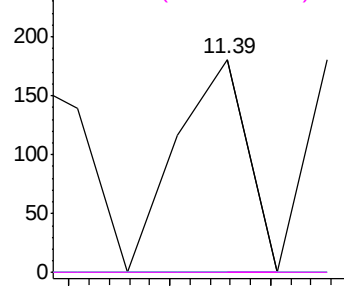


Abundance Ion 43.00 (42.70 to 43.70): VF0

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: 73.380 ug/l

RT: 11.66 min Scan# 1118

Delta R.T. -0.04 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

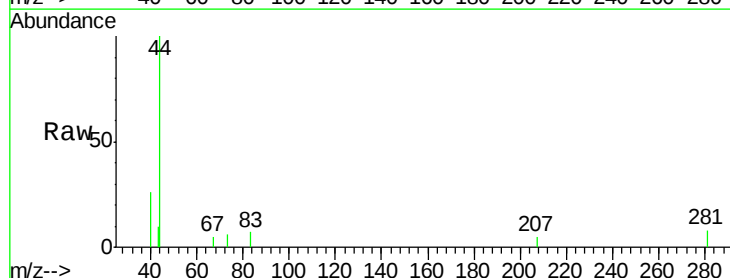
Tgt Ion: 83 Resp: 86

Ion Ratio Lower Upper

83 100

131 0.0 3.9 11.7#

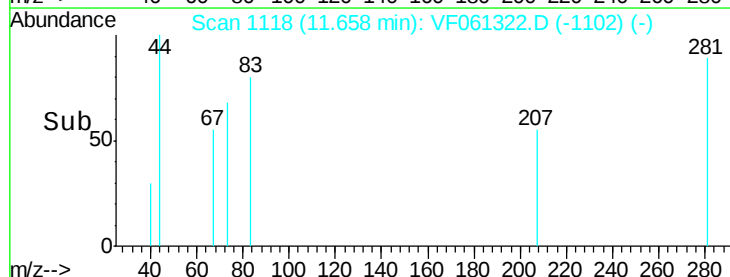
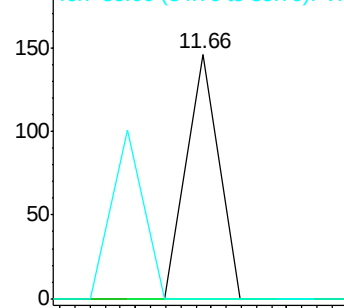
85 0.0 31.6 94.7#

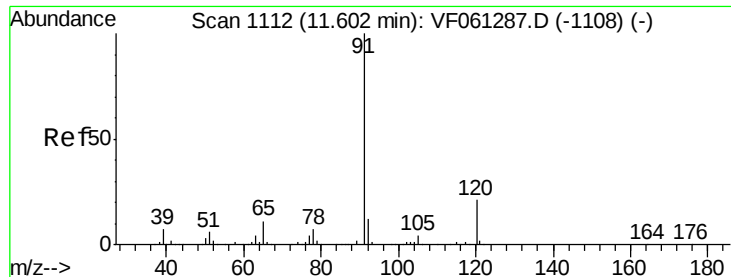


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VF0





#78

n-propylbenzene

Concen: 14.751 ug/l

RT: 11.74 min Scan# 1126

Delta R.T. 0.14 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

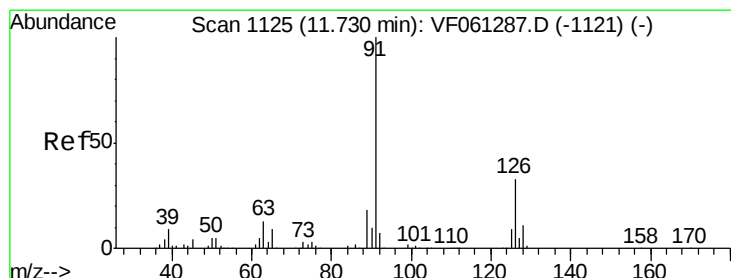
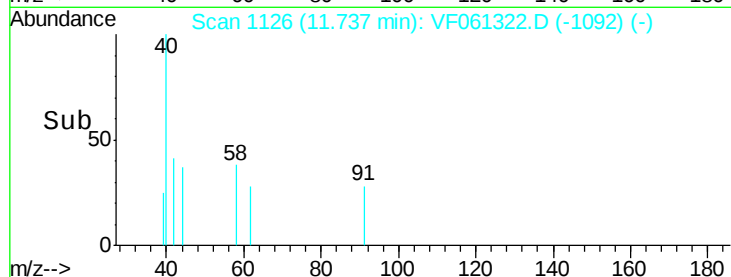
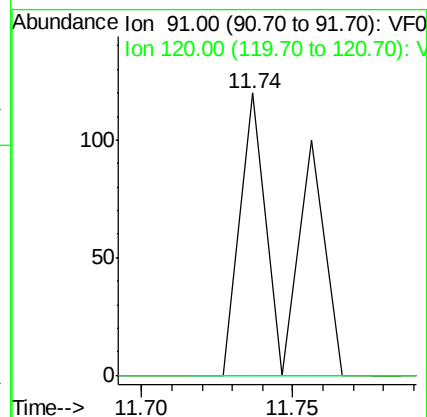
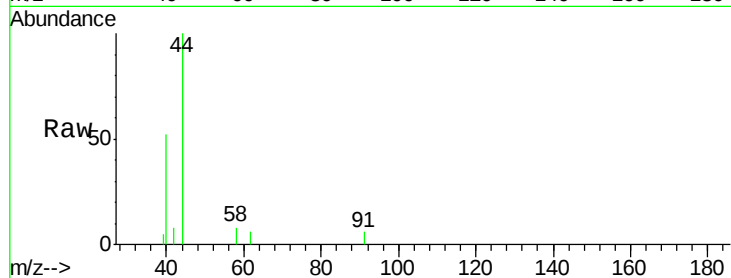
SP-1-4RE

Tot Ion: 91 Resp: 130

Ion Ratio Lower Upper

91 100

120 0.0 10.7 32.1#



#79

2-Chlorotoluene

Concen: 26.476 ug/l

RT: 11.74 min Scan# 1126

Delta R.T. 0.01 min

Lab File: VF061322.D

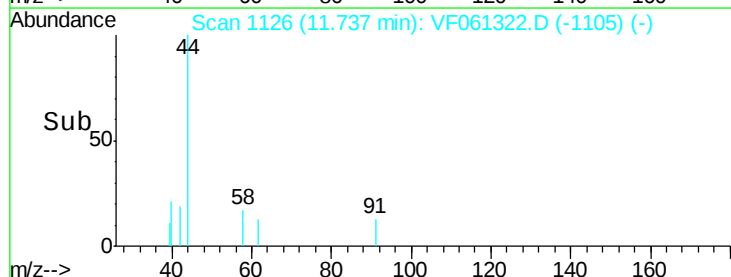
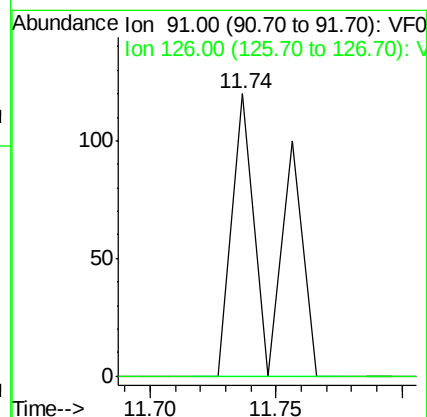
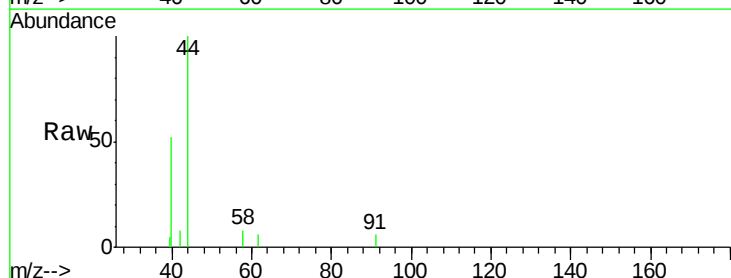
Acq: 10 Jan 2019 3:11

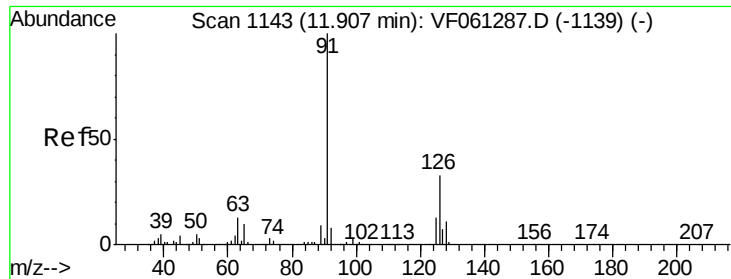
Tgt Ion: 91 Resp: 130

Ion Ratio Lower Upper

91 100

126 0.0 16.6 49.8#

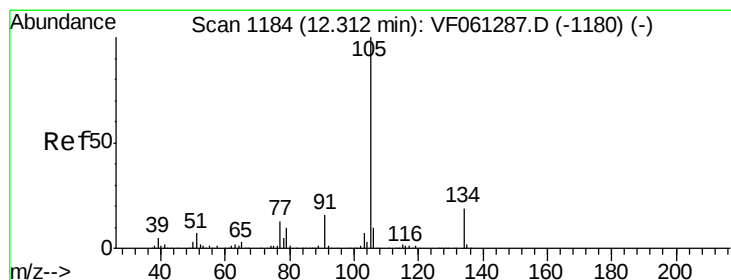
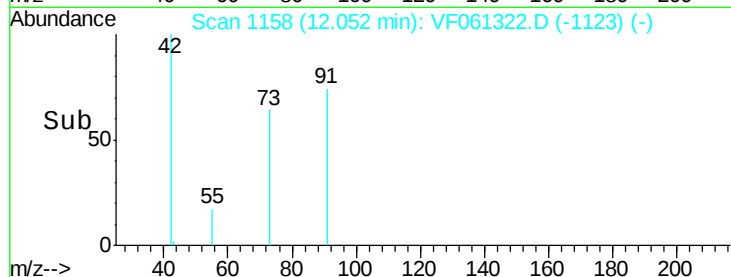
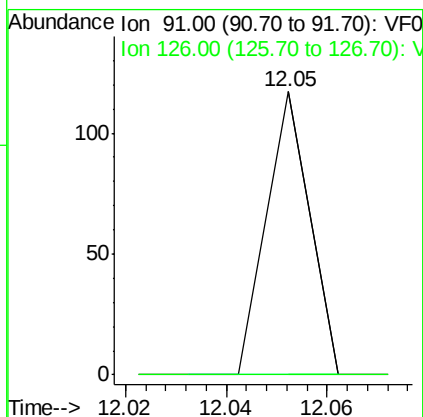
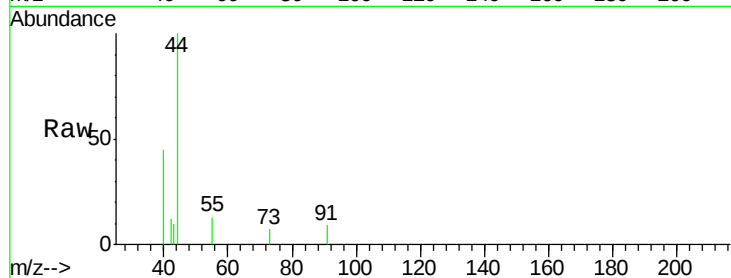




#82  
4-Chlorotoluene  
Concen: 13.830 ug/l  
RT: 12.05 min Scan# 1158  
Delta R.T. 0.14 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

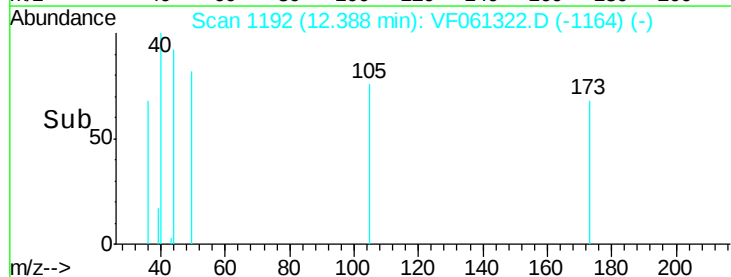
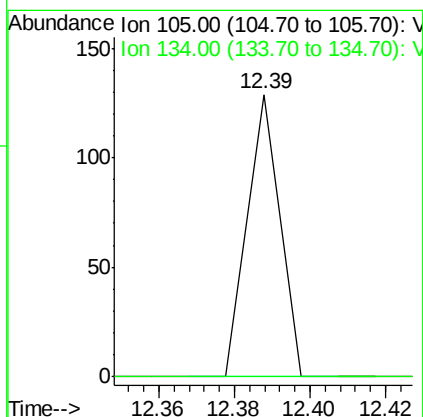
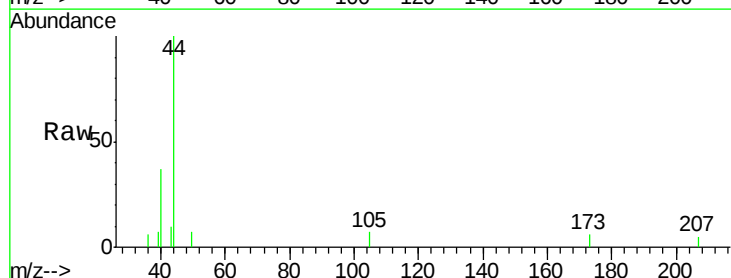
Instrument :  
MSVOA\_F  
ClientSampleId :  
SP-1-4RE

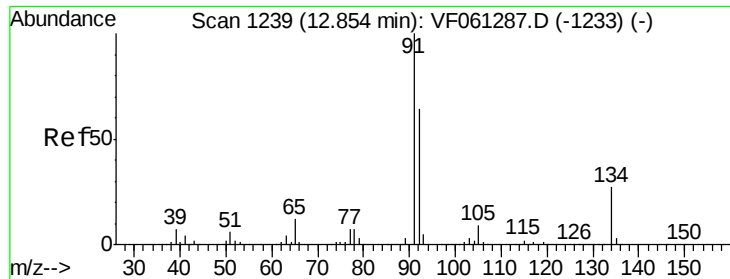
Tot Ion: 91 Resp: 69  
Ion Ratio Lower Upper  
91 100  
126 0.0 16.4 49.4#



#85  
sec-Butylbenzene  
Concen: 9.109 ug/l  
RT: 12.39 min Scan# 1192  
Delta R.T. 0.08 min  
Lab File: VF061322.D  
Acq: 10 Jan 2019 3:11

Tgt Ion: 105 Resp: 76  
Ion Ratio Lower Upper  
105 100  
134 0.0 9.7 28.9#





#89

n-Butylbenzene

Concen: 9.322 ug/l

RT: 12.86 min Scan# 1240

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

Instrument :

MSVOA\_F

ClientSampleId :

SP-1-4RE

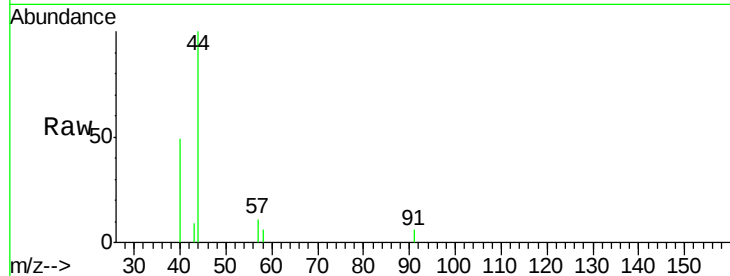
Tot Ion: 91 Resp: 65

Ion Ratio Lower Upper

91 100

92 0.0 32.1 96.3#

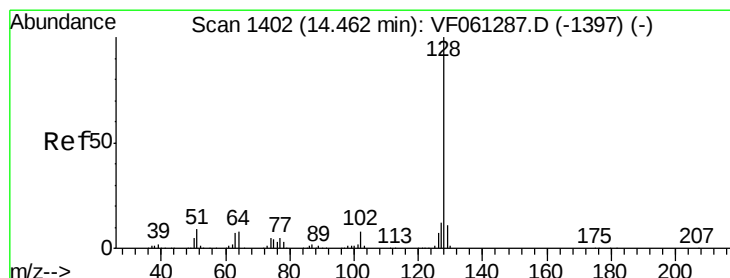
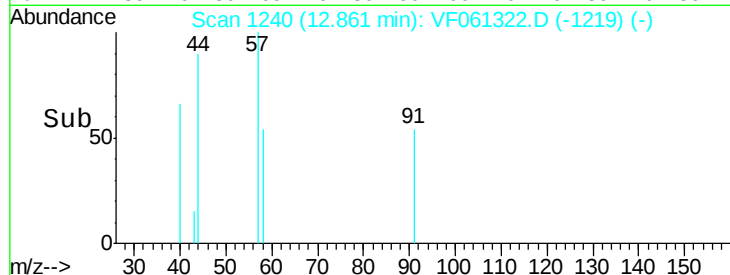
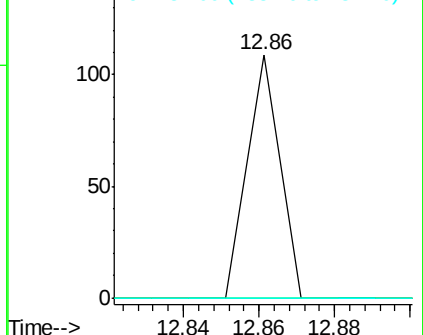
134 0.0 13.4 40.1#



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



#95

Naphthalene

Concen: 49.232 ug/l

RT: 14.47 min Scan# 1403

Delta R.T. 0.01 min

Lab File: VF061322.D

Acq: 10 Jan 2019 3:11

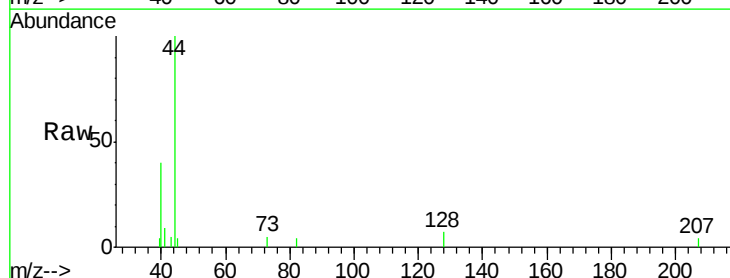
Tgt Ion: 128 Resp: 175

Ion Ratio Lower Upper

128 100

127 0.0 9.4 14.0#

129 0.0 8.8 13.2#



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

