

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF110618\  
 Data File : VF060621.D  
 Acq On : 6 Nov 2018 19:21  
 Operator : VA/AP  
 Sample : J5819-02  
 Misc : 2.99g/5mL/MSVOA-F/SOIL  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Nov 07 11:48:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F110218S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 03 05:29:31 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.89  | 168  | 299990   | 50.00 | ug/l  | 0.03     |
| 34) 1,4-Difluorobenzene    | 5.61  | 114  | 576469   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 9.80  | 117  | 501108   | 50.00 | ug/l  | 0.02     |
| 72) 1,4-Dichlorobenzene-d4 | 12.57 | 152  | 279920   | 50.00 | ug/l  | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.86  | 65   | 171197   | 56.48  | ug/l    | 0.02     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 112.96% |          |
| 35) Dibromofluoromethane    | 4.13  | 113  | 204173   | 45.84  | ug/l    | 0.03     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 91.68%  |          |
| 50) Toluene-d8              | 7.58  | 98   | 512640   | 38.86  | ug/l    | 0.02     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 77.72%  |          |
| 62) 4-Bromofluorobenzene    | 11.42 | 95   | 262639   | 45.51  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 91.02%  |          |

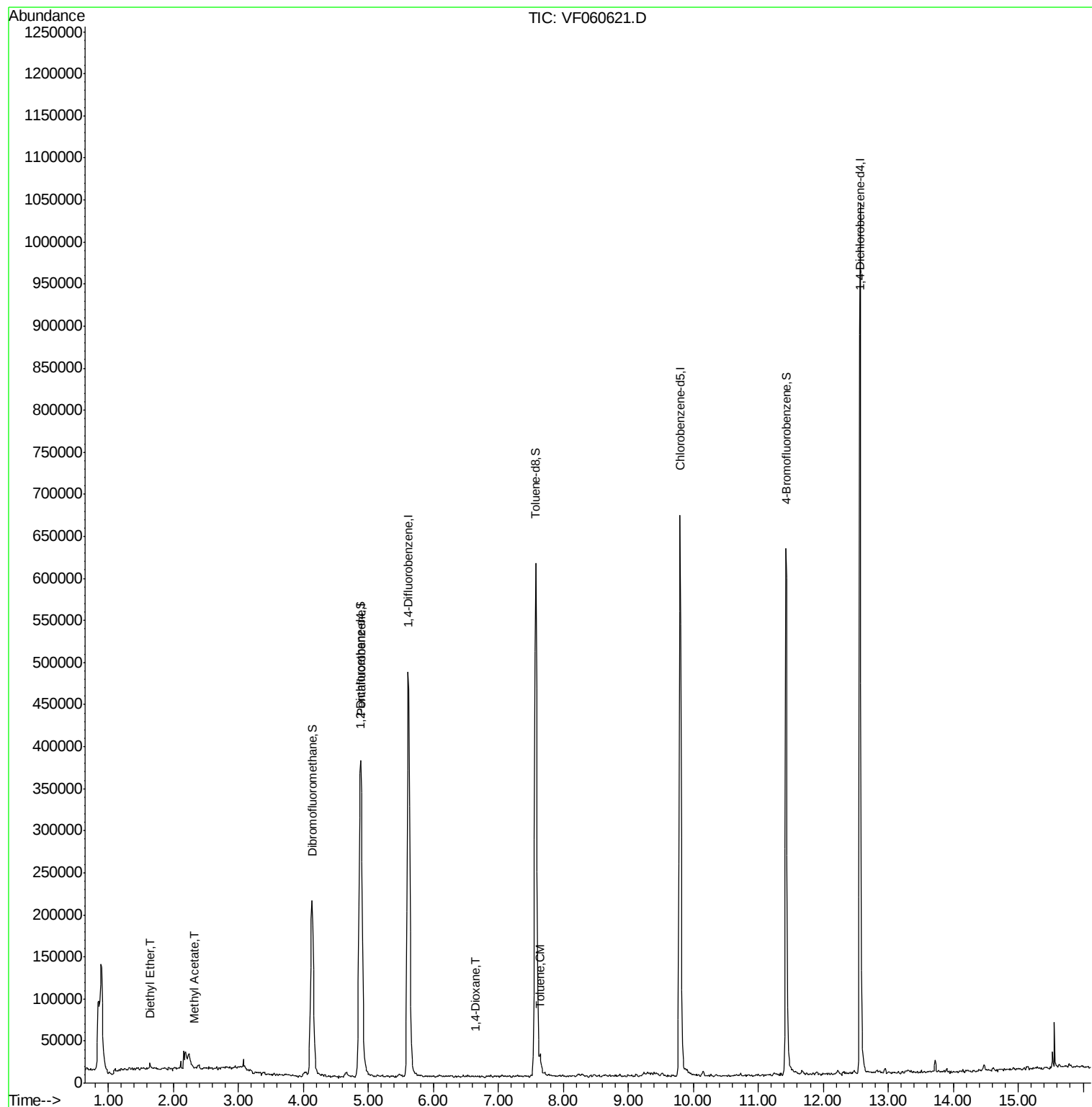
| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.93  | 85   | 267      | Below Cal | #      | 41     |
| 6) Chloroethane               | 1.37  | 64   | 60       | Below Cal | #      | 1      |
| 8) Diethyl Ether              | 1.64  | 74   | 1637     | 1.951     | ug/l   | 80     |
| 11) Tert butyl alcohol        | 2.57  | 59   | 489      | Below Cal | #      | 1      |
| 13) Acrolein                  | 2.02  | 56   | 416      | Below Cal | #      | 67     |
| 18) Methyl Acetate            | 2.34  | 43   | 976      | 1.350     | ug/l # | 64     |
| 20) Methylene Chloride        | 2.19  | 84   | 9445     | Below Cal | #      | 73     |
| 25) 2-Butanone                | 4.34  | 43   | 3049     | Below Cal | #      | 56     |
| 29) Tetrahydrofuran           | 4.09  | 42   | 1529     | Below Cal | #      | 36     |
| 49) 1,4-Dioxane               | 6.64  | 88   | 98       | 3.868     | ug/l # | 1      |
| 52) Toluene                   | 7.65  | 92   | 10522    | 1.048     | ug/l   | 99     |
| 58) 2-Chloroethyl Vinyl ether | 7.66  | 63   | 2154     | Below Cal |        | 100    |
| 59) 2-Hexanone                | 9.53  | 43   | 5961     | Below Cal | #      | 63     |
| 74) N-amyl acetate            | 11.39 | 43   | 1432     | Below Cal | #      | 58     |
| 89) n-Butylbenzene            | 12.85 | 91   | 821      | Below Cal | #      | 61     |

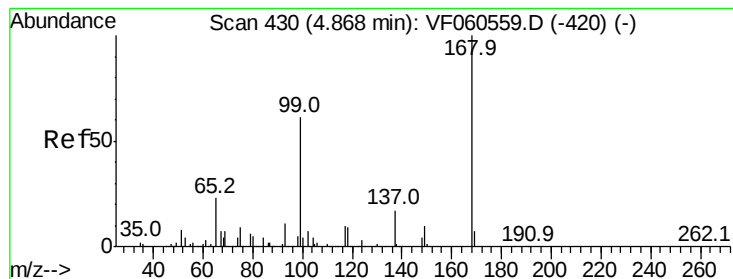
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF110618\  
Data File : VF060621.D  
Acq On : 6 Nov 2018 19:21  
Operator : VA/AP  
Sample : J5819-02  
Misc : 2.99g/5mL/MSVOA-F/SOIL  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :

Quant Time: Nov 07 11:48:04 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F110218S.M  
Quant Title : SW846 8260  
QLast Update : Sat Nov 03 05:29:31 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.89 min Scan# 432

Delta R.T. 0.03 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

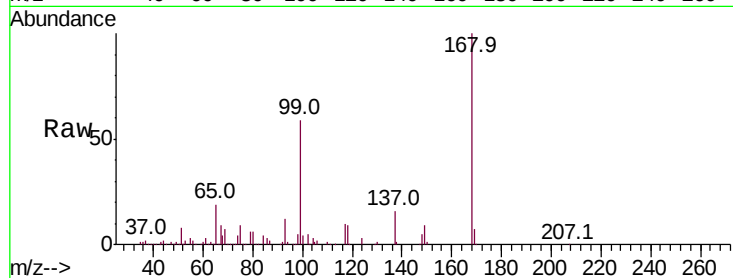
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:168 Resp: 299990

Ion Ratio Lower Upper

168 100

99 59.0 48.6 72.8



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.89

100000

80000

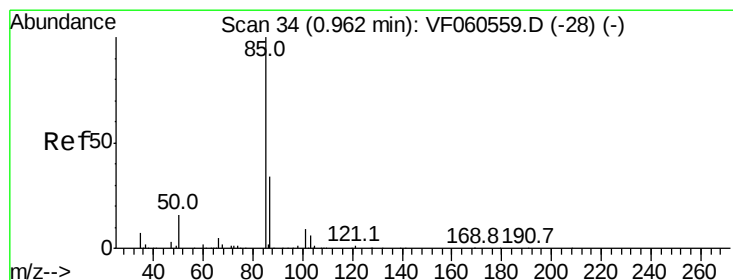
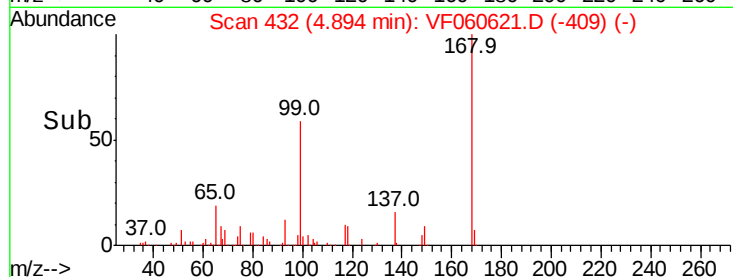
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 0.93 min Scan# 30

Delta R.T. -0.03 min

Lab File: VF060621.D

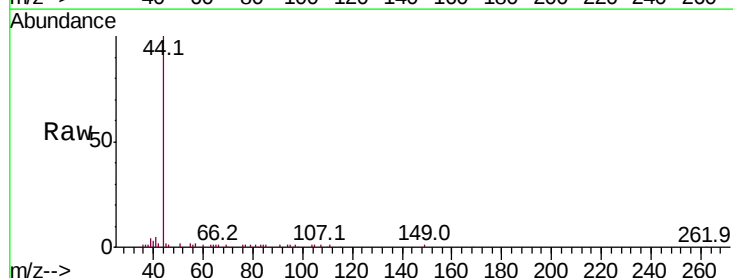
Acq: 6 Nov 2018 19:21

Tgt Ion: 85 Resp: 267

Ion Ratio Lower Upper

85 100

87 0.0 16.9 50.7#



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.93

250

200

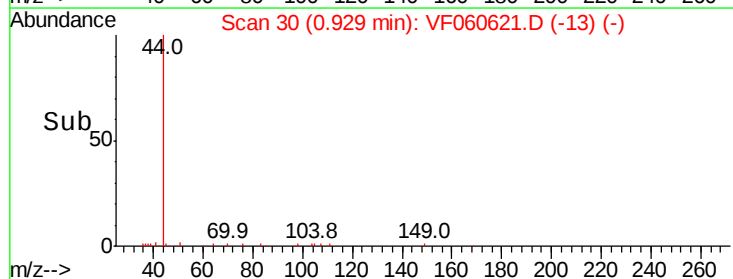
150

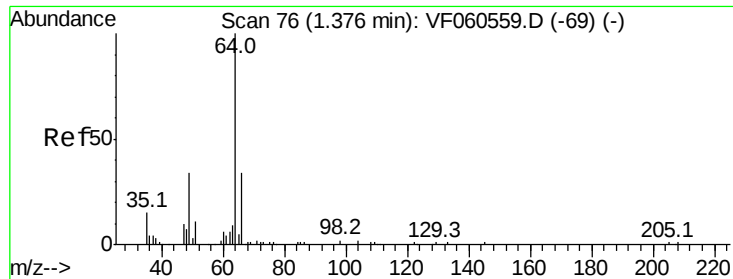
100

50

0

Time-->





#6

Chloroethane

Concen: Below Cal

RT: 1.37 min Scan# 75

Delta R.T. -0.00 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

Instrument :

MSVOA\_F

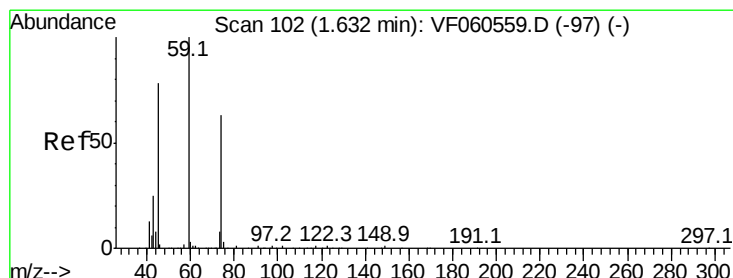
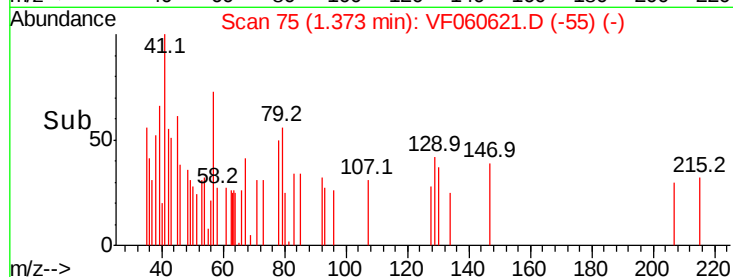
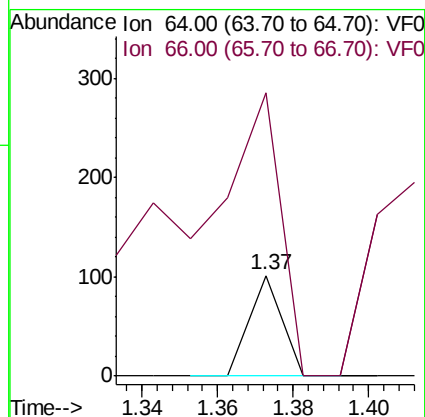
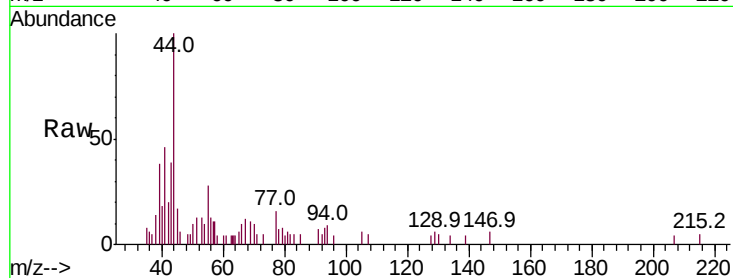
ClientSampleId :

Tot Ion: 64 Resp: 60

Ion Ratio Lower Upper

64 100

66 282.2 27.8 41.8#



#8

Diethyl Ether

Concen: 1.951 ug/l

RT: 1.64 min Scan# 102

Delta R.T. 0.01 min

Lab File: VF060621.D

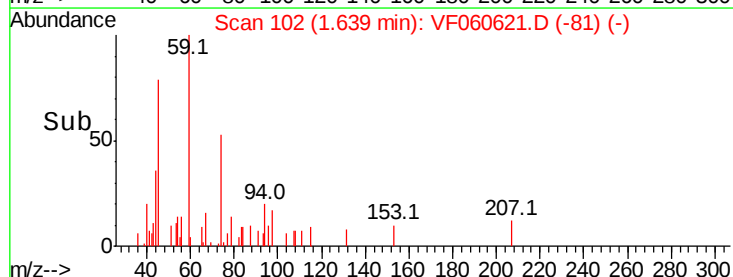
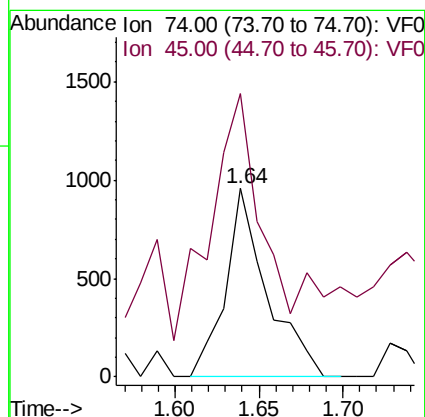
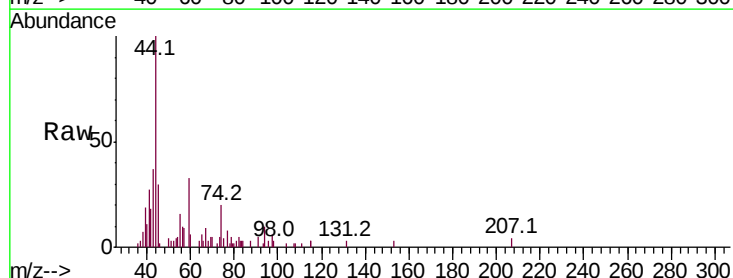
Acq: 6 Nov 2018 19:21

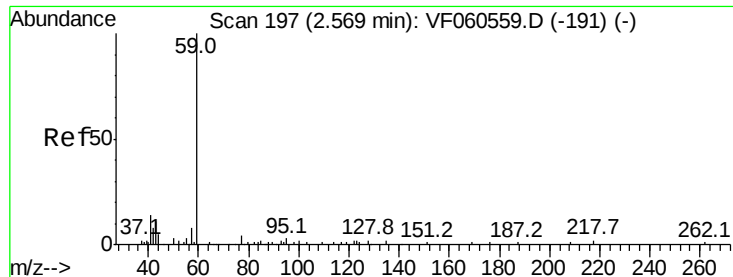
Tgt Ion: 74 Resp: 1637

Ion Ratio Lower Upper

74 100

45 150.3 63.8 191.5



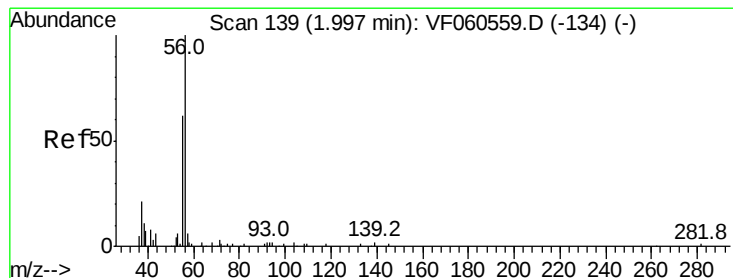
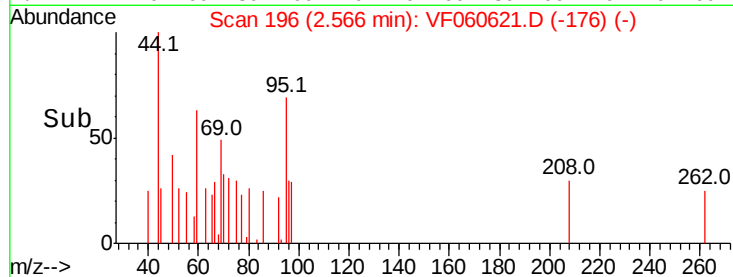
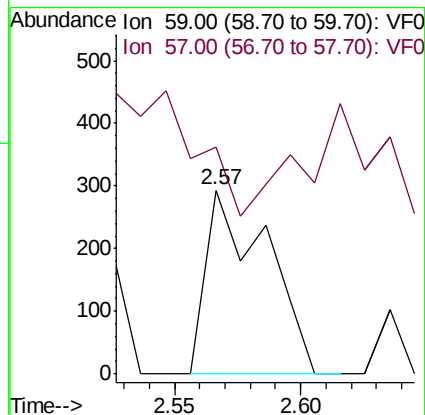
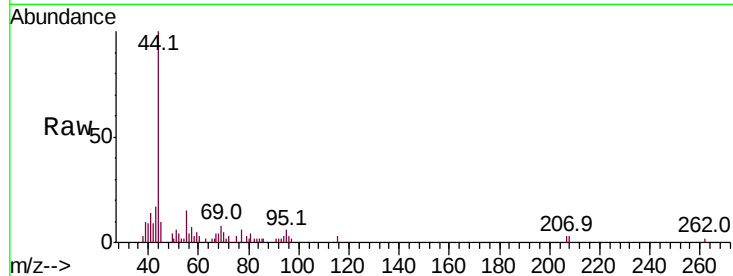


#11

Tert butyl alcohol  
Concen: Below Cal  
RT: 2.57 min Scan# 196  
Delta R.T. -0.00 min  
Lab File: VF060621.D  
Acq: 6 Nov 2018 19:21

Instrument :  
MSVOA\_F  
ClientSampleId :

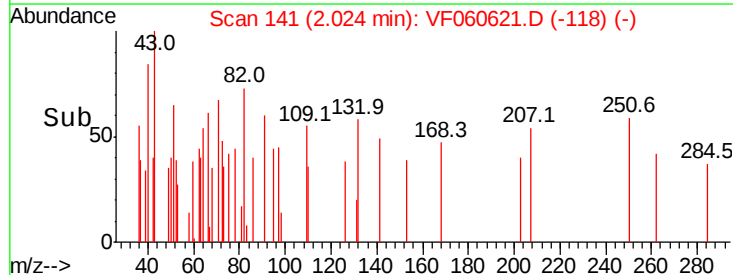
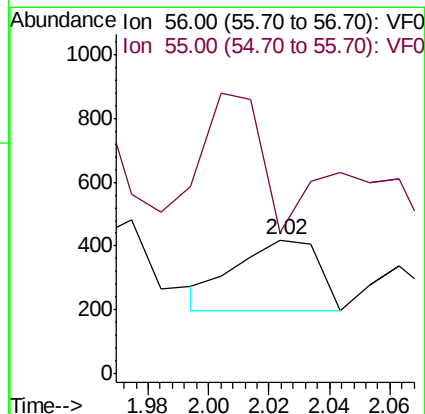
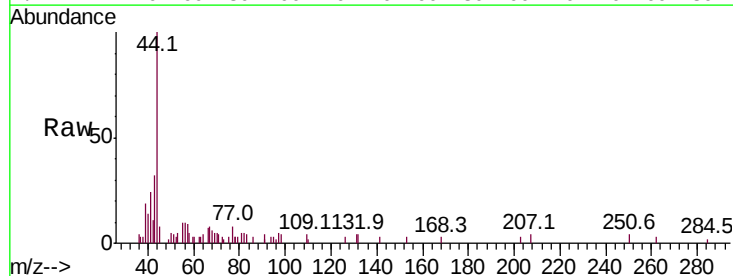
Tot Ion: 59 Resp: 489  
Ion Ratio Lower Upper  
59 100  
57 123.9 19.0 28.4#

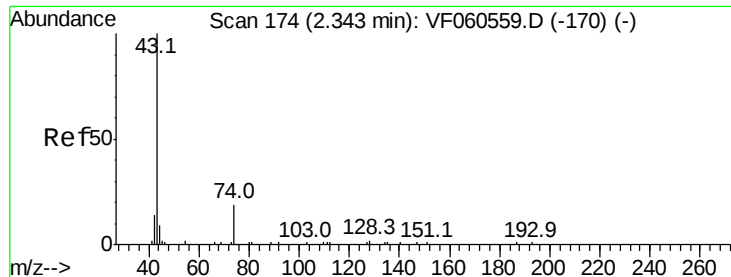


#13

Acrolein  
Concen: Below Cal  
RT: 2.02 min Scan# 141  
Delta R.T. 0.03 min  
Lab File: VF060621.D  
Acq: 6 Nov 2018 19:21

Tgt Ion: 56 Resp: 416  
Ion Ratio Lower Upper  
56 100  
55 105.5 61.8 92.6#

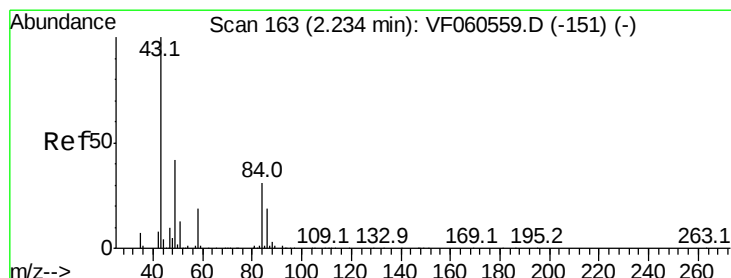
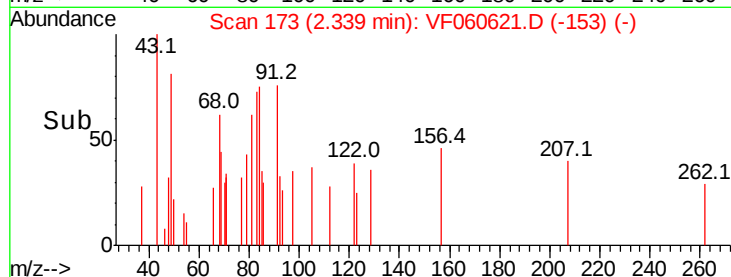
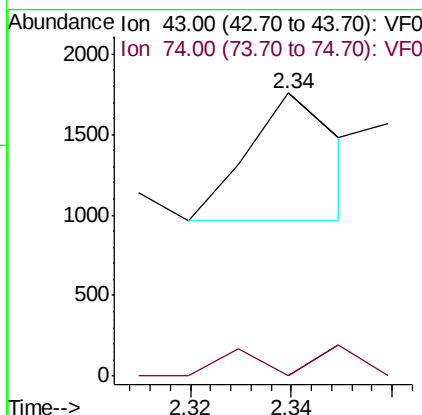
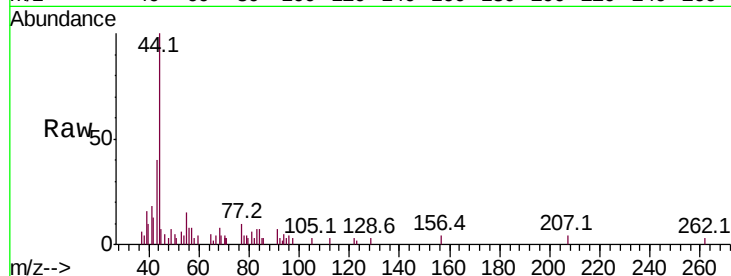




#18  
Methyl Acetate  
Concen: 1.350 ug/l  
RT: 2.34 min Scan# 173  
Delta R.T. -0.00 min  
Lab File: VF060621.D  
Acq: 6 Nov 2018 19:21

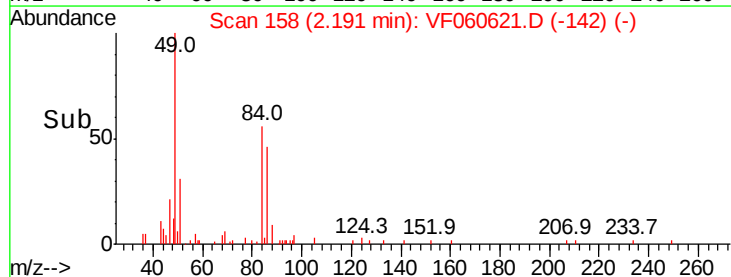
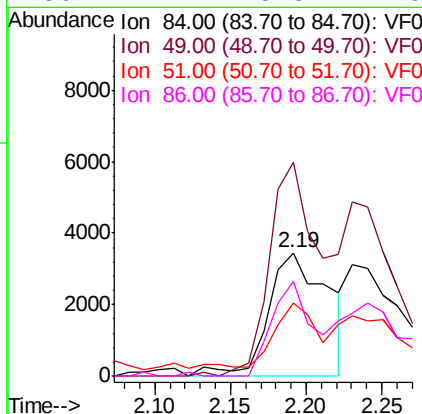
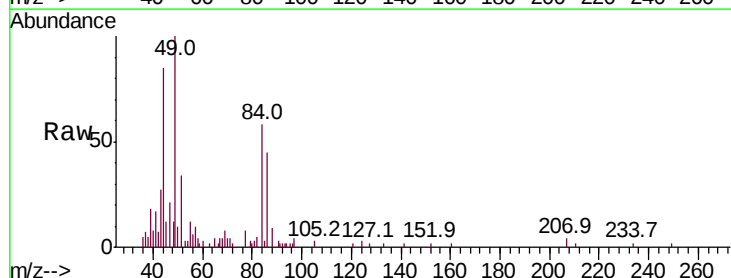
Instrument :  
MSVOA\_F  
ClientSampleId :

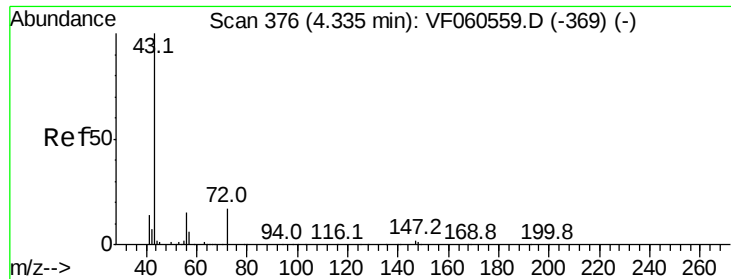
Tot Ion: 43 Resp: 976  
Ion Ratio Lower Upper  
43 100  
74 0.0 12.1 18.1#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.19 min Scan# 158  
Delta R.T. -0.04 min  
Lab File: VF060621.D  
Acq: 6 Nov 2018 19:21

Tgt Ion: 84 Resp: 9445  
Ion Ratio Lower Upper  
84 100  
49 173.7 109.9 164.9#  
51 59.1 35.8 53.8#  
86 77.4 48.3 72.5#





#25

2-Butanone

Concen: Below Cal

RT: 4.34 min Scan# 376

Delta R.T. 0.01 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

Instrument :

MSVOA\_F

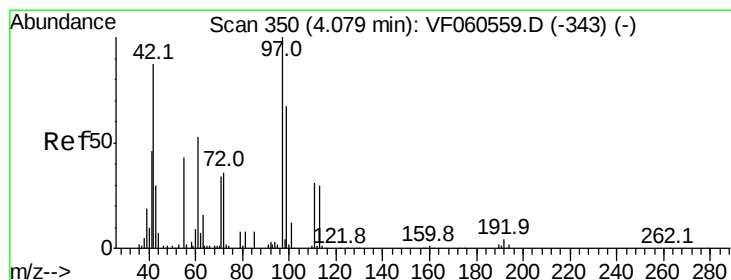
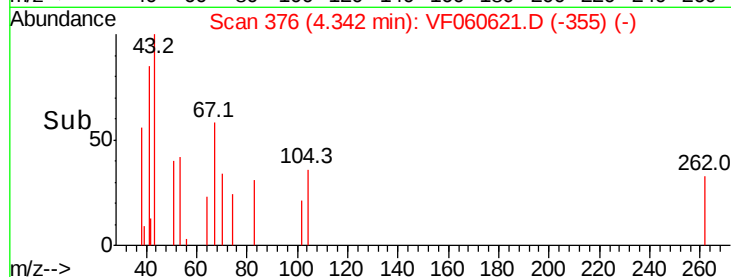
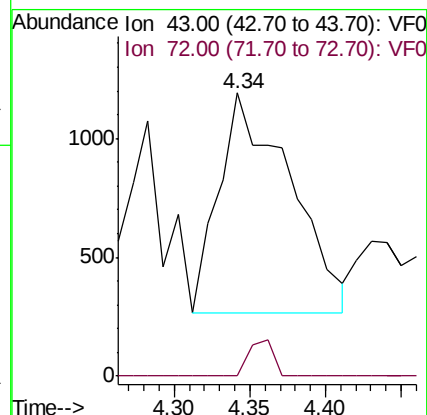
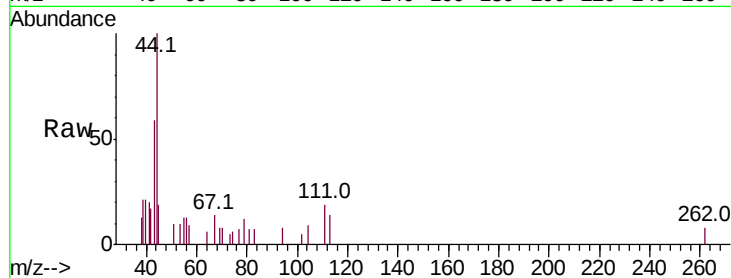
ClientSampled :

Tot Ion: 43 Resp: 3049

Ion Ratio Lower Upper

43 100

72 0.0 16.2 24.2#



#29

Tetrahydrofuran

Concen: Below Cal

RT: 4.09 min Scan# 350

Delta R.T. 0.01 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

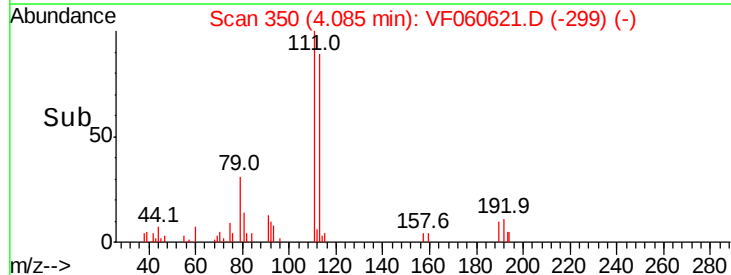
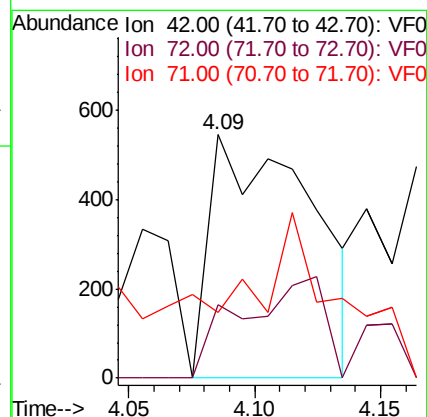
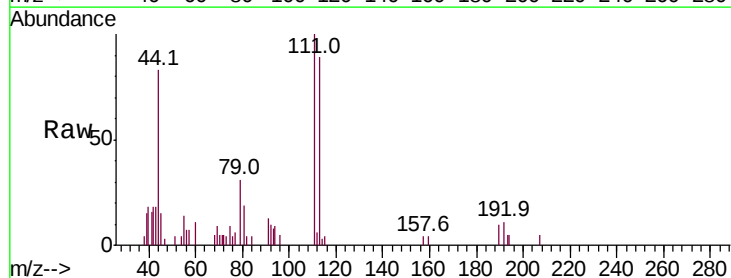
Tgt Ion: 42 Resp: 1529

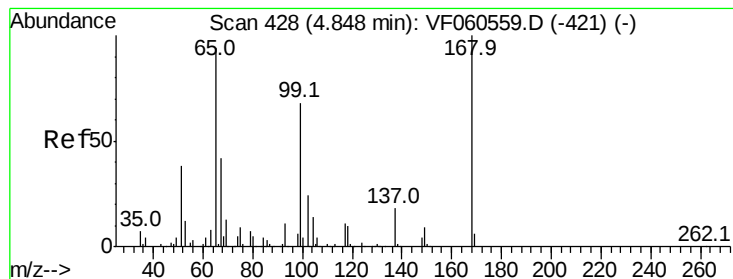
Ion Ratio Lower Upper

42 100

72 0.0 31.4 47.0#

71 0.0 31.8 47.6#





#33

1,2-Dichloroethane-d4

Concen: 56.482 ug/l

RT: 4.86 min Scan# 429

Delta R.T. 0.02 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

Instrument :

MSVOA\_F

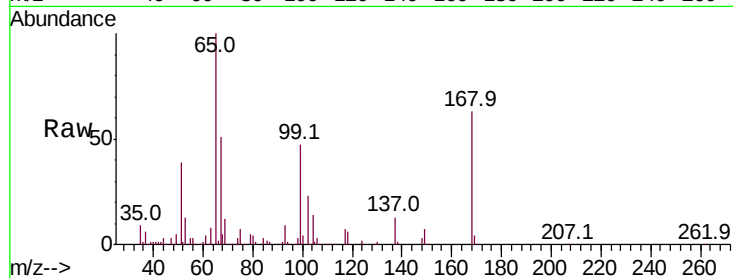
ClientSampleId :

Tot Ion: 65 Resp: 171197

Ion Ratio Lower Upper

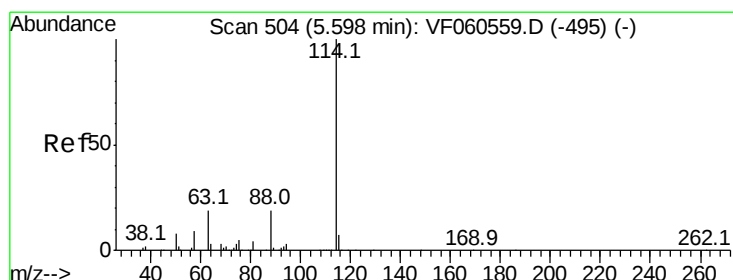
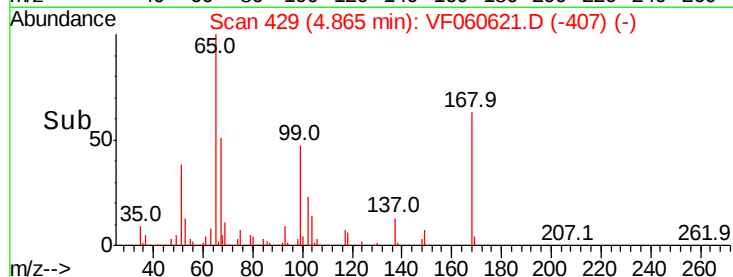
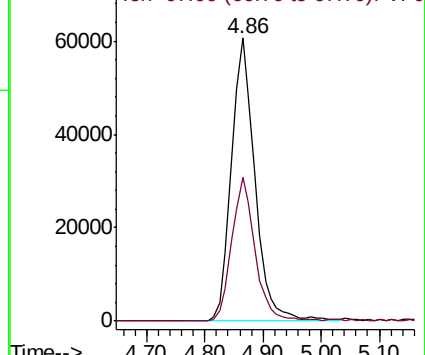
65 100

67 50.8 0.0 101.8



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: 5.61 min Scan# 505

Delta R.T. 0.02 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

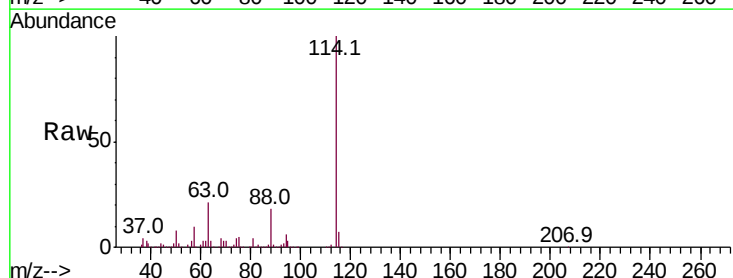
Tgt Ion: 114 Resp: 576469

Ion Ratio Lower Upper

114 100

63 20.8 0.0 39.0

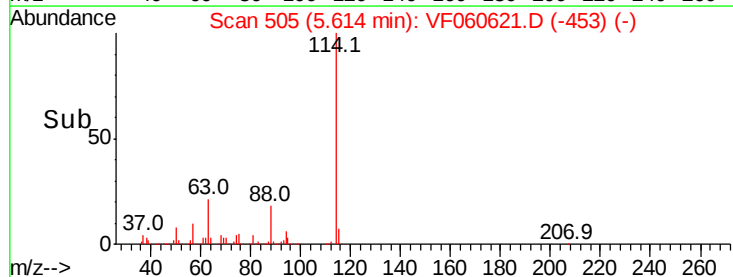
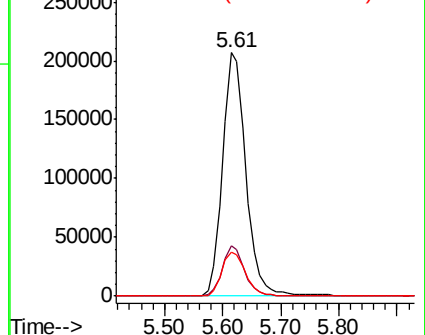
88 18.2 0.0 38.2

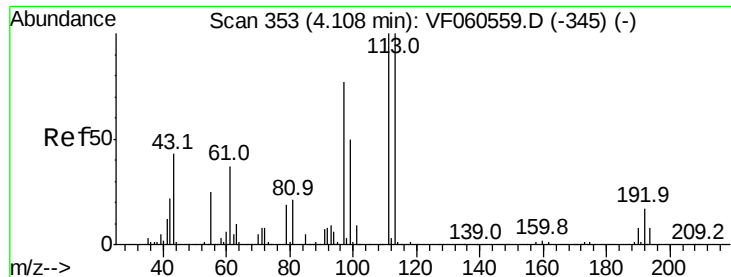


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0

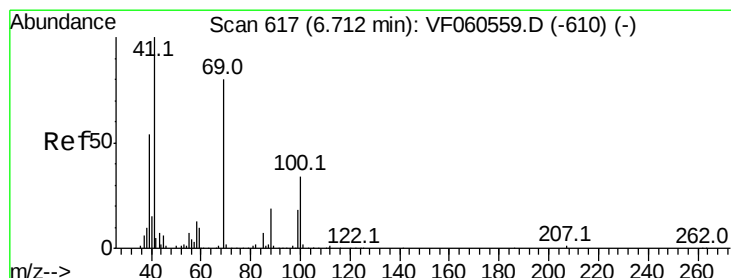
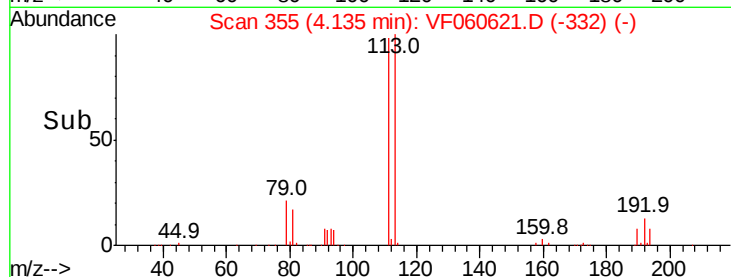
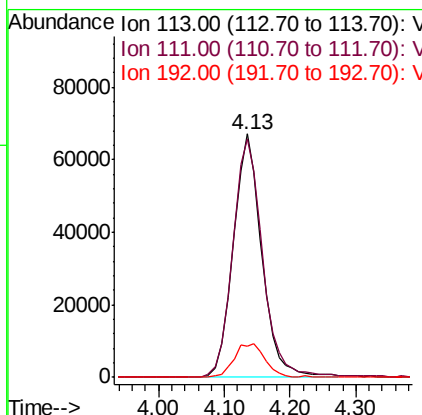
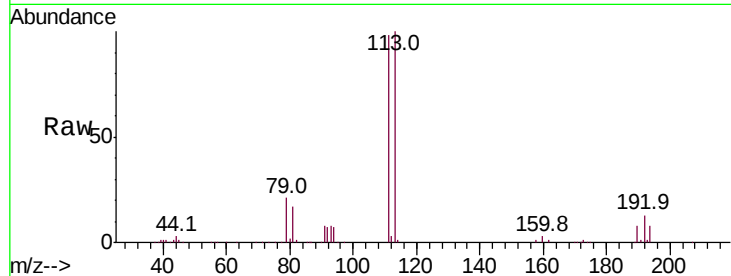




#35  
 Dibromofluoromethane  
 Concen: 45.843 ug/l  
 RT: 4.13 min Scan# 355  
 Delta R.T. 0.03 min  
 Lab File: VF060621.D  
 Acq: 6 Nov 2018 19:21

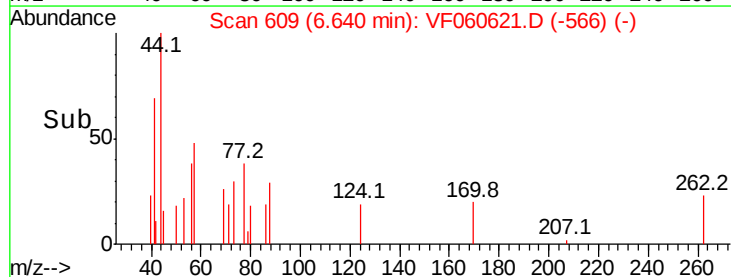
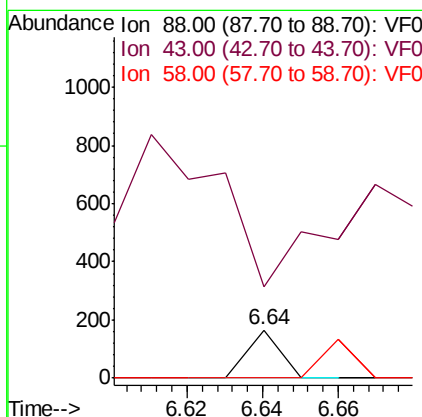
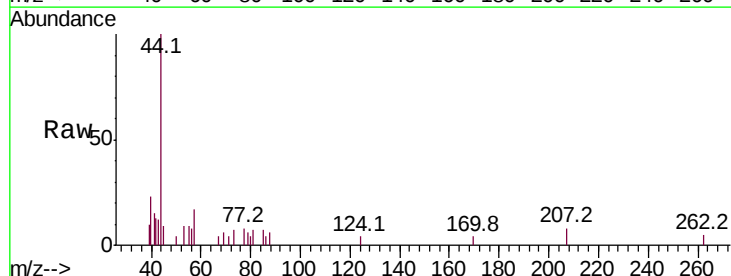
Instrument :  
 MSVOA\_F  
 ClientSampleId :

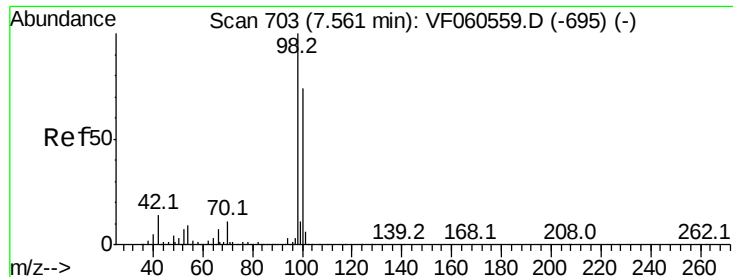
Tot Ion:113 Resp: 204173  
 Ion Ratio Lower Upper  
 113 100  
 111 98.1 79.9 119.9  
 192 13.0 13.3 19.9#



#49  
 1,4-Dioxane  
 Concen: 3.868 ug/l  
 RT: 6.64 min Scan# 609  
 Delta R.T. -0.07 min  
 Lab File: VF060621.D  
 Acq: 6 Nov 2018 19:21

Tgt Ion: 88 Resp: 98  
 Ion Ratio Lower Upper  
 88 100  
 43 189.7 61.2 91.8#  
 58 0.0 56.9 85.3#





#50

Toluene-d8

Concen: 38.856 ug/l

RT: 7.58 min Scan# 704

Delta R.T. 0.02 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

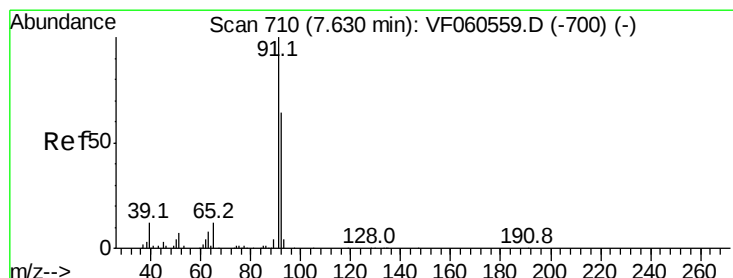
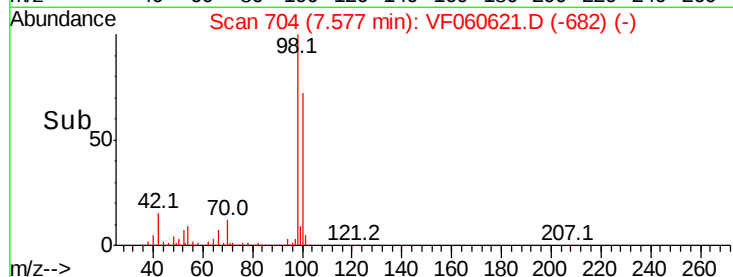
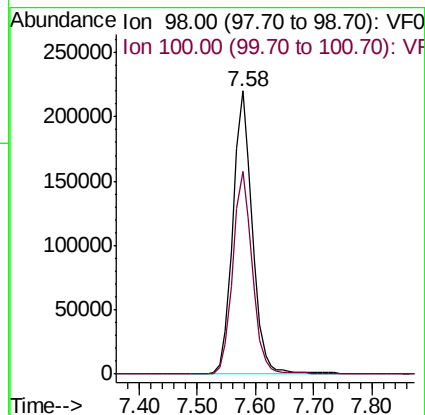
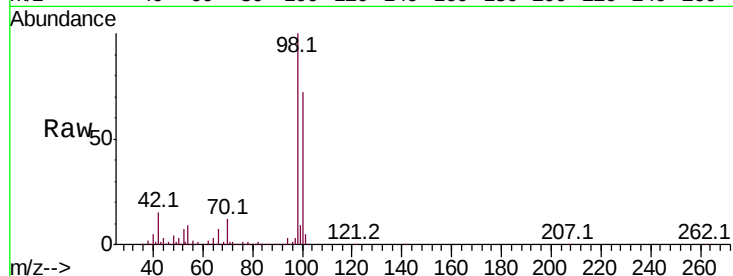
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 98 Resp: 512640

Ion Ratio Lower Upper

98 100

100 71.6 59.4 89.2



#52

Toluene

Concen: 1.048 ug/l

RT: 7.65 min Scan# 711

Delta R.T. 0.02 min

Lab File: VF060621.D

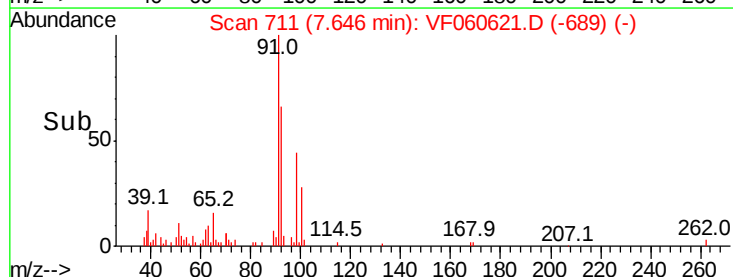
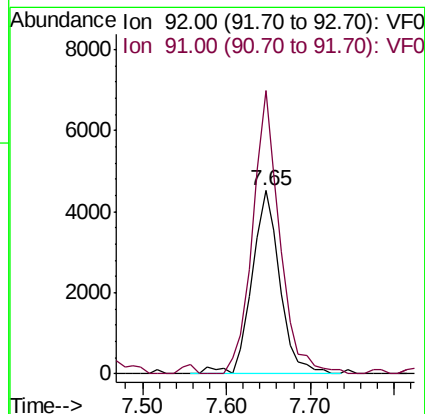
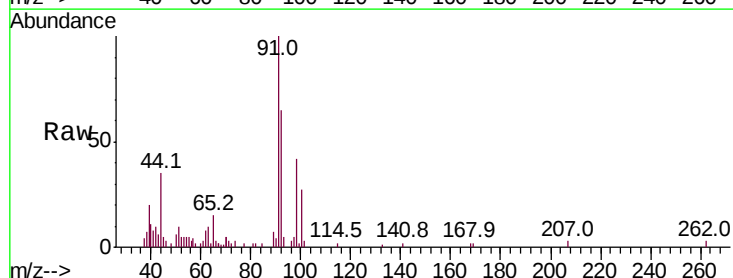
Acq: 6 Nov 2018 19:21

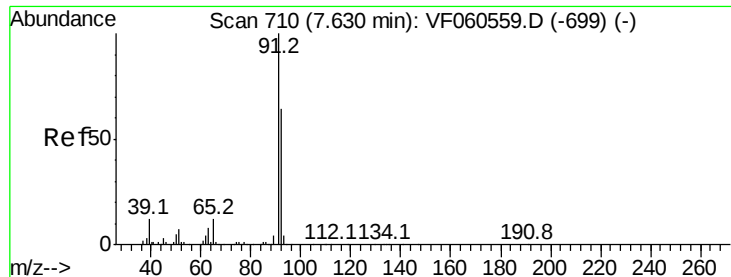
Tgt Ion: 92 Resp: 10522

Ion Ratio Lower Upper

92 100

91 154.5 124.5 186.7





#58

2-Chloroethyl Vinyl ether

Concen: Below Cal

RT: 7.66 min Scan# 712

Delta R.T. 0.03 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

Instrument :

MSVOA\_F

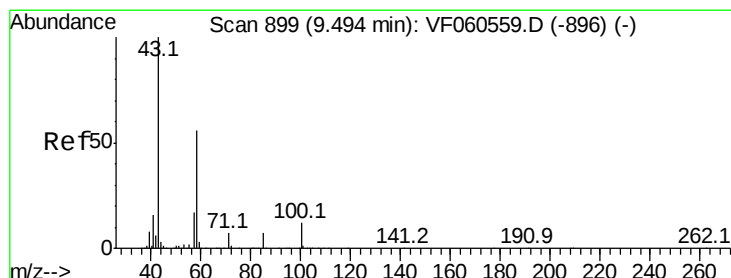
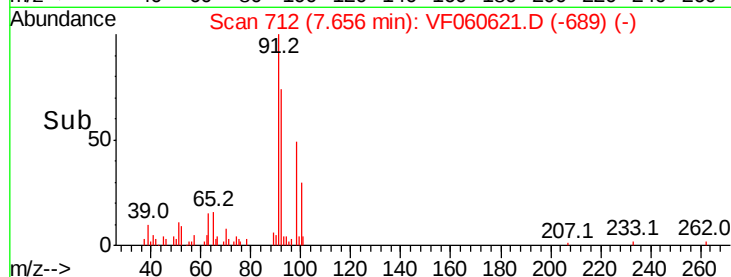
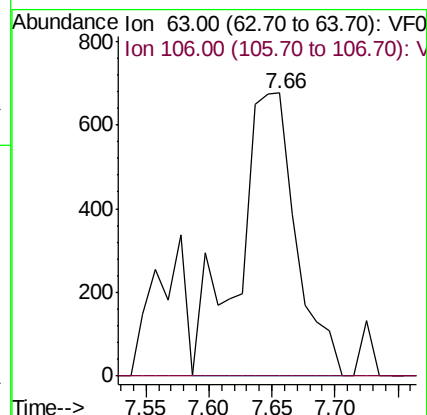
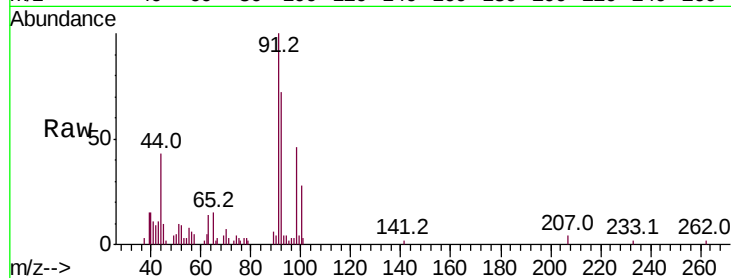
ClientSampleId :

Tot Ion: 63 Resp: 2154

Ion Ratio Lower Upper

63 100

106 0.0 0.0 0.0



#59

2-Hexanone

Concen: Below Cal

RT: 9.53 min Scan# 902

Delta R.T. 0.04 min

Lab File: VF060621.D

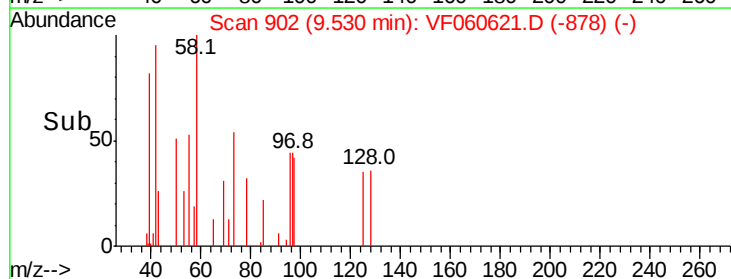
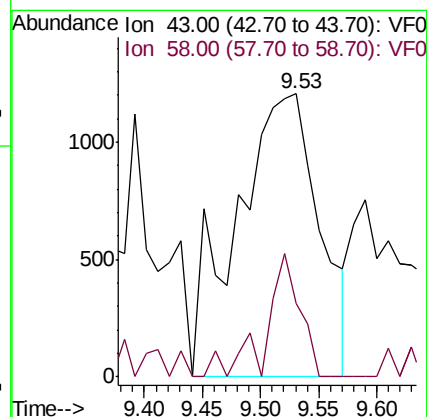
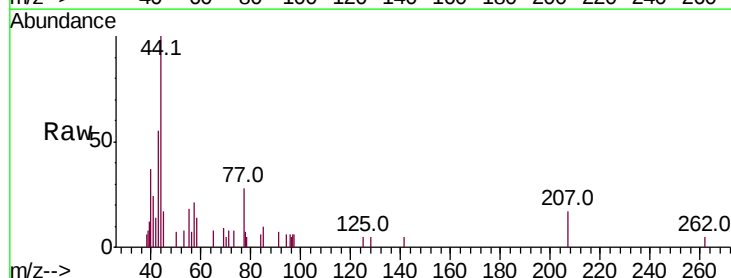
Acq: 6 Nov 2018 19:21

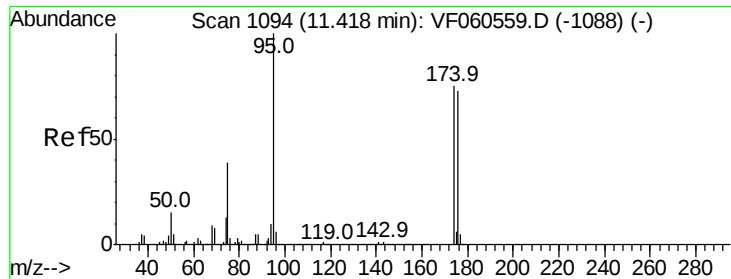
Tgt Ion: 43 Resp: 5961

Ion Ratio Lower Upper

43 100

58 26.0 26.1 78.3#

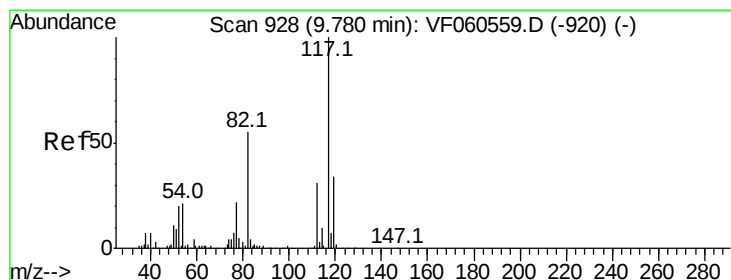
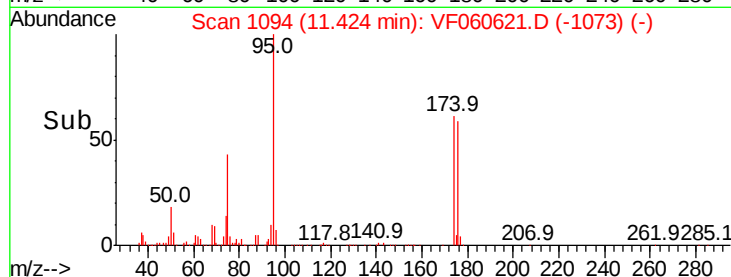
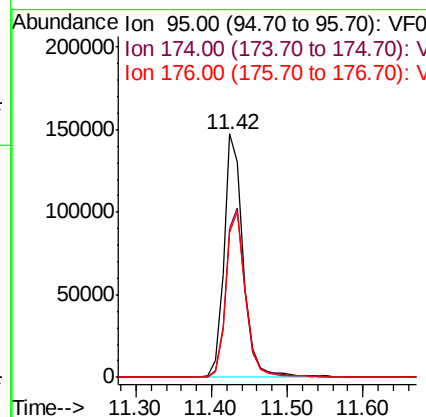
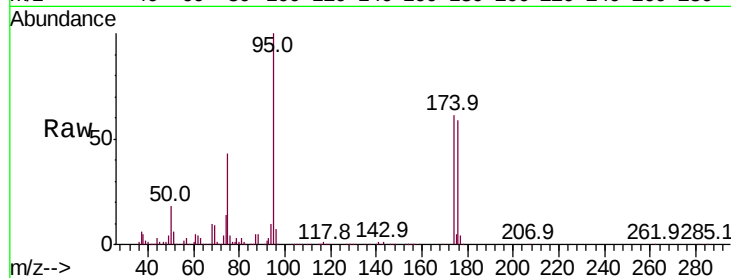




#62  
4-Bromofluorobenzene  
Concen: 45.510 ug/l  
RT: 11.42 min Scan# 1094  
Delta R.T. 0.01 min  
Lab File: VF060621.D  
Acq: 6 Nov 2018 19:21

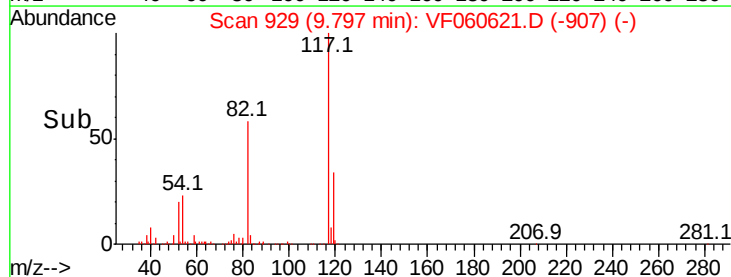
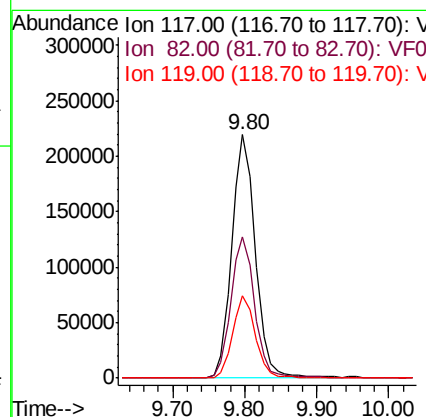
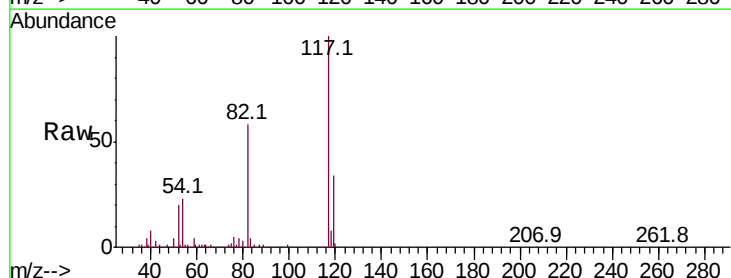
Instrument :  
MSVOA\_F  
ClientSampleId :

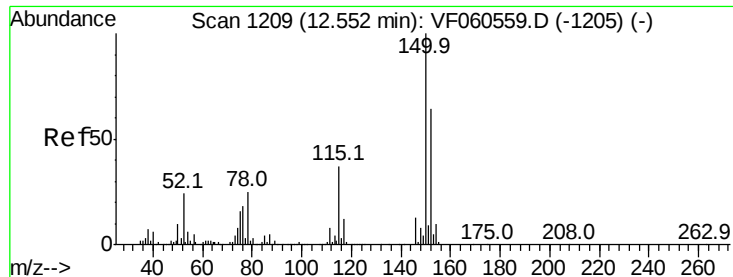
Tot Ion: 95 Resp: 262639  
Ion Ratio Lower Upper  
95 100  
174 61.1 0.0 149.0  
176 59.4 0.0 145.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.80 min Scan# 929  
Delta R.T. 0.02 min  
Lab File: VF060621.D  
Acq: 6 Nov 2018 19:21

Tgt Ion: 117 Resp: 501108  
Ion Ratio Lower Upper  
117 100  
82 58.1 43.9 65.9  
119 33.8 27.4 41.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.57 min Scan# 1210

Delta R.T. 0.02 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

Instrument :

MSVOA\_F

ClientSampleId :

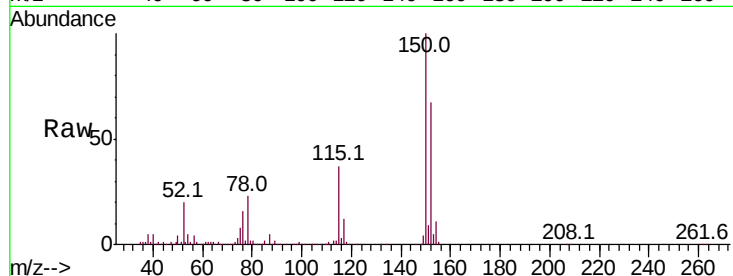
Tot Ion:152 Resp: 279920

Ion Ratio Lower Upper

152 100

115 54.8 29.6 88.8

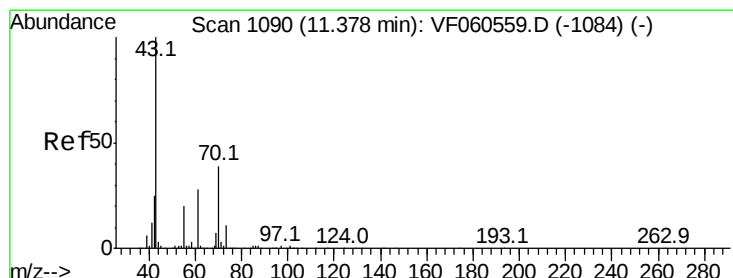
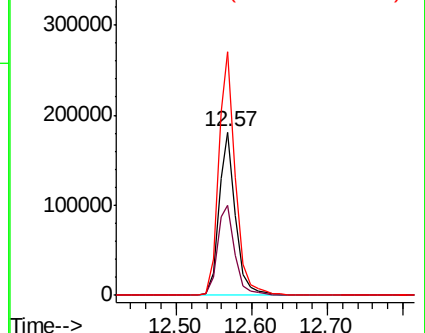
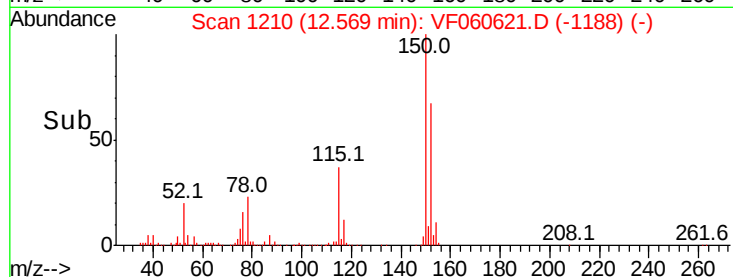
150 149.0 0.0 315.6



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



#74

N-ethyl acetate

Concen: Below Cal

RT: 11.39 min Scan# 1091

Delta R.T. 0.02 min

Lab File: VF060621.D

Acq: 6 Nov 2018 19:21

Tgt Ion: 43 Resp: 1432

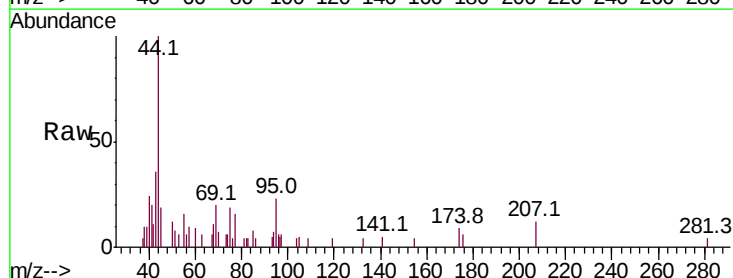
Ion Ratio Lower Upper

43 100

70 20.2 30.9 46.3#

55 44.1 16.6 24.8#

61 0.0 22.0 33.0#



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

