

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF121118\  
 Data File : VF060986.D  
 Acq On : 11 Dec 2018 19:53  
 Operator : VA/AP  
 Sample : J6214-45RE  
 Misc : 4.28g/5mL/MSVOA-F/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SB-6-(0-2)

Quant Time: Dec 12 06:29:18 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      | 4.88  | 168  | 166557   | 50.00 | ug/l  | -0.03    |
| 34) 1,4-Difluorobenzene    | 5.61  | 114  | 278750   | 50.00 | ug/l  | -0.03    |
| 63) Chlorobenzene-d5       | 9.78  | 117  | 225842   | 50.00 | ug/l  | -0.03    |
| 72) 1,4-Dichlorobenzene-d4 | 12.55 | 152  | 97204    | 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   | 108663   | 55.38 | ug/l    | -0.03    |
| Spiked Amount               |       |      | Recovery | =     | 110.76% |          |
| 35) Dibromofluoromethane    | 4.12  | 113  | 116556   | 52.71 | ug/l    | -0.03    |
| Spiked Amount               |       |      | Recovery | =     | 105.42% |          |
| 50) Toluene-d8              | 7.56  | 98   | 247971   | 38.07 | ug/l    | -0.03    |
| Spiked Amount               |       |      | Recovery | =     | 76.14%  |          |
| 62) 4-Bromofluorobenzene    | 11.42 | 95   | 108883   | 36.78 | ug/l    | -0.02    |
| Spiked Amount               |       |      | Recovery | =     | 73.56%  |          |

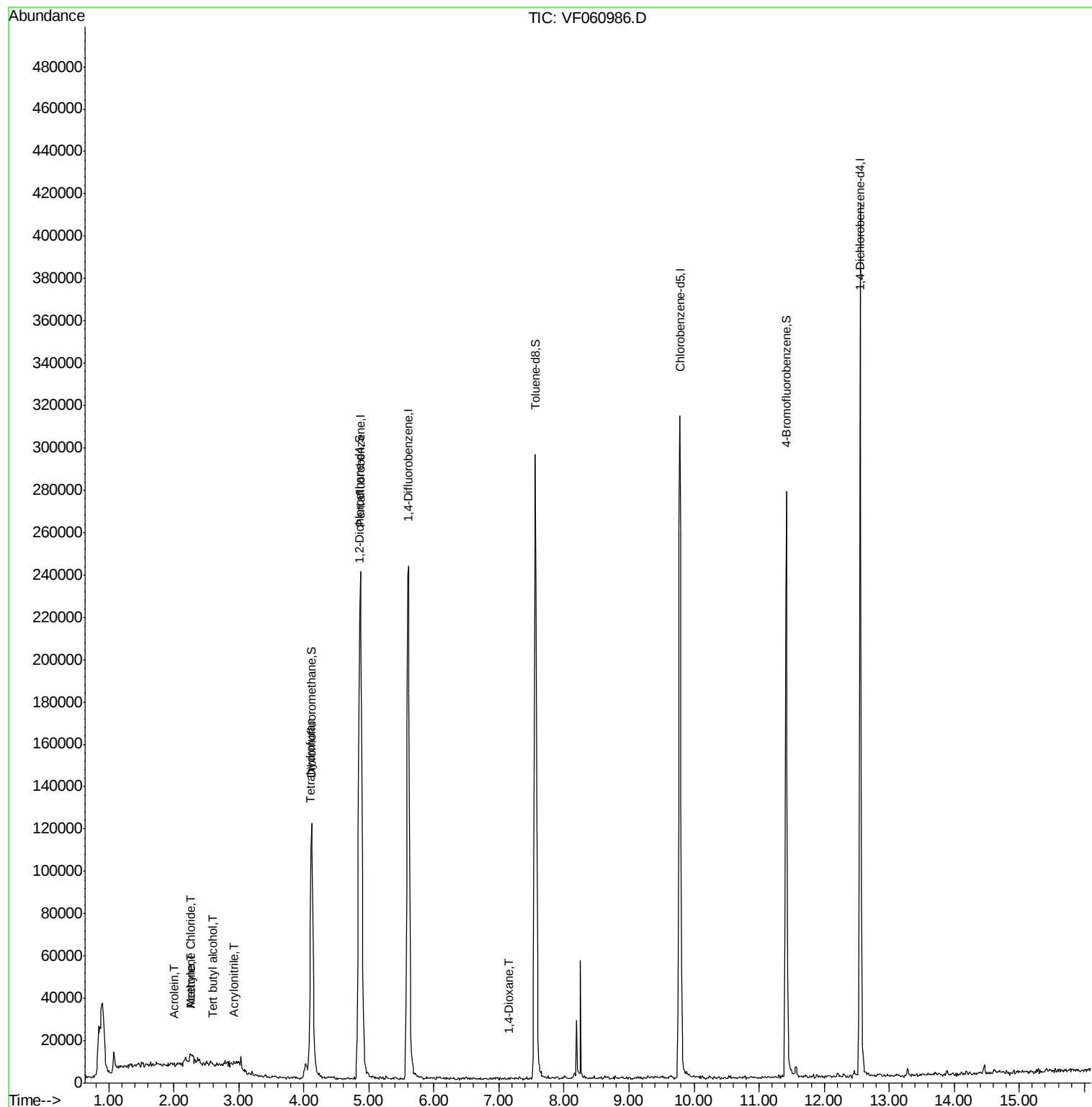
| Target Compounds       | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol | 2.59  | 59   | 83       | 1.032     | ug/l # | 1      |
| 13) Acrolein           | 2.02  | 56   | 535      | 7.020     | ug/l # | 75     |
| 15) Acrylonitrile      | 2.92  | 53   | 608      | 3.372     | ug/l # | 11     |
| 16) Acetone            | 2.25  | 43   | 1120     | 3.095     | ug/l # | 88     |
| 20) Methylene Chloride | 2.26  | 84   | 3913     | 2.948     | ug/l # | 82     |
| 29) Tetrahydrofuran    | 4.10  | 42   | 459      | 1.730     | ug/l # | 65     |
| 41) Methacrylonitrile  | 4.77  | 41   | 250      | Below Cal | #      | 51     |
| 43) Isopropyl Acetate  | 6.96  | 43   | 481      | Below Cal | #      | 49     |
| 49) 1,4-Dioxane        | 7.16  | 88   | 62       | 7.449     | ug/l # | 1      |
| 95) Naphthalene        | 14.47 | 128  | 1816     | Below Cal | #      | 84     |

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

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.88 min Scan# 431

Delta R.T. -0.03 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Instrument :

MSVOA\_F

ClientSampleId :

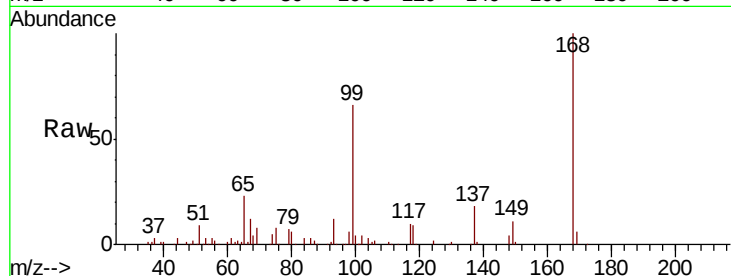
SB-6-(0-2)

Tot Ion:168 Resp: 166557

Ion Ratio Lower Upper

168 100

99 66.3 52.6 79.0



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.88

60000

50000

40000

30000

20000

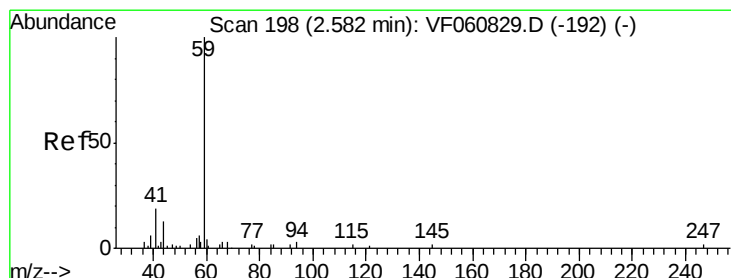
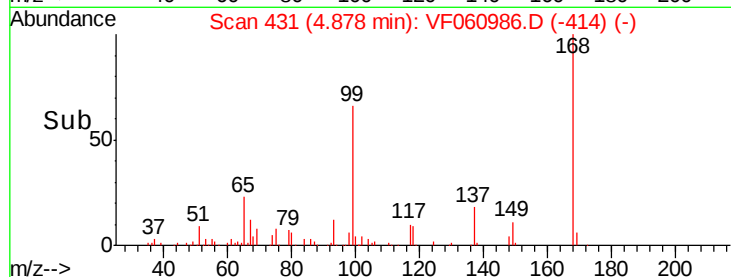
10000

0

4.80

5.00

Time-->



#11

Tert butyl alcohol

Concen: 1.032 ug/l

RT: 2.59 min Scan# 199

Delta R.T. 0.01 min

Lab File: VF060986.D

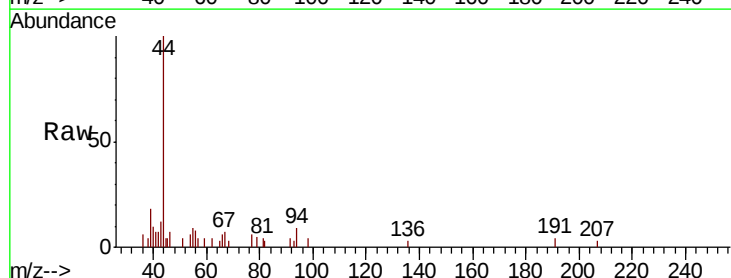
Acq: 11 Dec 2018 19:53

Tgt Ion: 59 Resp: 83

Ion Ratio Lower Upper

59 100

57 96.5 12.7 19.1#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

400

300

200

100

0

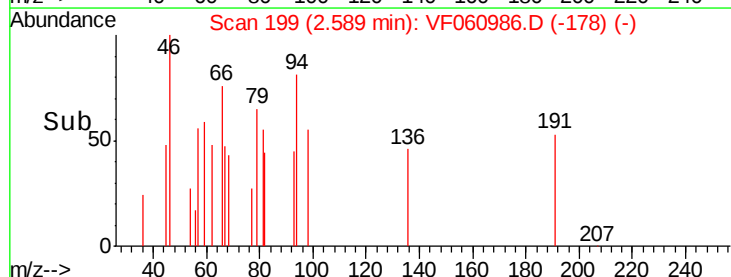
2.56

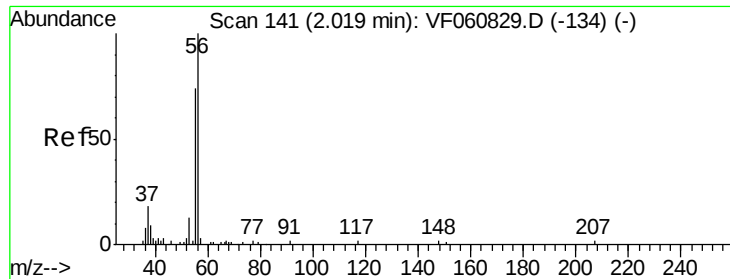
2.58

2.60

2.62

Time-->





#13

Acrolein

Concen: 7.020 ug/l

RT: 2.02 min Scan# 141

Delta R.T. -0.00 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Instrument :

MSVOA\_F

ClientSampleId :

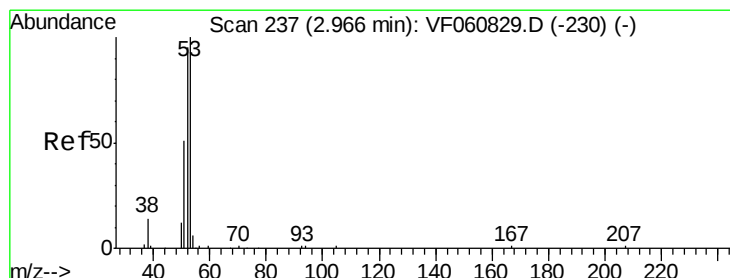
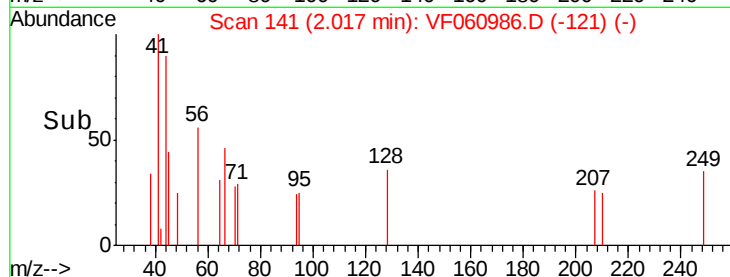
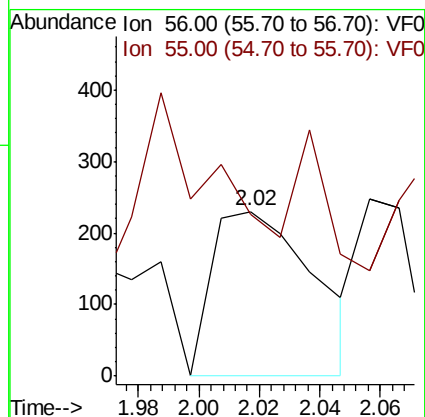
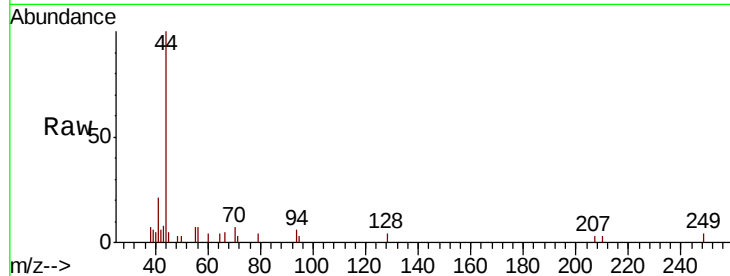
SB-6-(0-2)

Tot Ion: 56 Resp: 535

Ion Ratio Lower Upper

56 100

55 98.3 61.2 91.8#



#15

Acrylonitrile

Concen: 3.372 ug/l

RT: 2.92 min Scan# 233

Delta R.T. -0.04 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

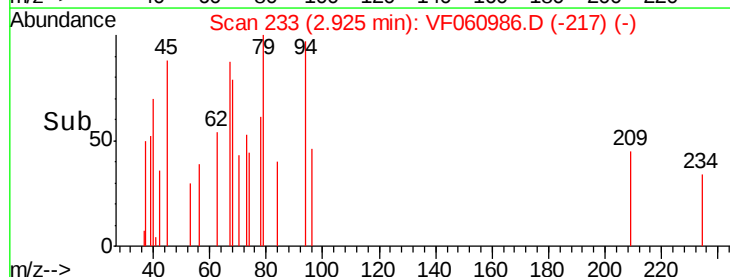
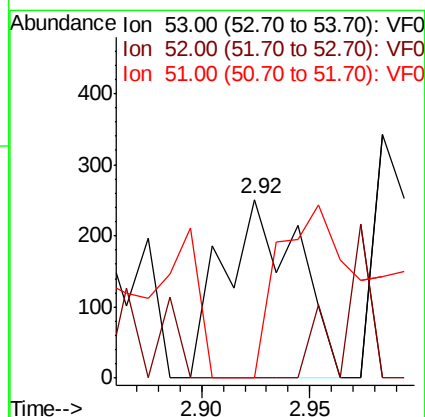
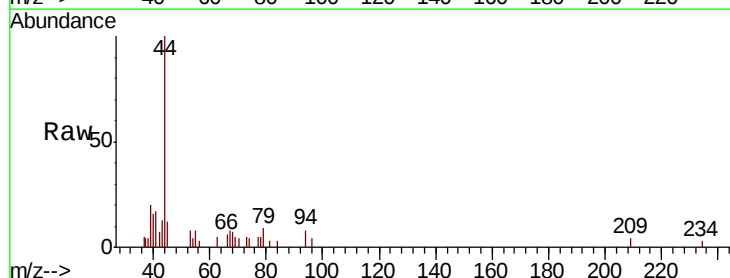
Tgt Ion: 53 Resp: 608

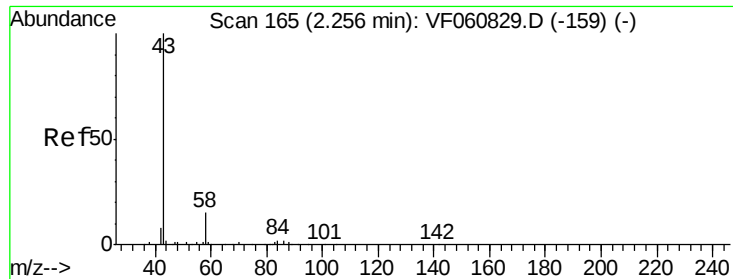
Ion Ratio Lower Upper

53 100

52 0.0 76.5 114.7#

51 0.0 40.7 61.1#





#16

Acetone

Concen: 3.095 ug/l

RT: 2.25 min Scan# 165

Delta R.T. -0.00 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Instrument :

MSVOA\_F

ClientSampleId :

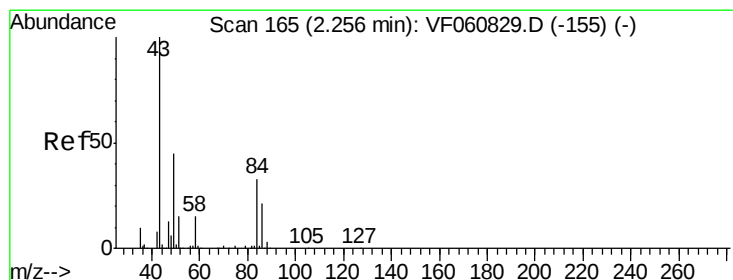
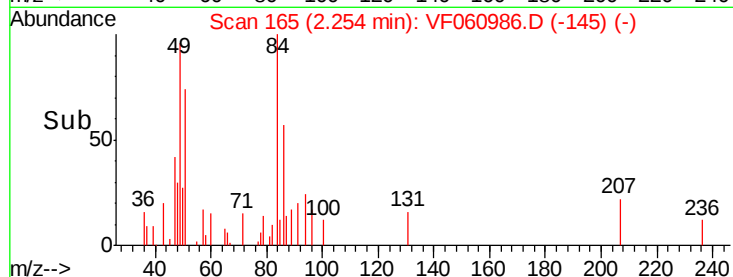
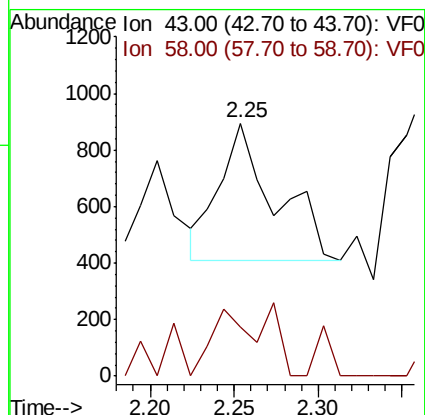
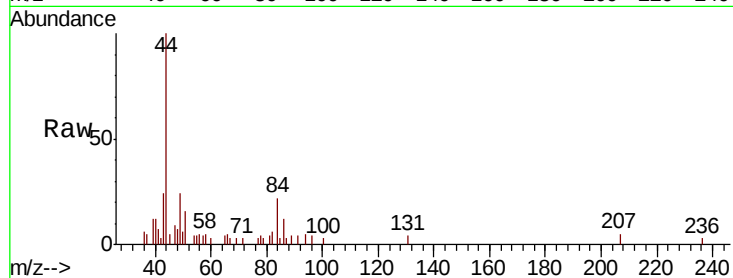
SB-6-(0-2)

Tot Ion: 43 Resp: 1120

Ion Ratio Lower Upper

43 100

58 19.3 11.4 17.2#



#20

Methylene Chloride

Concen: 2.948 ug/l

RT: 2.26 min Scan# 166

Delta R.T. 0.01 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Tgt Ion: 84 Resp: 3913

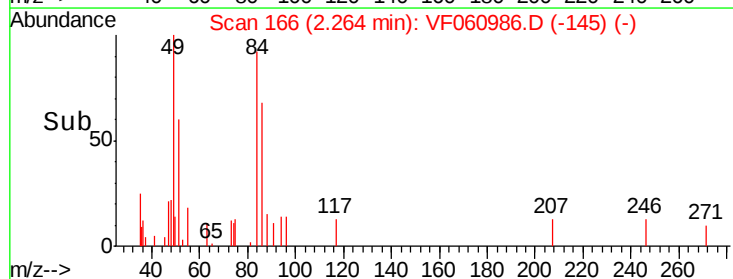
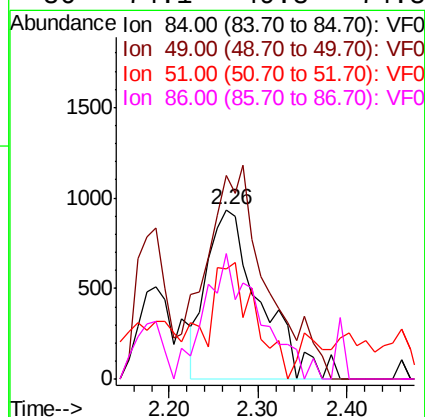
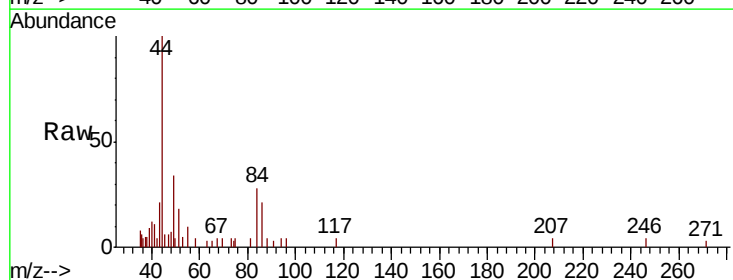
Ion Ratio Lower Upper

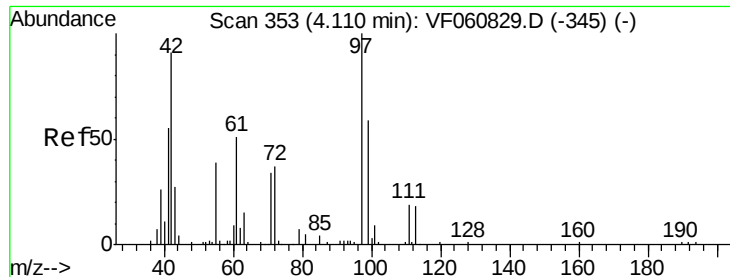
84 100

49 120.1 111.3 166.9

51 65.1 38.0 57.0#

86 74.1 49.8 74.8





#29

Tetrahydrofuran

Concen: 1.730 ug/l

RT: 4.10 min Scan# 352

Delta R.T. -0.01 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Instrument :

MSVOA\_F

ClientSampleId :

SB-6-(0-2)

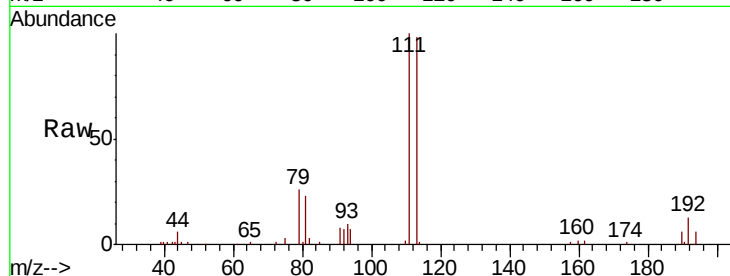
Tot Ion: 42 Resp: 459

Ion Ratio Lower Upper

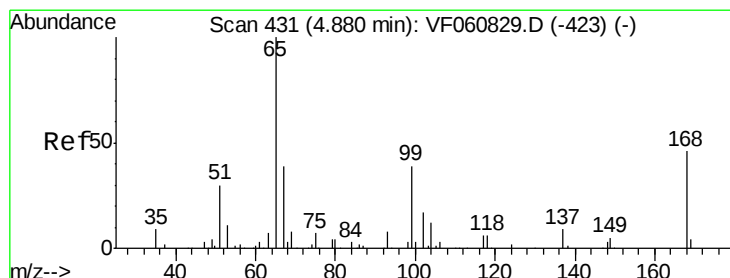
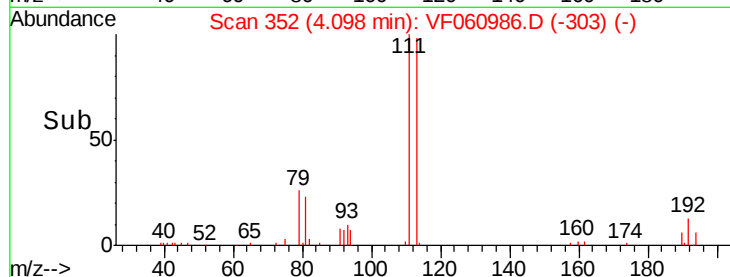
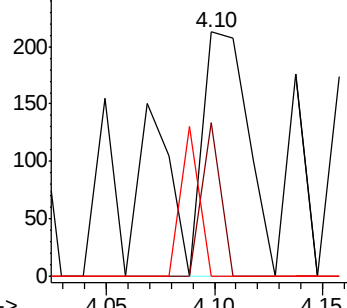
42 100

72 17.2 31.9 47.9#

71 16.8 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: 55.381 ug/l

RT: 4.85 min Scan# 428

Delta R.T. -0.03 min

Lab File: VF060986.D

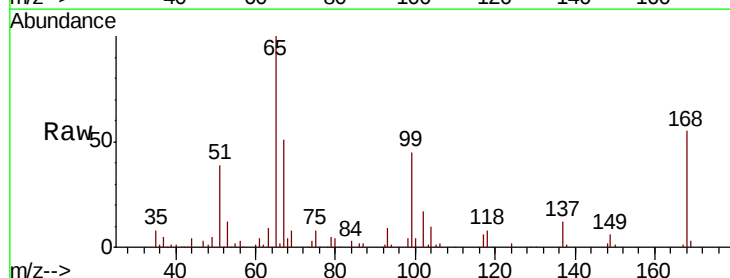
Acq: 11 Dec 2018 19:53

Tgt Ion: 65 Resp: 108663

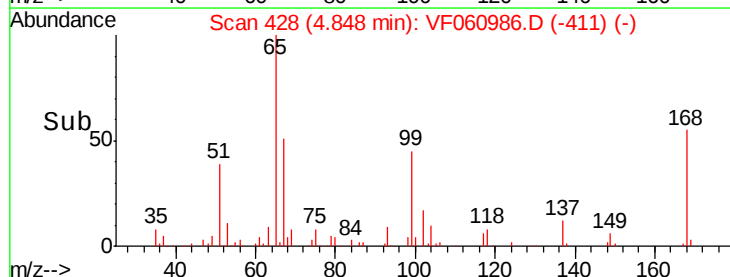
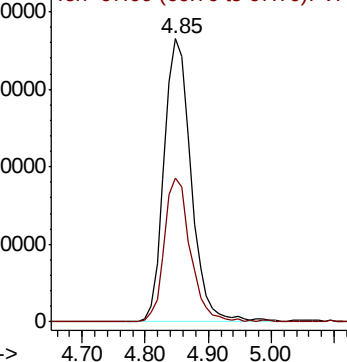
Ion Ratio Lower Upper

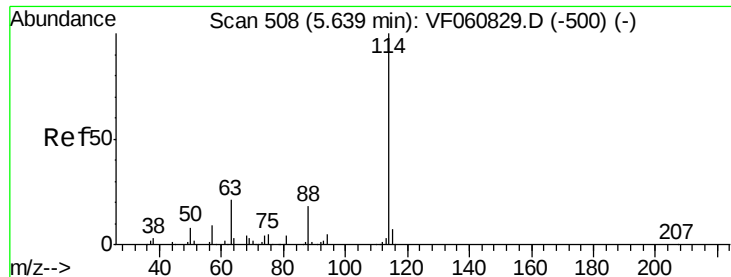
65 100

67 50.7 0.0 96.4



Abundance Ion 65.00 (64.70 to 65.70): VF0  
Ion 67.00 (66.70 to 67.70): VF0

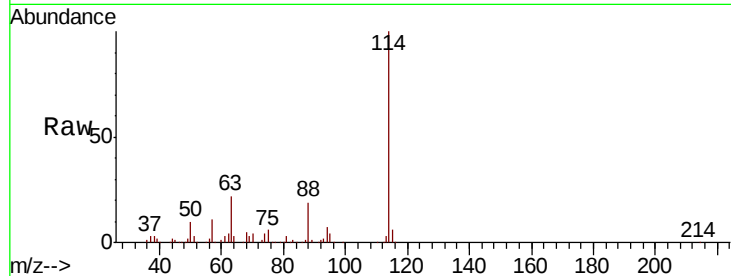




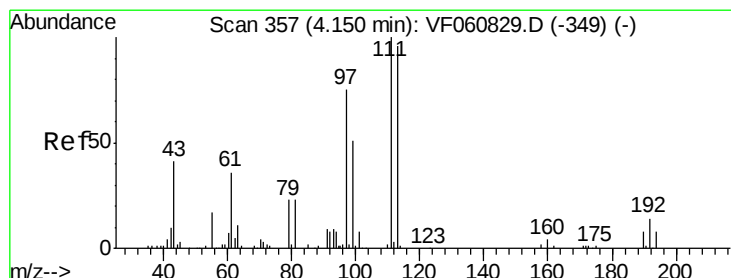
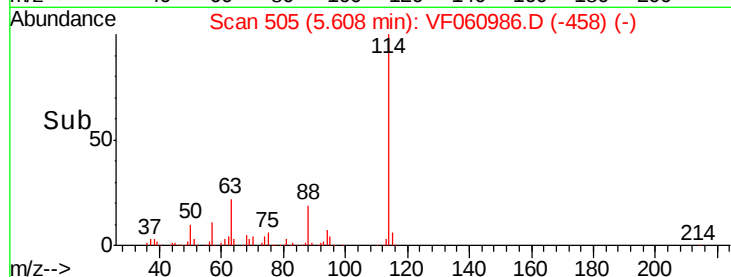
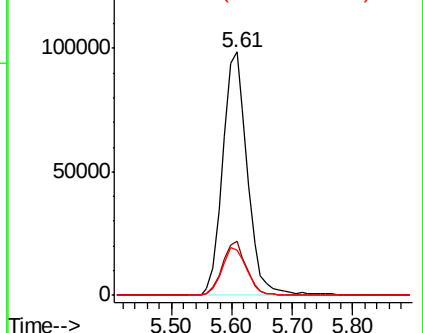
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 5.61 min Scan# 505  
Delta R.T. -0.03 min  
Lab File: VF060986.D  
Acq: 11 Dec 2018 19:53

Instrument :  
MSVOA\_F  
ClientSampleId :  
SB-6-(0-2)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 22.0  | 0.0   | 41.6  |
| 88      | 18.6  | 0.0   | 36.6  |

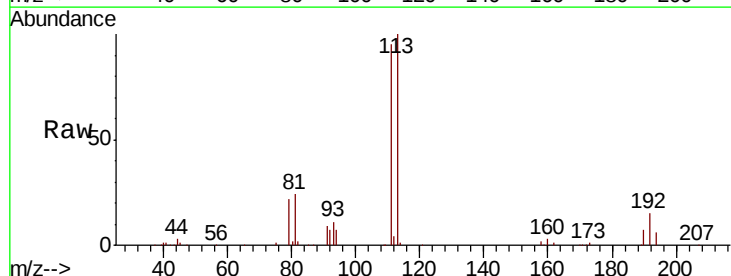


Abundance Ion 114.00 (113.70 to 114.70): V  
Ion 63.00 (62.70 to 63.70): VF0  
Ion 88.00 (87.70 to 88.70): VF0

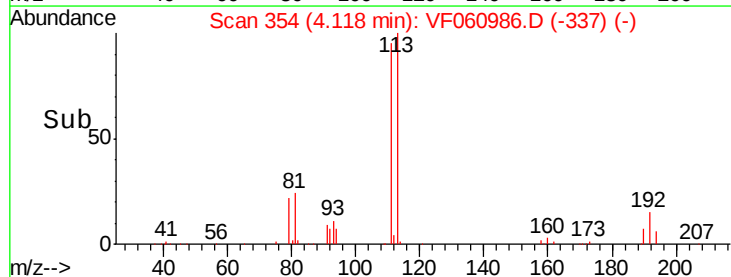
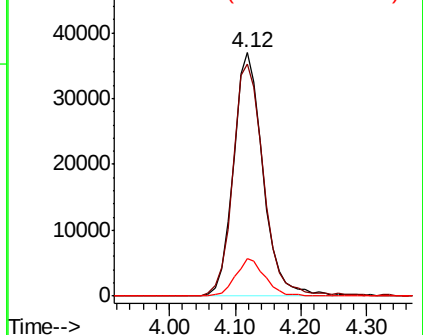


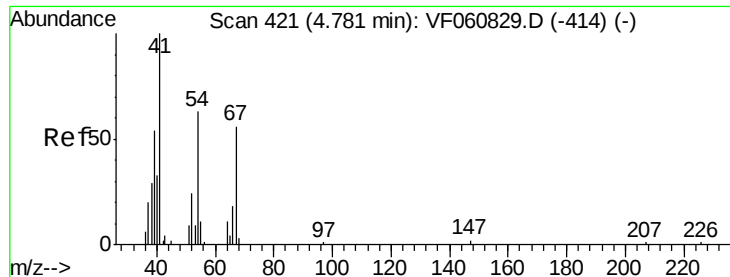
#35  
Dibromofluoromethane  
Concen: 52.707 ug/l  
RT: 4.12 min Scan# 354  
Delta R.T. -0.03 min  
Lab File: VF060986.D  
Acq: 11 Dec 2018 19:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 95.2  | 83.0  | 124.6 |
| 192     | 15.2  | 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





#41

Methacrylonitrile

Concen: Below Cal

RT: 4.77 min Scan# 420

Delta R.T. -0.01 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Instrument :

MSVOA\_F

ClientSampleId :

SB-6-(0-2)

Tot Ion: 41 Resp: 250

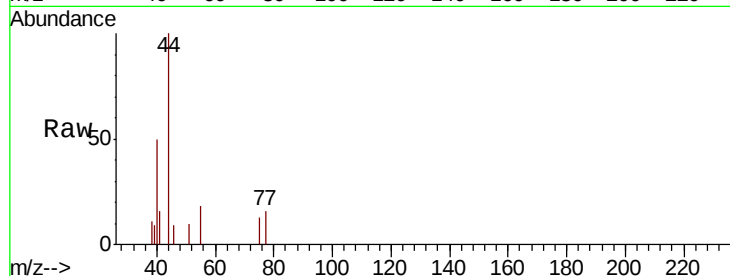
Ion Ratio Lower Upper

41 100

39 58.2 53.0 79.6

67 0.0 43.8 65.6#

52 0.0 37.8 56.8#

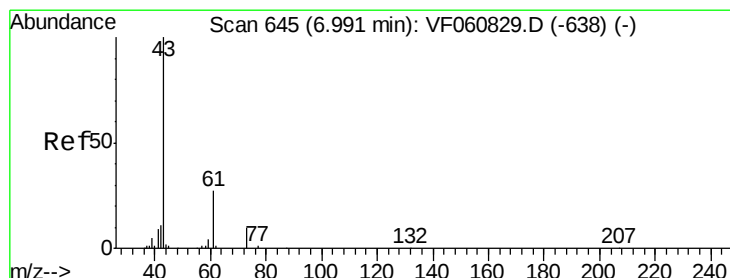
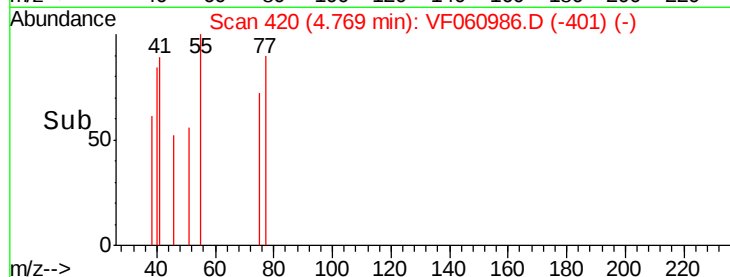
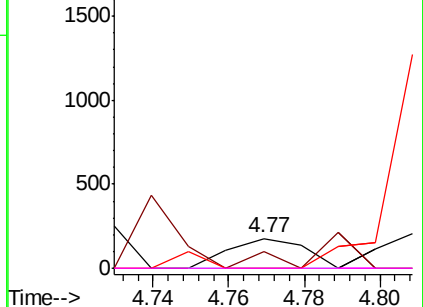


Abundance Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

Ion 67.00 (66.70 to 67.70): VF0

Ion 52.00 (51.70 to 52.70): VF0



#43

Isopropyl Acetate

Concen: Below Cal

RT: 6.96 min Scan# 642

Delta R.T. -0.03 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

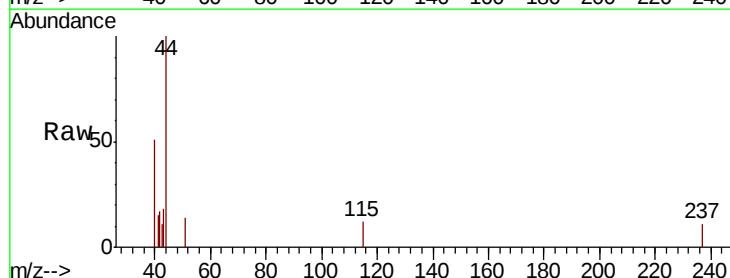
Tgt Ion: 43 Resp: 481

Ion Ratio Lower Upper

43 100

61 0.0 21.4 32.0#

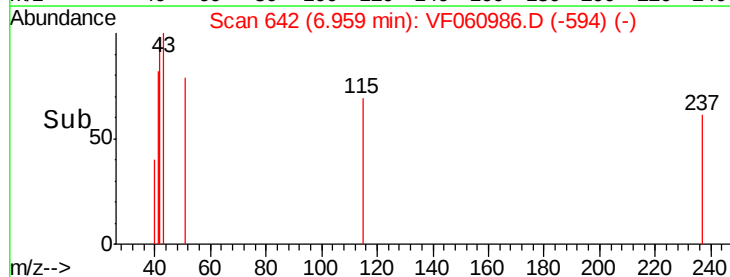
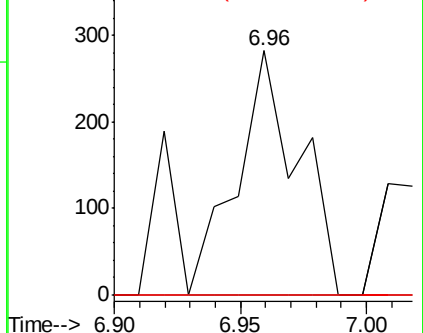
87 0.0 0.2 0.4#

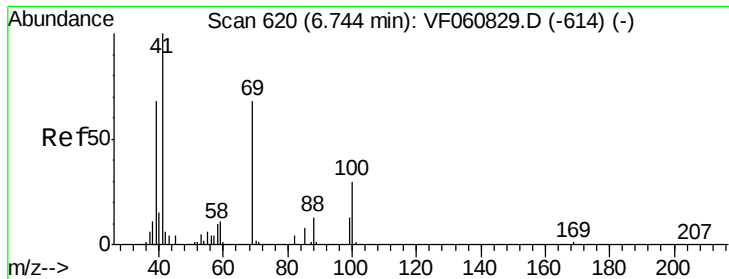


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

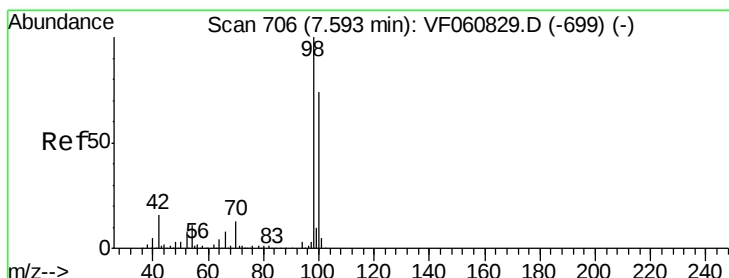
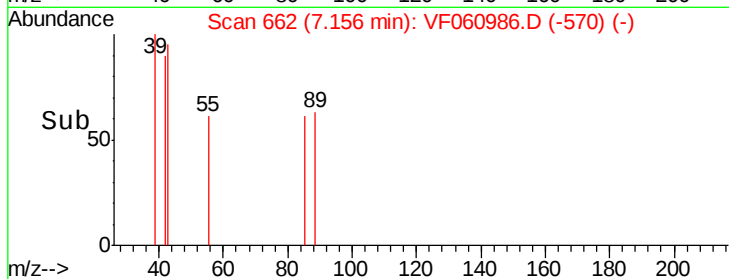
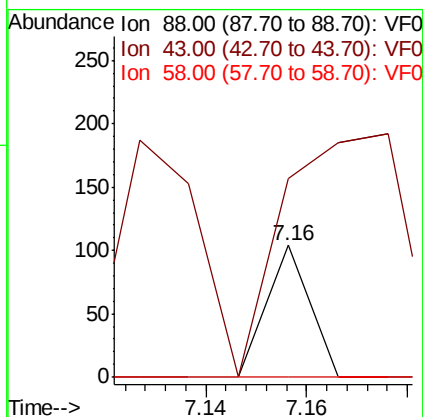
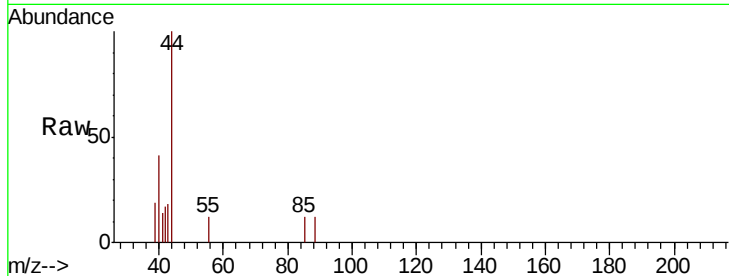




#49  
1,4-Dioxane  
Concen: 7.449 ug/l  
RT: 7.16 min Scan# 662  
Delta R.T. 0.41 min  
Lab File: VF060986.D  
Acq: 11 Dec 2018 19:53

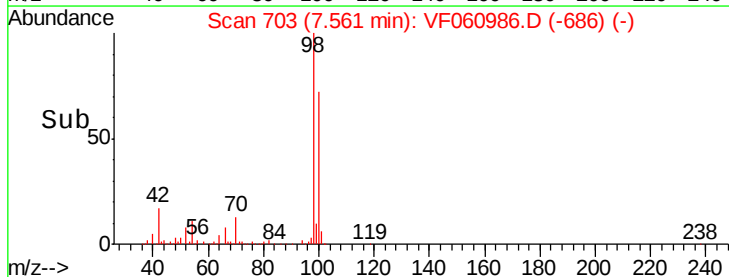
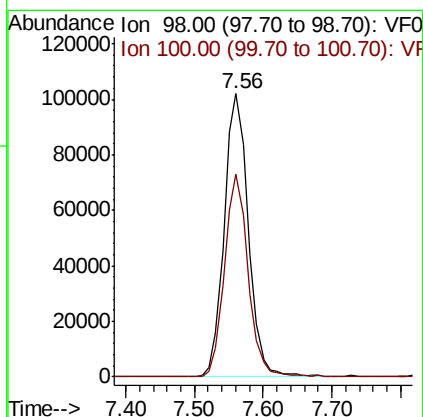
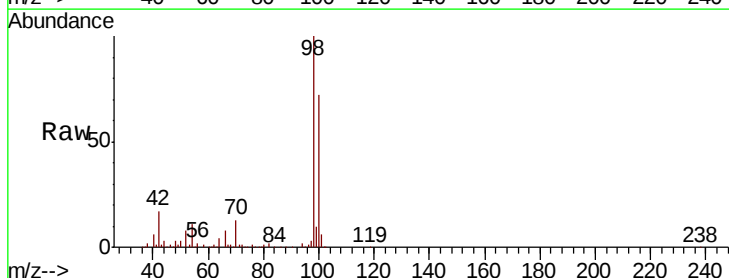
Instrument :  
MSVOA\_F  
ClientSampleId :  
SB-6-(0-2)

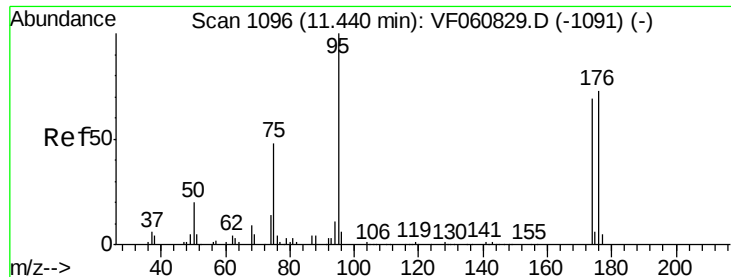
Tot Ion: 88 Resp: 62  
Ion Ratio Lower Upper  
88 100  
43 151.0 42.0 63.0#  
58 0.0 61.8 92.8#



#50  
Toluene-d8  
Concen: 38.067 ug/l  
RT: 7.56 min Scan# 703  
Delta R.T. -0.03 min  
Lab File: VF060986.D  
Acq: 11 Dec 2018 19:53

Tgt Ion: 98 Resp: 247971  
Ion Ratio Lower Upper  
98 100  
100 71.8 59.3 88.9





#62

4-Bromofluorobenzene

Concen: 36.778 ug/l

RT: 11.42 min Scan# 1094

Delta R.T. -0.02 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

Instrument :

MSVOA\_F

ClientSampleId :

SB-6-(0-2)

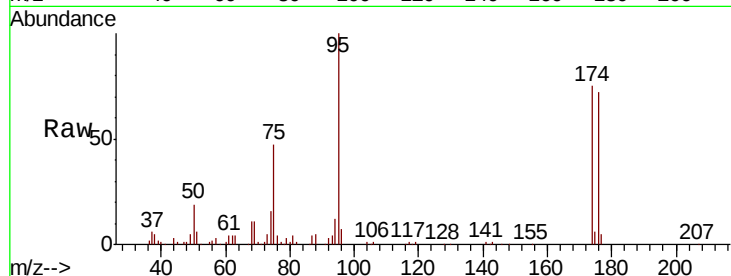
Tot Ion: 95 Resp: 108883

Ion Ratio Lower Upper

95 100

174 75.3 0.0 138.2

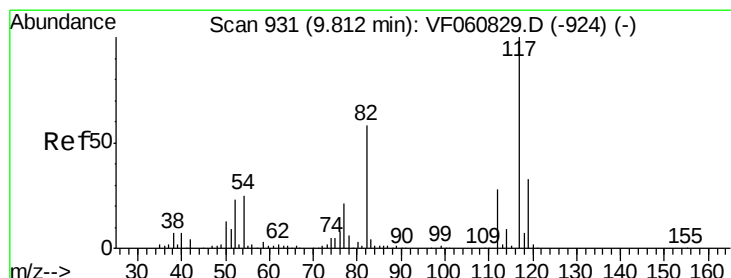
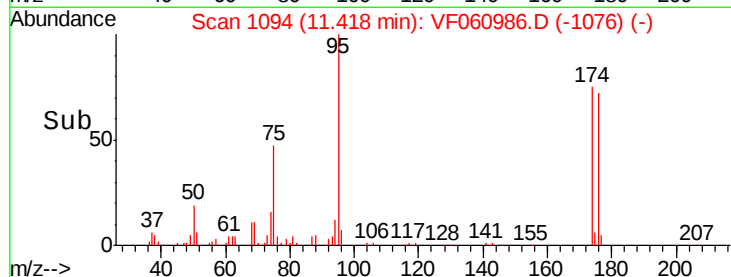
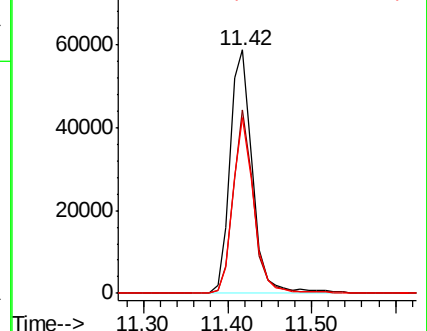
176 72.1 0.0 146.2



Abundance Ion 95.00 (94.70 to 95.70): VF060829.D (-1091) (-)

Ion 174.00 (173.70 to 174.70): VF060829.D (-1091) (-)

Ion 176.00 (175.70 to 176.70): VF060829.D (-1091) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.78 min Scan# 928

Delta R.T. -0.03 min

Lab File: VF060986.D

Acq: 11 Dec 2018 19:53

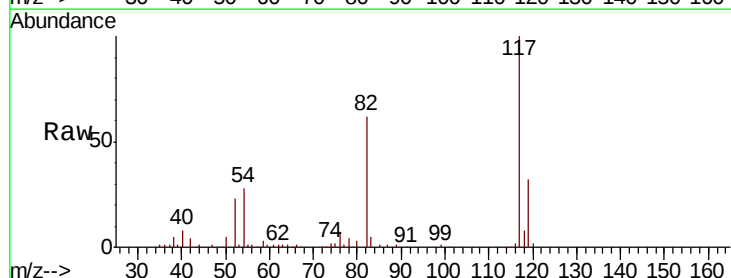
Tgt Ion: 117 Resp: 225842

Ion Ratio Lower Upper

117 100

82 62.5 46.6 69.8

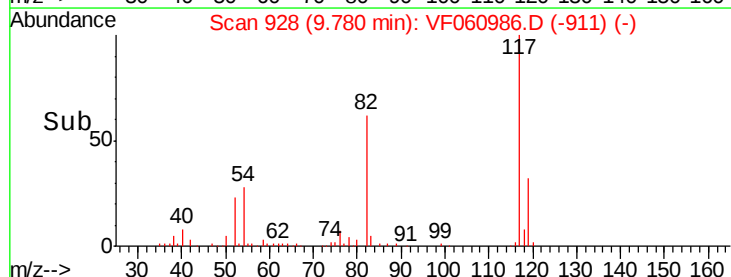
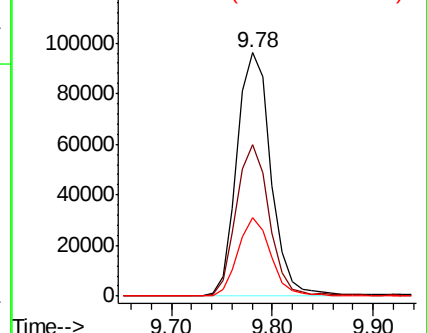
119 32.1 26.4 39.6

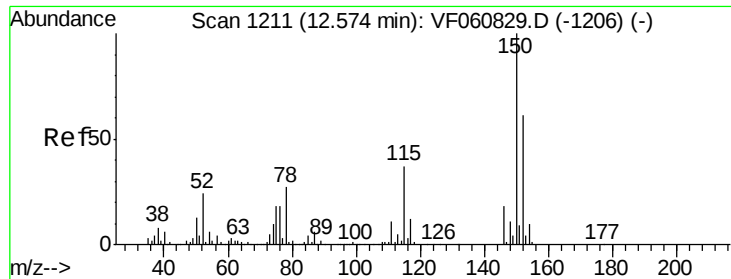


Abundance Ion 117.00 (116.70 to 117.70): VF060829.D (-924) (-)

Ion 82.00 (81.70 to 82.70): VF060829.D (-924) (-)

Ion 119.00 (118.70 to 119.70): VF060829.D (-924) (-)



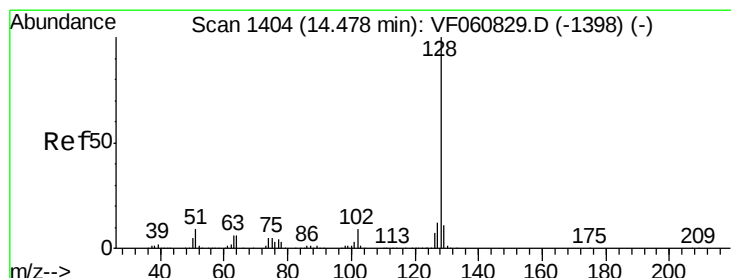
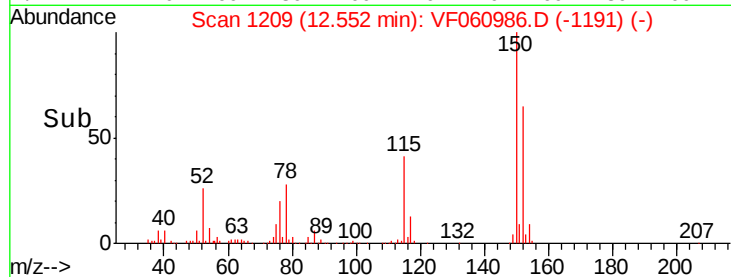
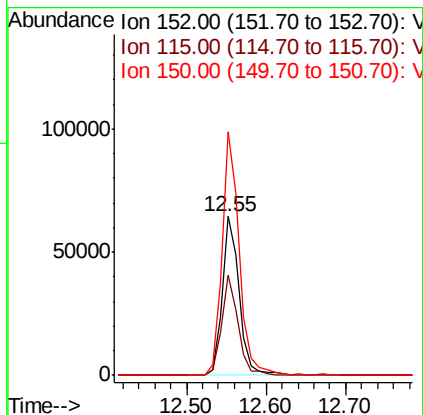
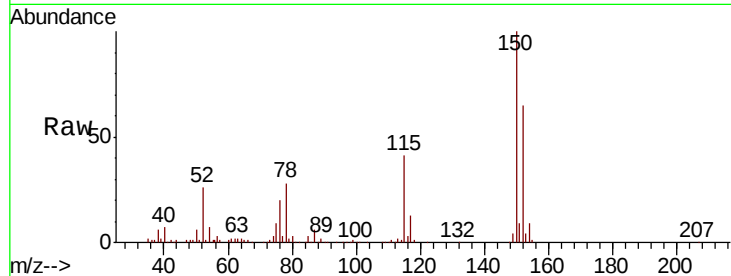


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.55 min Scan# 1209  
Delta R.T. -0.02 min  
Lab File: VF060986.D  
Acq: 11 Dec 2018 19:53

Instrument :  
MSVOA\_F  
ClientSampled :  
SB-6-(0-2)

Tot Ion:152 Resp: 97204  
Ion Ratio Lower Upper  
152 100  
115 63.4 30.1 90.5  
150 153.5 0.0 327.6



#95

Naphthalene  
Concen: Below Cal  
RT: 14.47 min Scan# 1403  
Delta R.T. -0.01 min  
Lab File: VF060986.D  
Acq: 11 Dec 2018 19:53

Tgt Ion:128 Resp: 1816  
Ion Ratio Lower Upper  
128 100  
127 9.2 9.9 14.9#  
129 20.5 9.1 13.7#

