

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF122418\  
 Data File : VF061164.D  
 Acq On : 24 Dec 2018 14:43  
 Operator : VA/AP  
 Sample : J6461-01RE  
 Misc : 5.13g/5mL/MSVOA-F/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Dec 24 23:47:46 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 00:56:59 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.87  | 168  | 207291   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.60  | 114  | 367306   | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 9.78  | 117  | 305070   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.56 | 152  | 130750   | 50.00 | ug/l  | 0.01     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.85  | 65   | 143476   | 53.81 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.62% |          |
| 35) Dibromofluoromethane    | 4.12  | 113  | 146032   | 49.63 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.26%  |          |
| 50) Toluene-d8              | 7.56  | 98   | 338790   | 40.63 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 81.26%  |          |
| 62) 4-Bromofluorobenzene    | 11.41 | 95   | 142332   | 37.03 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 74.06%  |          |

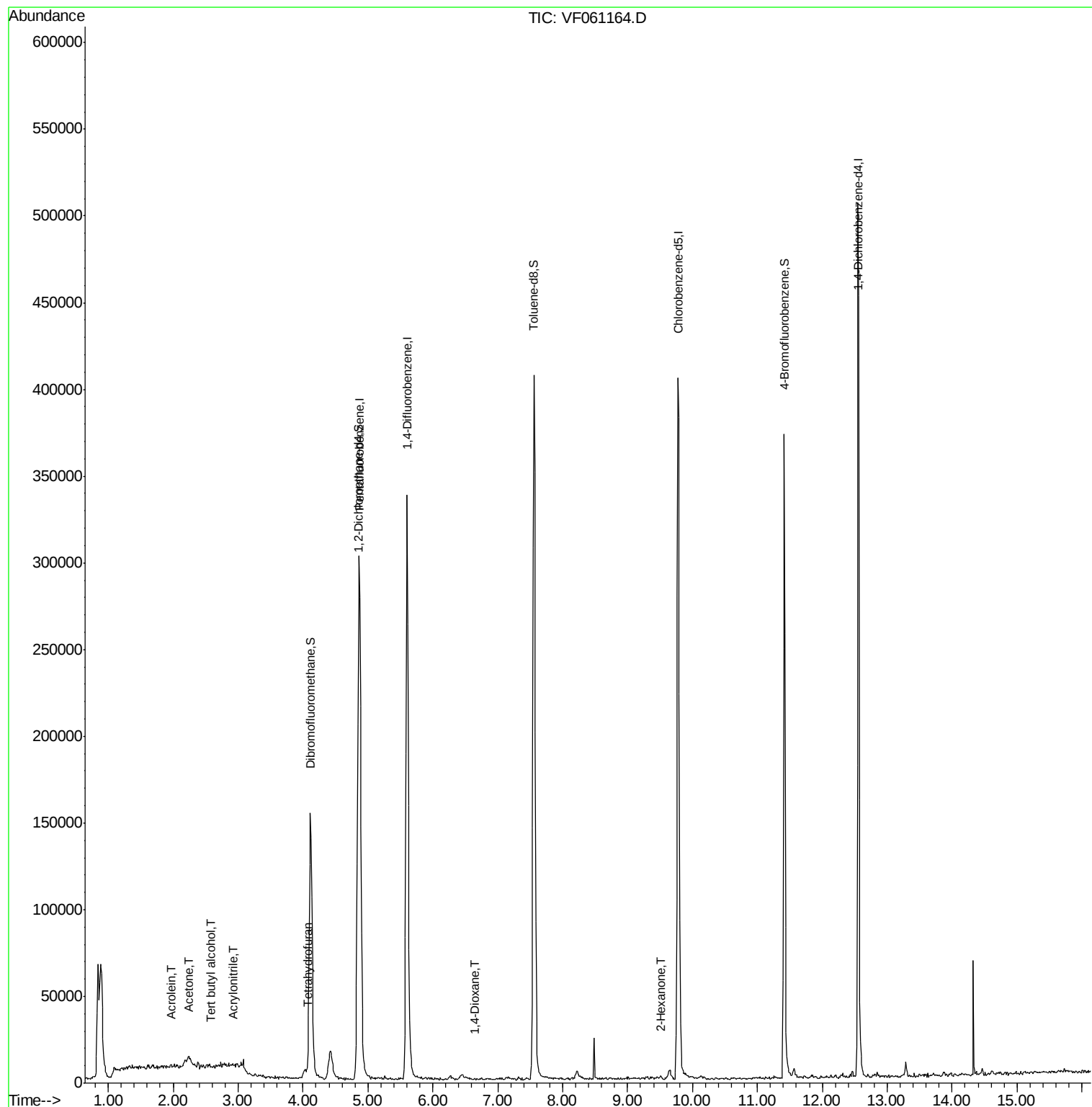
| Target Compounds        | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol  | 2.59  | 59   | 135      | 1.255     | ug/l # | 65     |
| 13) Acrolein            | 1.98  | 56   | 333      | 4.283     | ug/l # | 50     |
| 15) Acrylonitrile       | 2.93  | 53   | 494      | 1.986     | ug/l # | 66     |
| 16) Acetone             | 2.24  | 43   | 1776     | 3.332     | ug/l # | 90     |
| 20) Methylene Chloride  | 2.25  | 84   | 3684     | Below Cal |        | 88     |
| 29) Tetrahydrofuran     | 4.07  | 42   | 498      | 1.415     | ug/l # | 37     |
| 49) 1,4-Dioxane         | 6.64  | 88   | 66       | 6.086     | ug/l # | 23     |
| 59) 2-Hexanone          | 9.51  | 43   | 1696     | 1.597     | ug/l   | 72     |
| 70) Styrene             | 10.78 | 104  | 136      | Below Cal | #      | 30     |
| 78) n-propylbenzene     | 11.60 | 91   | 794      | Below Cal |        | 97     |
| 87) 1,3-Dichlorobenzene | 12.47 | 146  | 176      | Below Cal | #      | 43     |

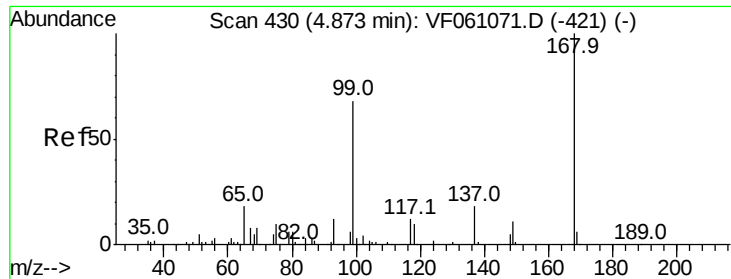
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF122418\  
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Instrument :  
MSVOA\_F  
ClientSampleId :

Quant Time: Dec 24 23:47:46 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 00:56:59 2018  
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: VF061164.D

Acq: 24 Dec 2018 14:43

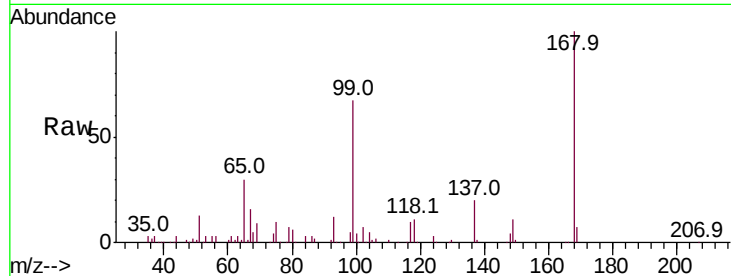
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion:168 Resp: 207291

Ion Ratio Lower Upper

168 100

99 66.6 54.4 81.6



Abundance Ion 168.00 (167.70 to 168.70): VF061071.D (-421) (-)

Ion 99.00 (98.70 to 99.70): VF061071.D (-421) (-)

4.87

60000

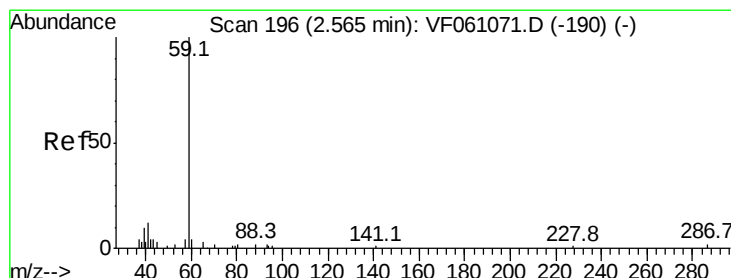
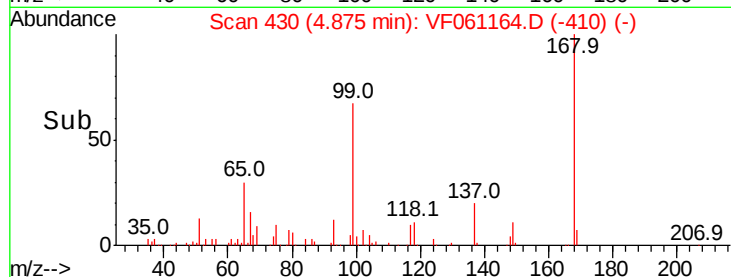
40000

20000

0

Time-->

4.70 4.80 4.90 5.00 5.10



#11

Tert butyl alcohol

Concen: 1.255 ug/l

RT: 2.59 min Scan# 198

Delta R.T. 0.02 min

Lab File: VF061164.D

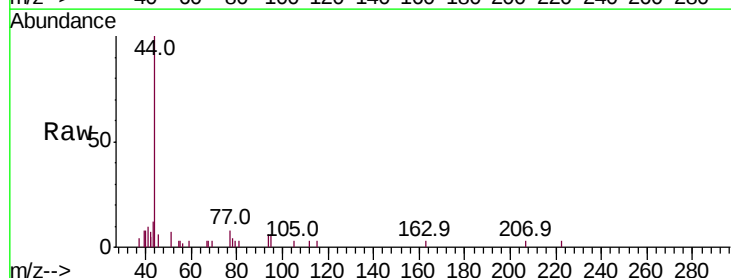
Acq: 24 Dec 2018 14:43

Tgt Ion: 59 Resp: 135

Ion Ratio Lower Upper

59 100

57 0.0 11.5 17.3#



Abundance Ion 59.00 (58.70 to 59.70): VF061071.D (-190) (-)

Ion 57.00 (56.70 to 57.70): VF061071.D (-190) (-)

2.59

300

250

200

150

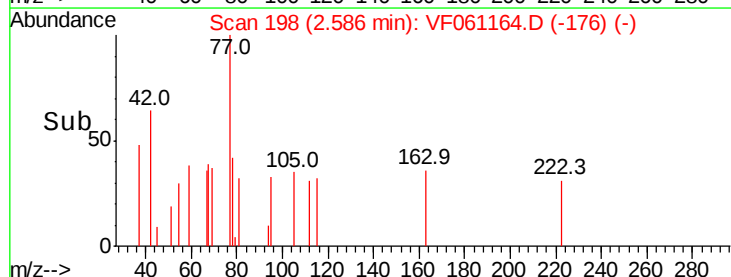
100

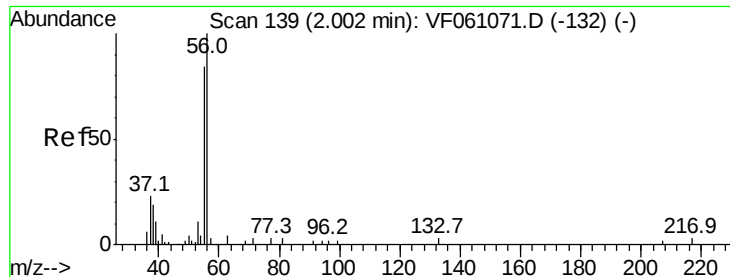
50

0

Time-->

2.56 2.58 2.60 2.62





#13

Acrolein

Concen: 4.283 ug/l

RT: 1.98 min Scan# 137

Delta R.T. -0.02 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

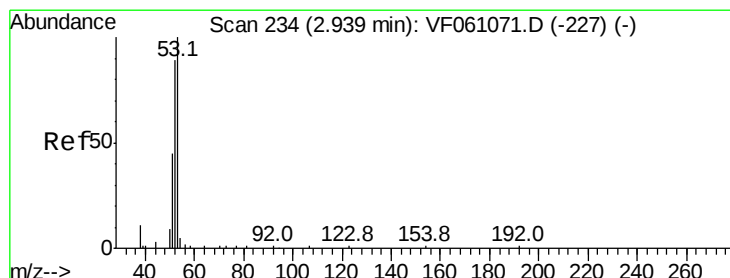
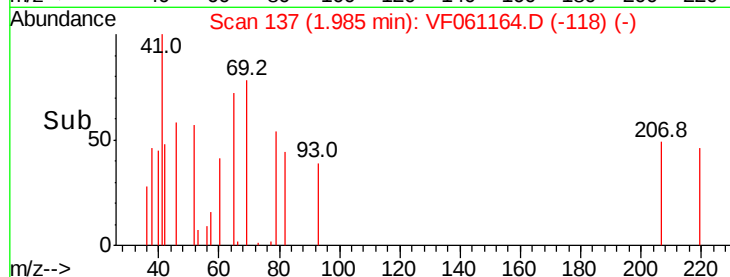
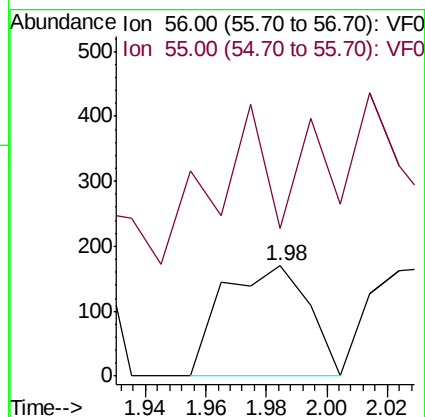
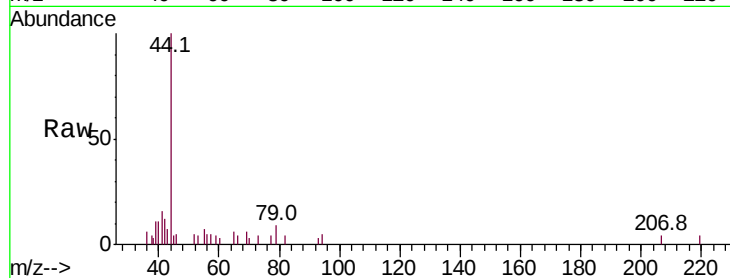
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 56 Resp: 333

Ion Ratio Lower Upper

56 100

55 134.1 70.2 105.2#



#15

Acrylonitrile

Concen: 1.986 ug/l

RT: 2.93 min Scan# 233

Delta R.T. -0.01 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

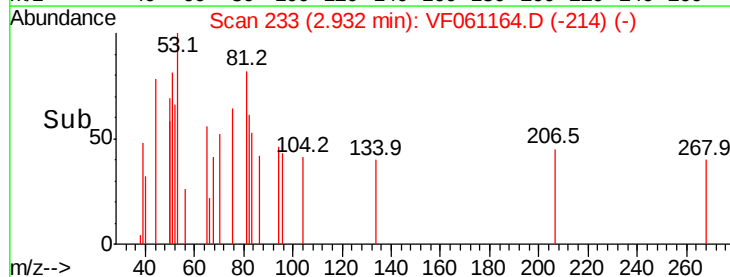
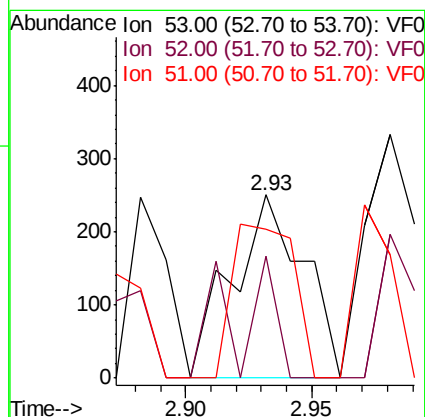
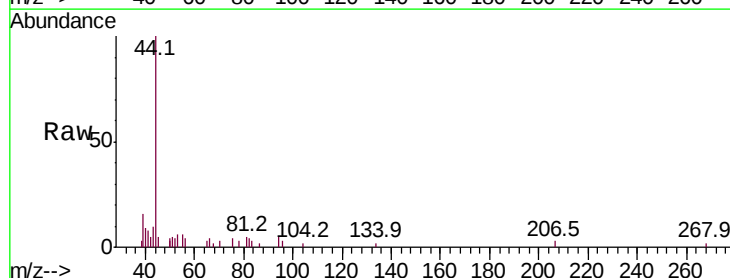
Tgt Ion: 53 Resp: 494

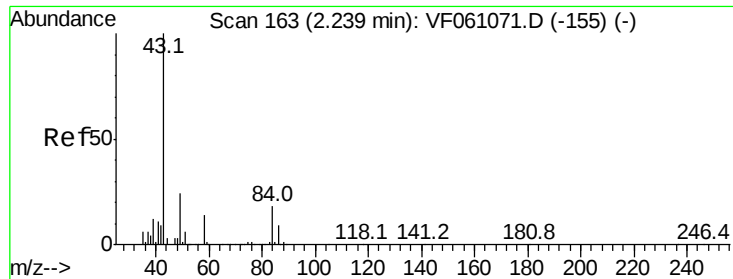
Ion Ratio Lower Upper

53 100

52 66.4 71.3 106.9#

51 81.2 36.8 55.2#





#16

Acetone

Concen: 3.332 ug/l

RT: 2.24 min Scan# 163

Delta R.T. 0.00 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

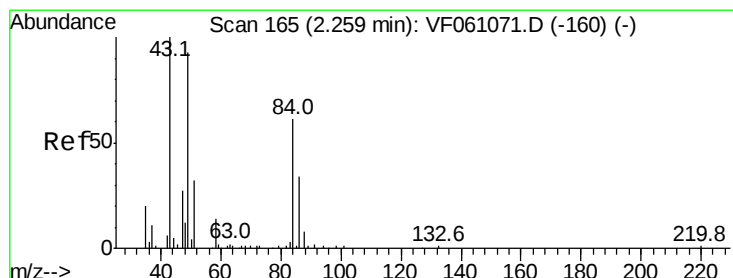
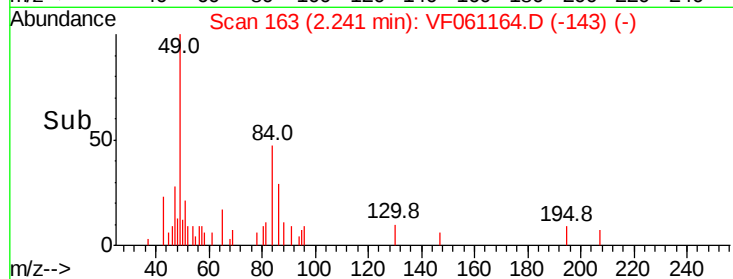
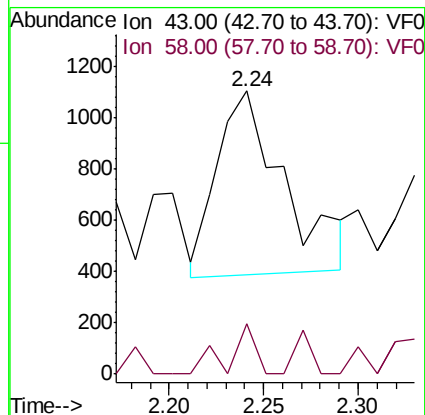
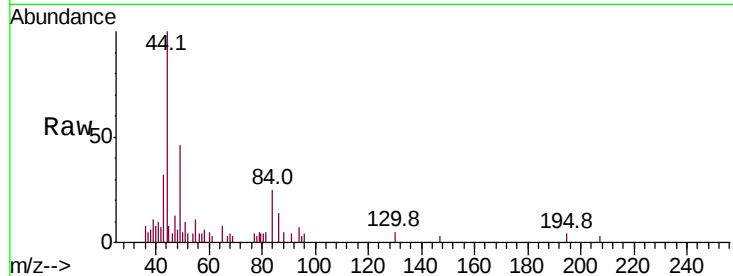
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 43 Resp: 1776

Ion Ratio Lower Upper

43 100

58 17.9 11.1 16.7#



#20

Methylene Chloride

Concen: Below Cal

RT: 2.25 min Scan# 164

Delta R.T. -0.01 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

Tgt Ion: 84 Resp: 3684

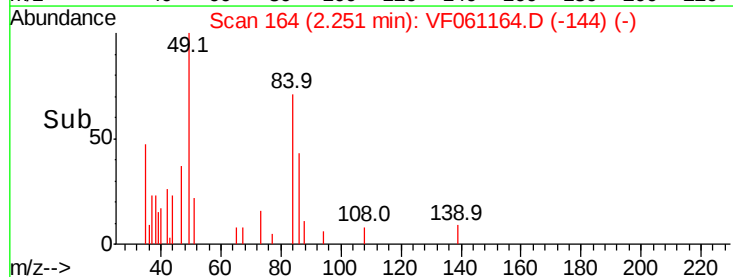
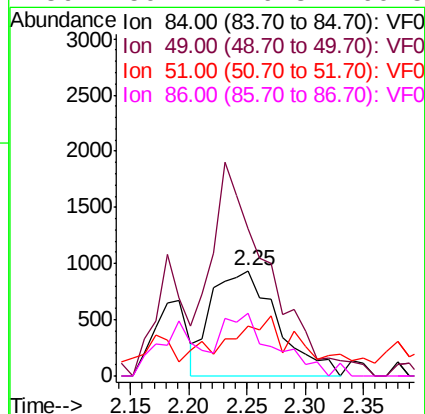
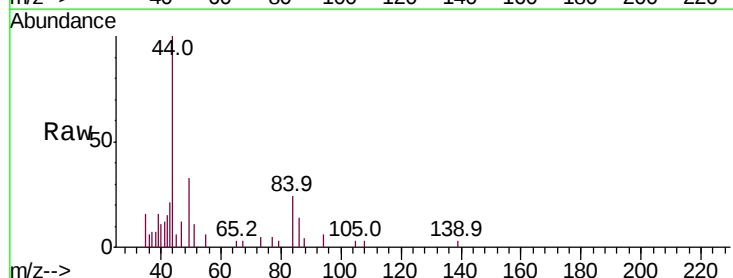
Ion Ratio Lower Upper

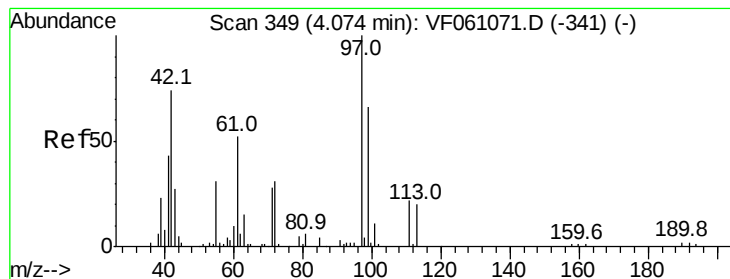
84 100

49 140.1 129.4 194.2

51 47.2 44.0 66.0

86 59.7 46.3 69.5





#29

Tetrahydrofuran

Concen: 1.415 ug/l

RT: 4.07 min Scan# 348

Delta R.T. -0.01 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

Instrument :  
MSVOA\_F  
ClientSampleId :

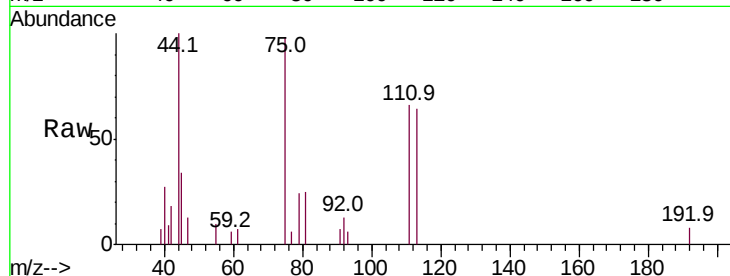
Tot Ion: 42 Resp: 498

Ion Ratio Lower Upper

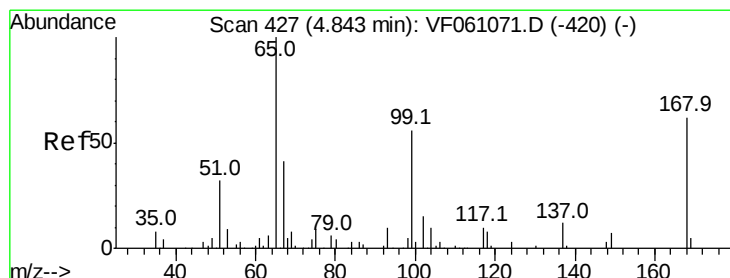
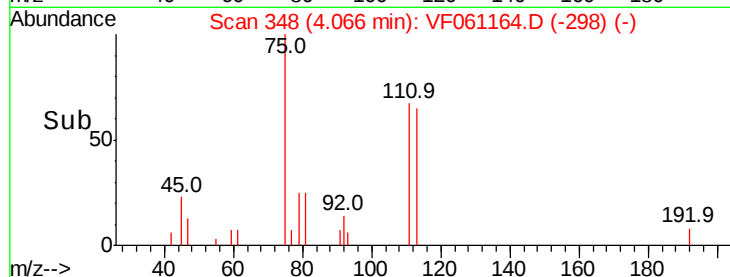
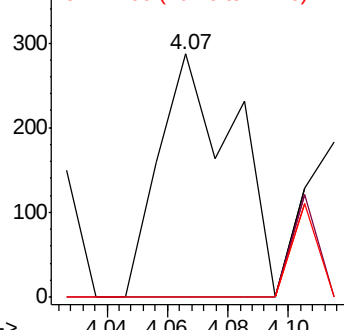
42 100

72 0.0 31.8 47.8#

71 0.0 29.7 44.5#



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: 53.815 ug/l

RT: 4.85 min Scan# 427

Delta R.T. 0.00 min

Lab File: VF061164.D

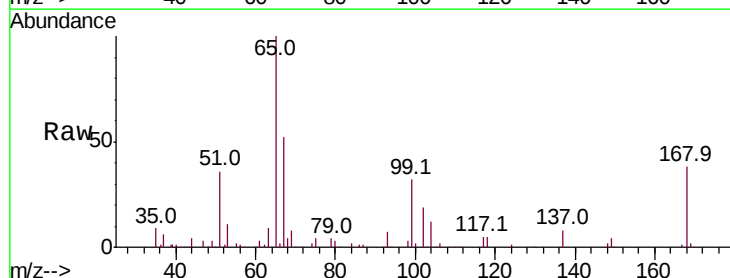
Acq: 24 Dec 2018 14:43

Tgt Ion: 65 Resp: 143476

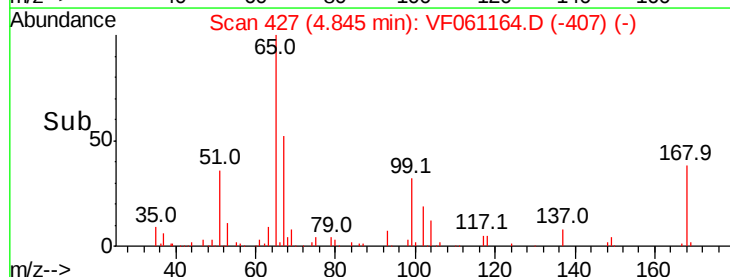
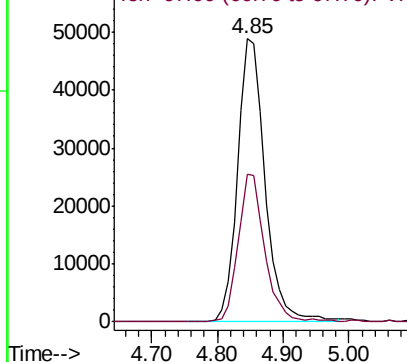
Ion Ratio Lower Upper

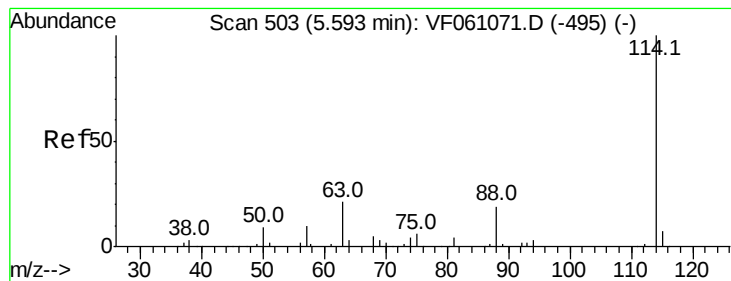
65 100

67 52.1 0.0 94.6



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





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.60 min Scan# 504

Delta R.T. 0.01 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

Instrument :  
MSVOA\_F  
ClientSampleId :

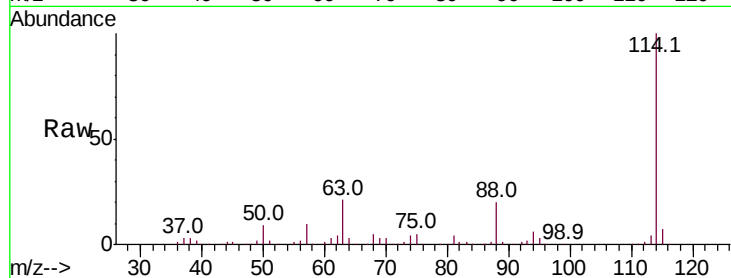
Tot Ion:114 Resp: 367306

Ion Ratio Lower Upper

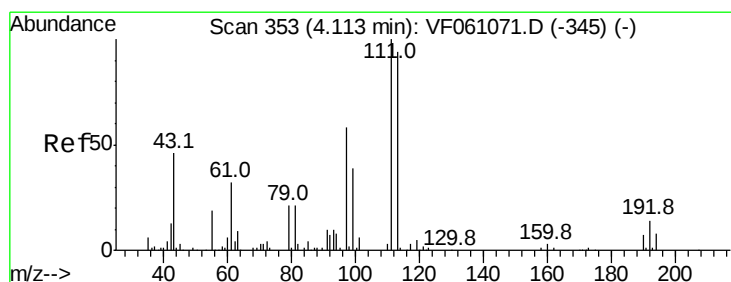
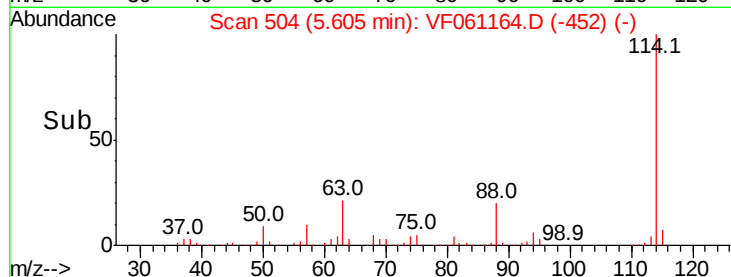
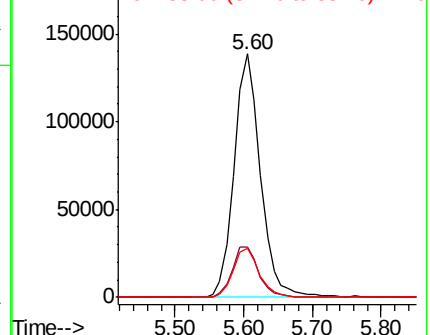
114 100

63 20.8 0.0 41.6

88 20.0 0.0 38.0



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: 49.631 ug/l

RT: 4.12 min Scan# 353

Delta R.T. 0.00 min

Lab File: VF061164.D

Acq: 24 Dec 2018 14:43

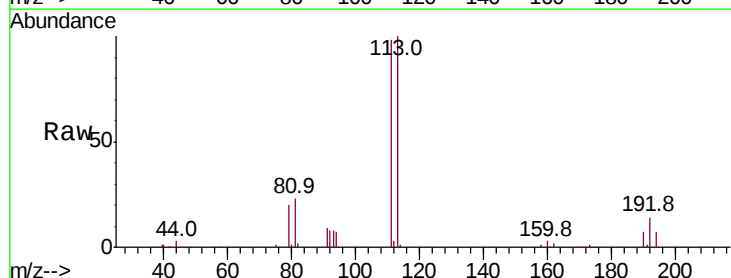
Tgt Ion:113 Resp: 146032

Ion Ratio Lower Upper

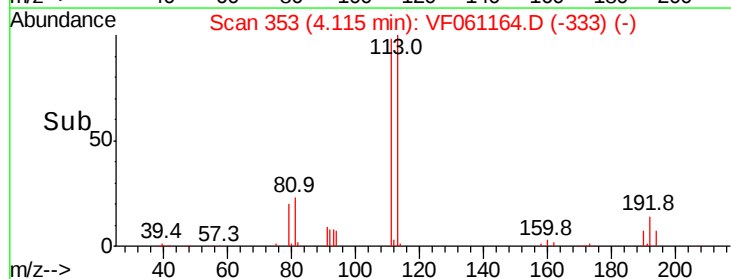
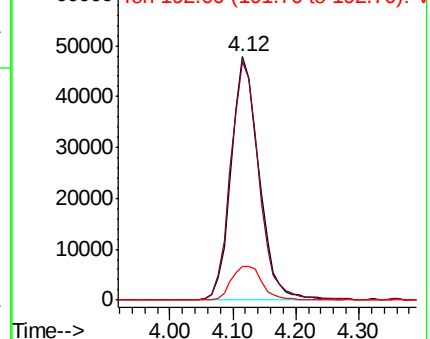
113 100

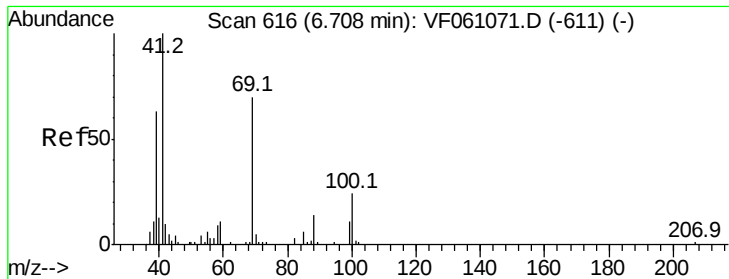
111 97.7 85.2 127.8

192 13.6 12.8 19.2



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

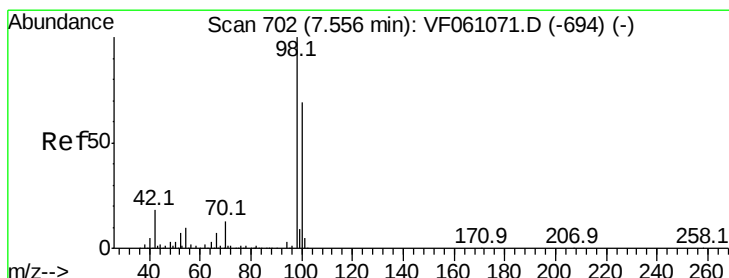
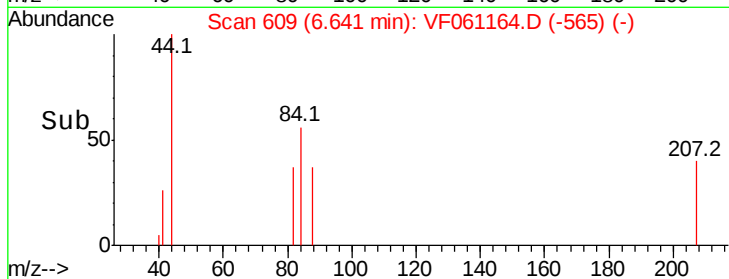
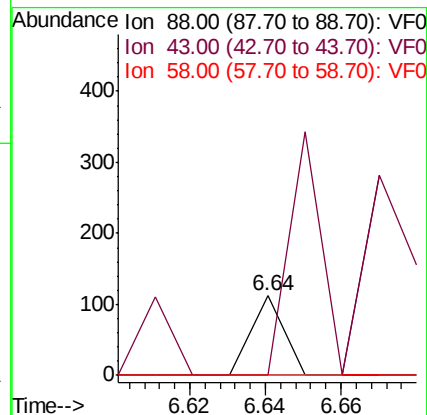
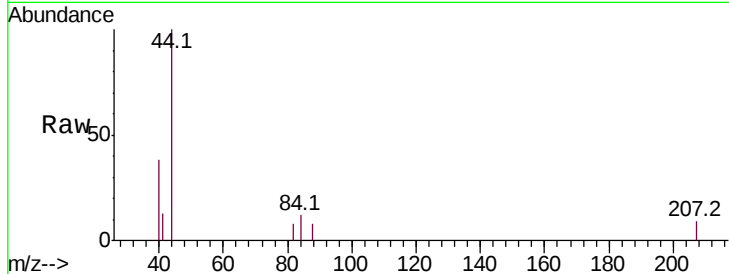




#49  
1,4-Dioxane  
Concen: 6.086 ug/l  
RT: 6.64 min Scan# 609  
Delta R.T. -0.07 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

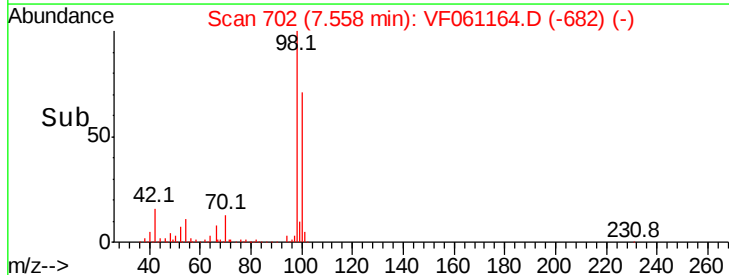
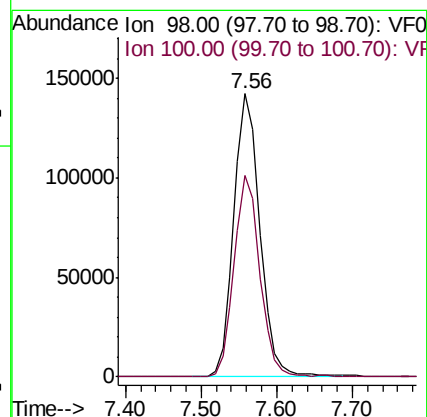
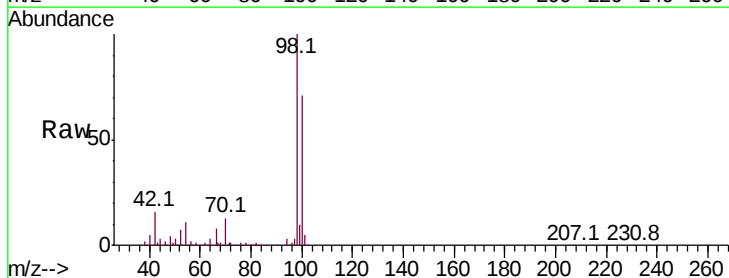
Instrument :  
MSVOA\_F  
ClientSampled :

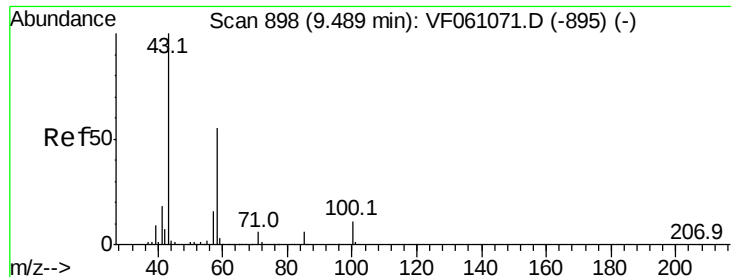
Tot Ion: 88 Resp: 66  
Ion Ratio Lower Upper  
88 100  
43 0.0 33.3 49.9#  
58 0.0 53.2 79.8#



#50  
Toluene-d8  
Concen: 40.631 ug/l  
RT: 7.56 min Scan# 702  
Delta R.T. 0.00 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

Tgt Ion: 98 Resp: 338790  
Ion Ratio Lower Upper  
98 100  
100 71.4 55.3 82.9

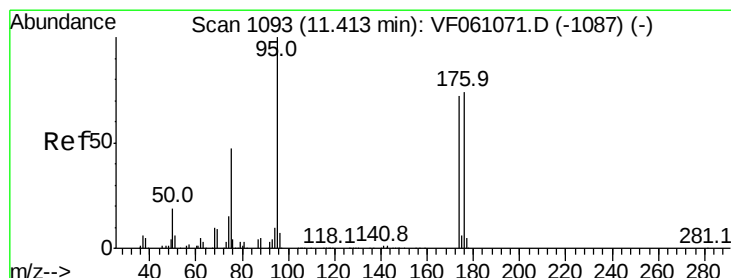
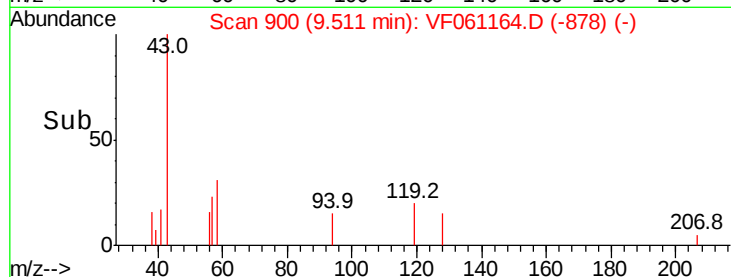
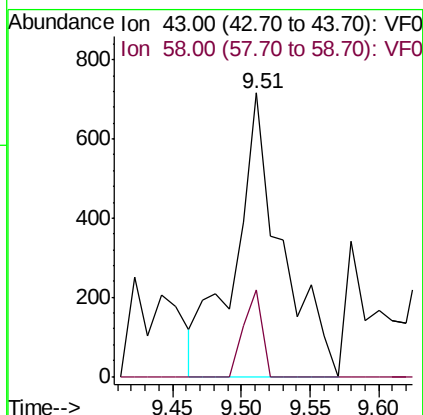
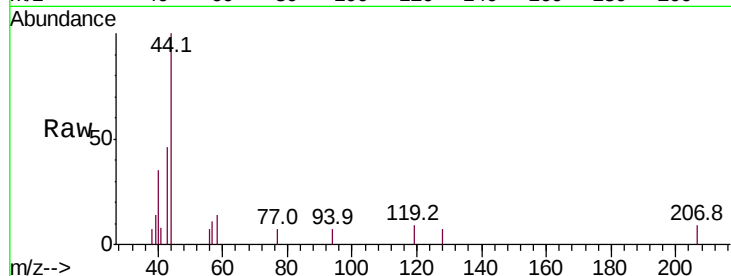




#59  
2-Hexanone  
Concen: 1.597 ug/l  
RT: 9.51 min Scan# 900  
Delta R.T. 0.02 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

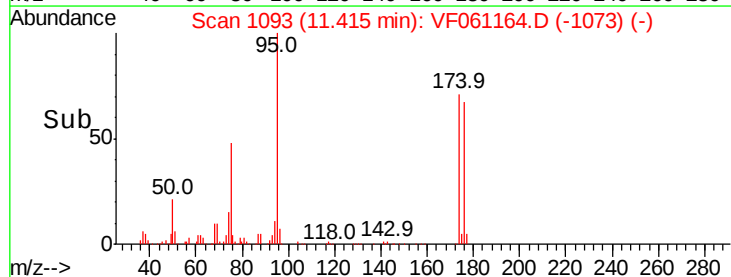
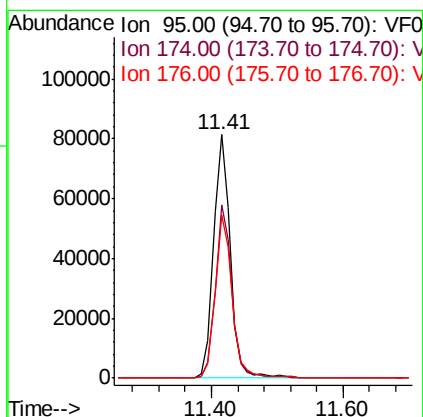
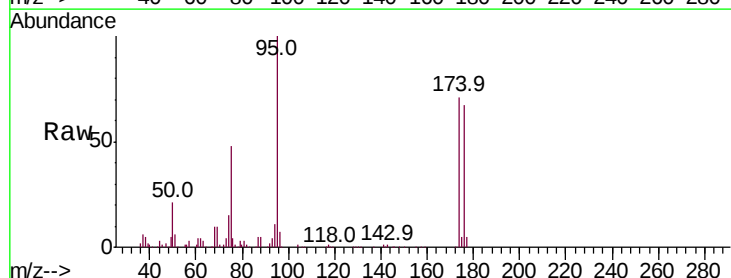
Instrument :  
MSVOA\_F  
ClientSampleId :

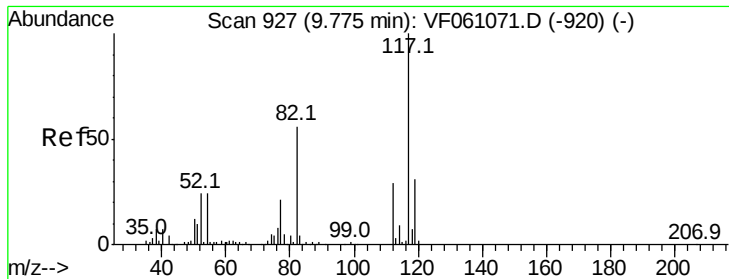
Tot Ion: 43 Resp: 1696  
Ion Ratio Lower Upper  
43 100  
58 30.7 25.1 75.2



#62  
4-Bromofluorobenzene  
Concen: 37.027 ug/l  
RT: 11.41 min Scan# 1093  
Delta R.T. 0.00 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

Tgt Ion: 95 Resp: 142332  
Ion Ratio Lower Upper  
95 100  
174 71.3 0.0 143.8  
176 66.7 0.0 147.6

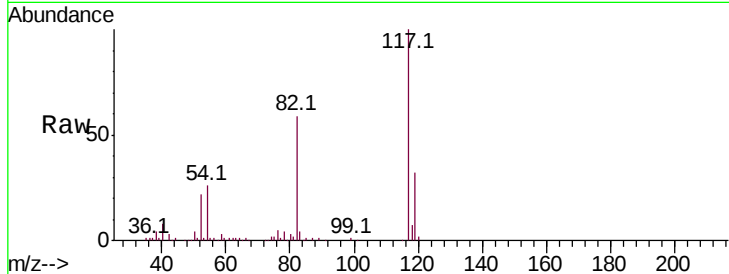




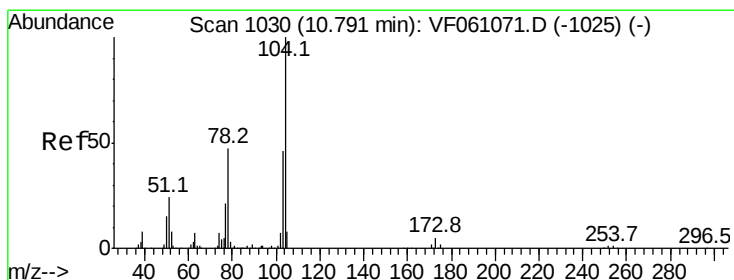
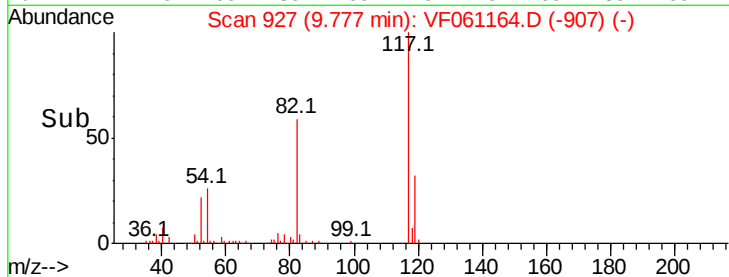
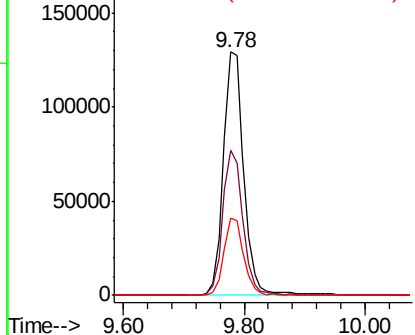
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.78 min Scan# 927  
Delta R.T. 0.00 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:117 Resp: 305070  
Ion Ratio Lower Upper  
117 100  
82 59.3 45.0 67.4  
119 31.6 24.8 37.2

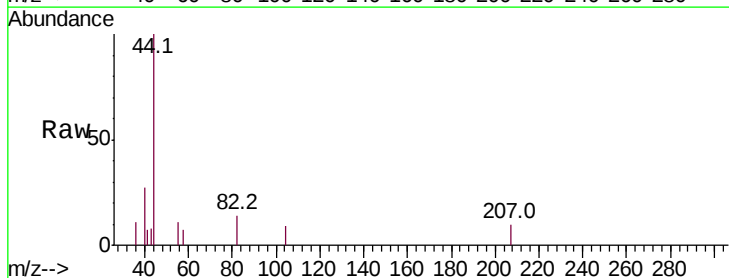


Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 82.00 (81.70 to 82.70): VF0  
Ion 119.00 (118.70 to 119.70): V

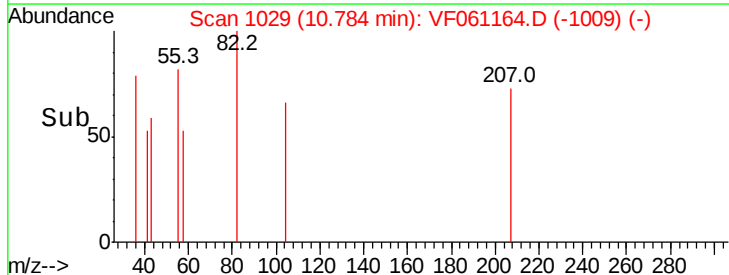
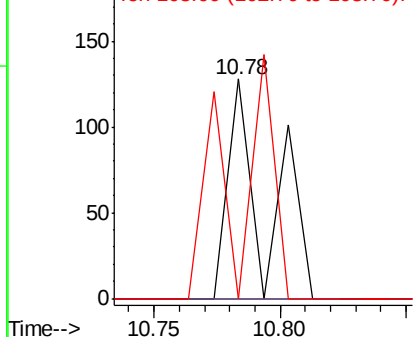


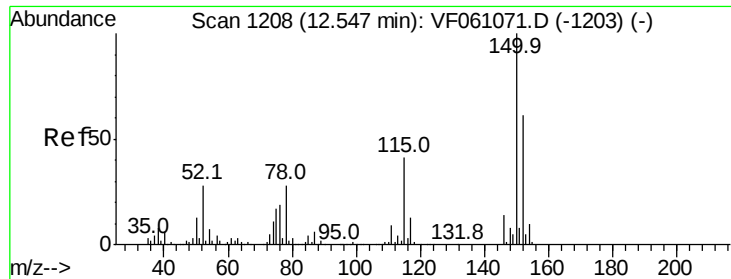
#70  
Styrene  
Concen: Below Cal  
RT: 10.78 min Scan# 1029  
Delta R.T. -0.01 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

Tgt Ion:104 Resp: 136  
Ion Ratio Lower Upper  
104 100  
78 0.0 38.4 57.6#  
103 0.0 37.0 55.6#



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



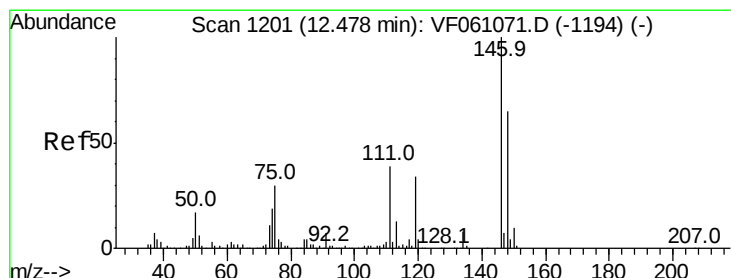
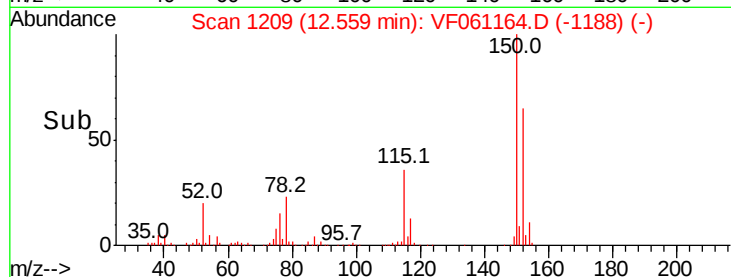
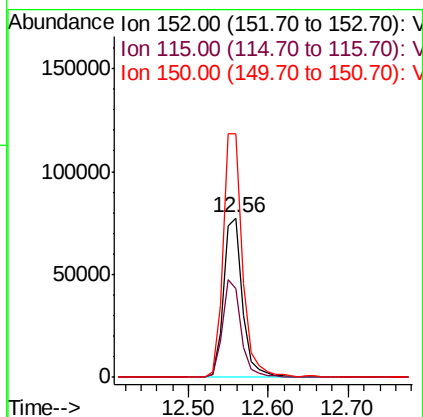
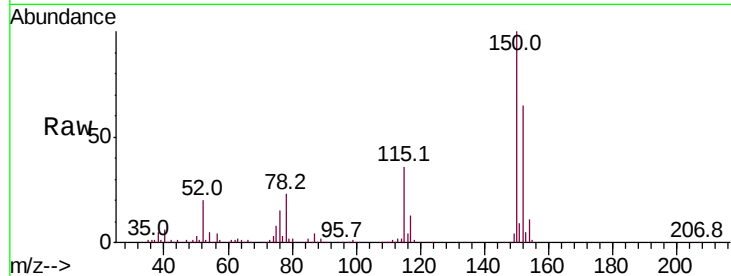


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.56 min Scan# 1209  
Delta R.T. 0.01 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion:152 Resp: 130750  
Ion Ratio Lower Upper  
152 100  
115 55.4 33.3 99.9  
150 152.8 0.0 328.2



#87

1,3-Dichlorobenzene  
Concen: Below Cal  
RT: 12.47 min Scan# 1200  
Delta R.T. -0.01 min  
Lab File: VF061164.D  
Acq: 24 Dec 2018 14:43

Tgt Ion:146 Resp: 176  
Ion Ratio Lower Upper  
146 100  
111 0.0 19.3 57.9#  
148 107.0 32.4 97.2#

