

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF012419\  
 Data File : VF061511.D  
 Acq On : 24 Jan 2019 20:28  
 Operator : VA/AP  
 Sample : K1223-08RE  
 Misc : 4.10g/5mL/MSVOA-F/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 TS-TRE

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 1/25/2019 10:28:22 AM

Quant Time: Jan 25 06:01:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 16 04:51:59 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|---------|--------|----------|
| 1) Pentafluorobenzene       | 4.89  | 168  | 142531   | 50.00   | ug/l   | 0.03     |
| 34) 1,4-Difluorobenzene     | 5.61  | 114  | 247892   | 50.00   | ug/l   | 0.02     |
| 63) Chlorobenzene-d5        | 9.80  | 117  | 153376   | 50.00   | ug/l   | 0.03     |
| 72) 1,4-Dichlorobenzene-d4  | 12.57 | 152  | 36823    | 50.00   | ug/l   | 0.02     |
| System Monitoring Compounds |       |      |          |         |        |          |
| 33) 1,2-Dichloroethane-d4   | 4.87  | 65   | 80715    | 45.87   | ug/l   | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 91.74% |          |
| 35) Dibromofluoromethane    | 4.14  | 113  | 90014    | 46.02   | ug/l   | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 92.04% |          |
| 50) Toluene-d8              | 7.58  | 98   | 190640   | 35.57   | ug/l   | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 71.14% |          |
| 62) 4-Bromofluorobenzene    | 11.42 | 95   | 44225    | 17.66   | ug/l   | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 35.32% |          |
| Target Compounds            |       |      |          |         |        |          |
| 16) Acetone                 | 2.25  | 43   | 45758    | 129.618 | ug/l   | 99       |
| 20) Methylene Chloride      | 2.20  | 84   | 5895m    | 3.277   | ug/l   |          |
| 25) 2-Butanone              | 4.35  | 43   | 131790   | 224.491 | ug/l   | 96       |
| 86) p-Isopropyltoluene      | 12.47 | 119  | 12829    | 4.600   | ug/l   | 95       |
| 95) Naphthalene             | 14.47 | 128  | 2388     | 1.516   | ug/l # | 93       |

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

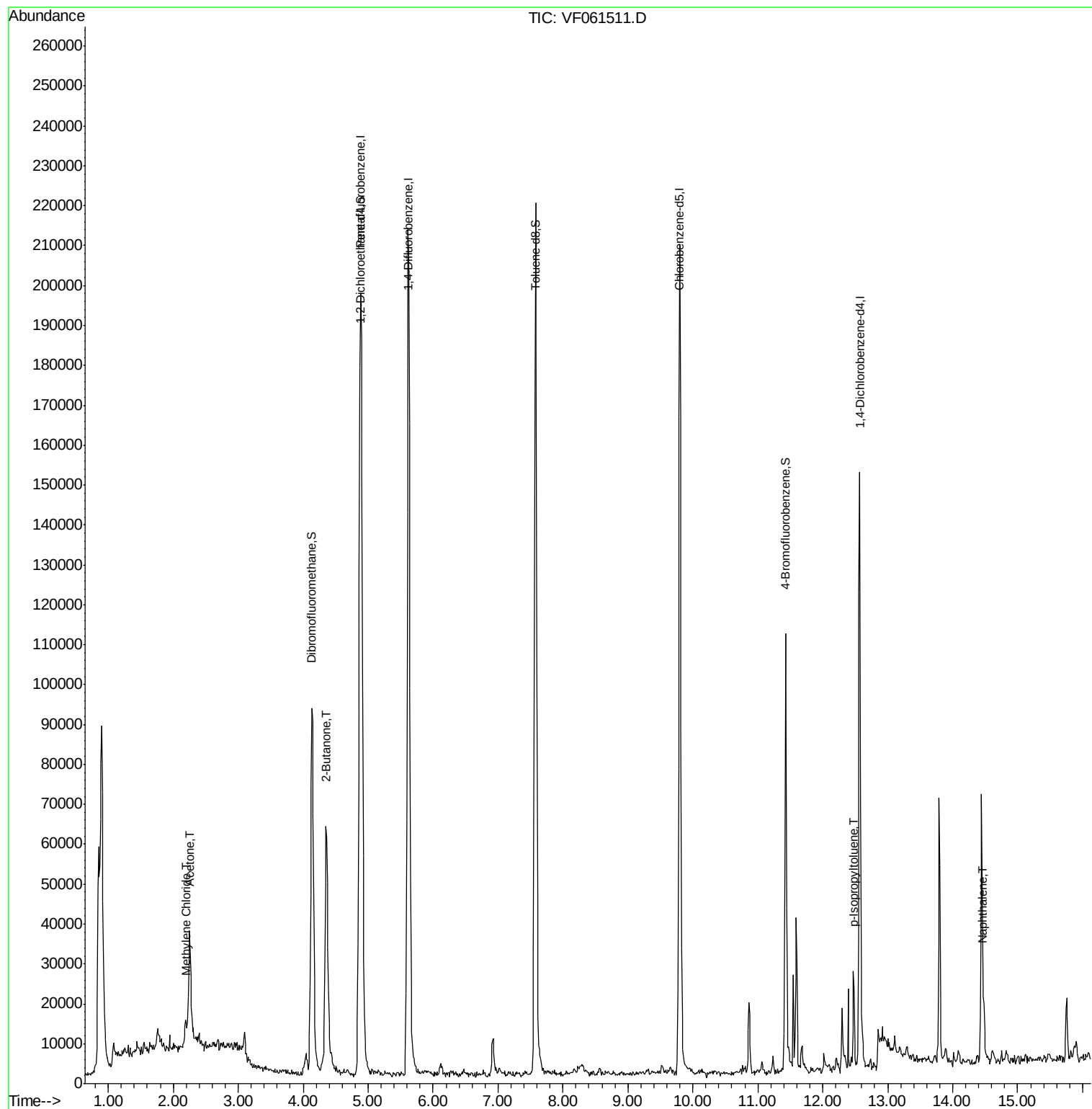
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF012419\  
Data File : VF061511.D  
Acq On : 24 Jan 2019 20:28  
Operator : VA/AP  
Sample : K1223-08RE  
Misc : 4.10g/5mL/MSVOA-F/SOIL  
ALS Vial : 21 Sample Multiplier: 1

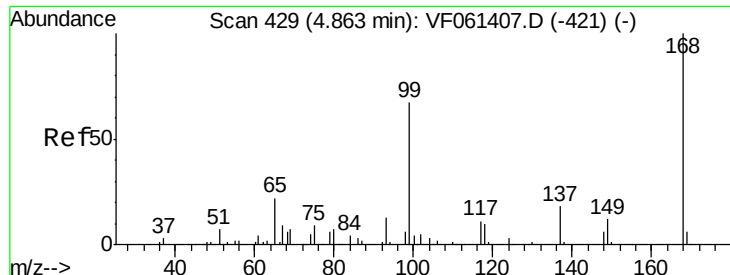
Instrument :  
MSVOA\_F  
ClientSampleId :  
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Quant Time: Jan 25 06:01:42 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F011519S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 16 04:51:59 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.89 min Scan# 432

Delta R.T. 0.03 min

Lab File: VF061511.D

Acq: 24 Jan 2019 20:28

Instrument :

MSVOA\_F

ClientSampled :

TS-TRE

Tot Ion:168 Resp: 142531

Ion Ratio Lower Upper

168 100

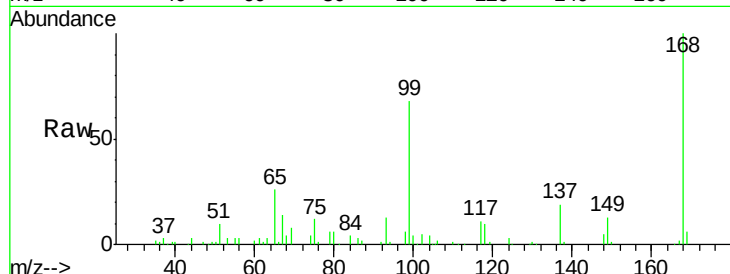
99 68.1 53.5 80.3

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Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.89

50000

40000

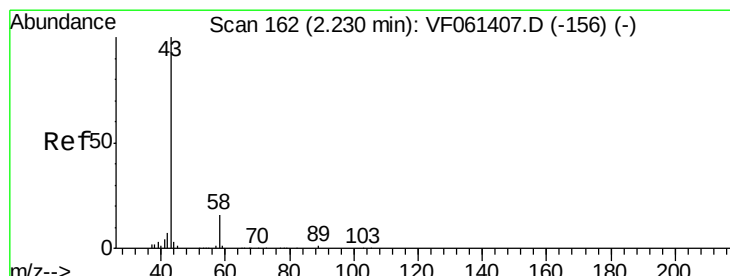
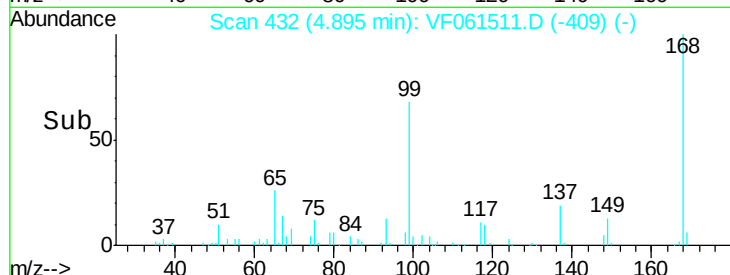
30000

20000

10000

0

Time-->



#16

Acetone

Concen: 129.618 ug/l

RT: 2.25 min Scan# 164

Delta R.T. 0.02 min

Lab File: VF061511.D

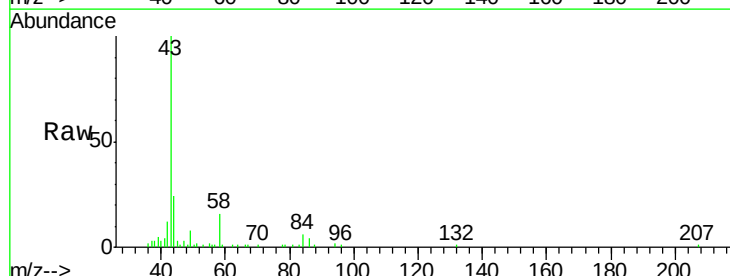
Acq: 24 Jan 2019 20:28

Tgt Ion: 43 Resp: 45758

Ion Ratio Lower Upper

43 100

58 16.0 13.3 19.9



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

2.25

20000

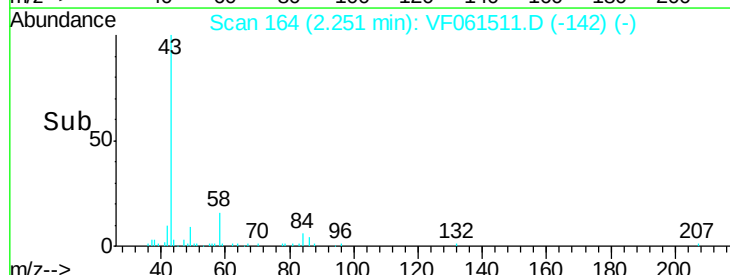
15000

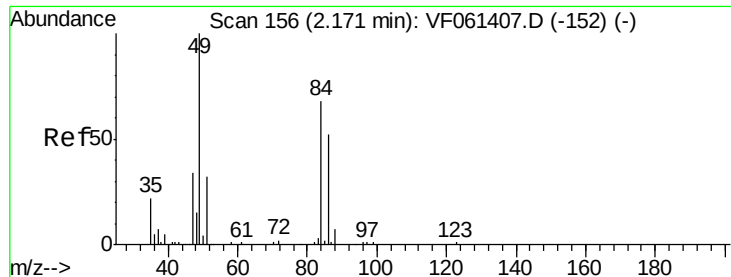
10000

5000

0

Time-->





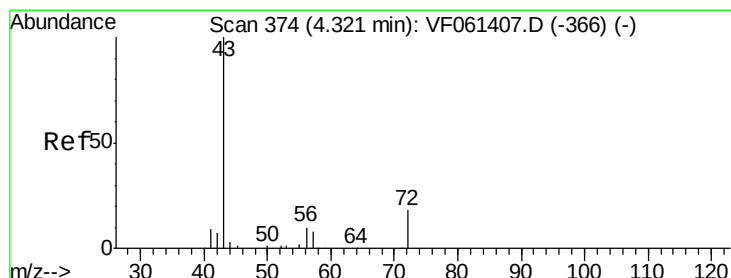
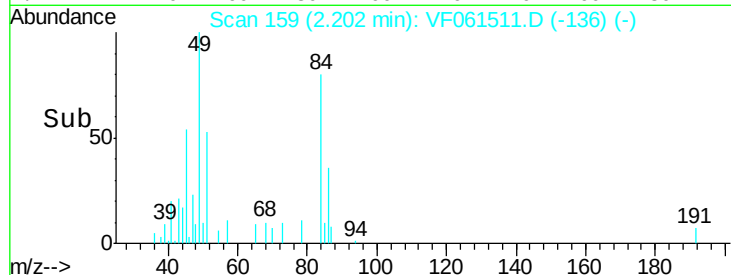
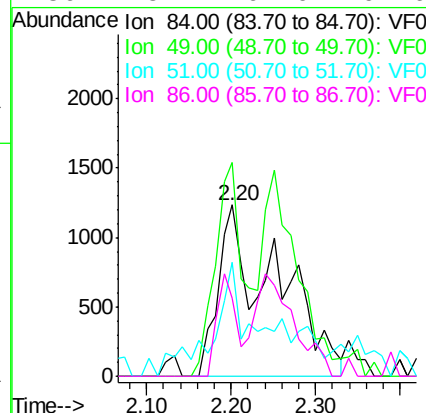
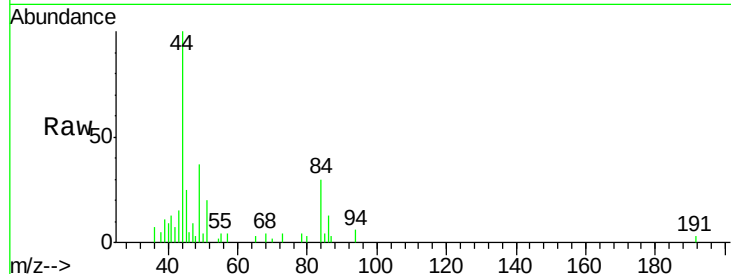
#20  
Methylene Chloride  
Concen: 3.277 ug/l m  
RT: 2.20 min Scan# 159  
Delta R.T. 0.03 min  
Lab File: VF061511.D  
Acq: 24 Jan 2019 20:28

Instrument :  
MSVOA\_F  
ClientSampleId :  
TS-TRE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 49      | 124.6 | 120.0 | 180.0 |
| 51      | 66.3  | 38.6  | 58.0# |
| 86      | 45.2  | 61.0  | 91.6# |

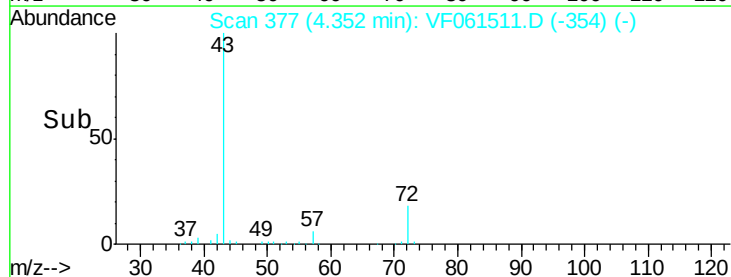
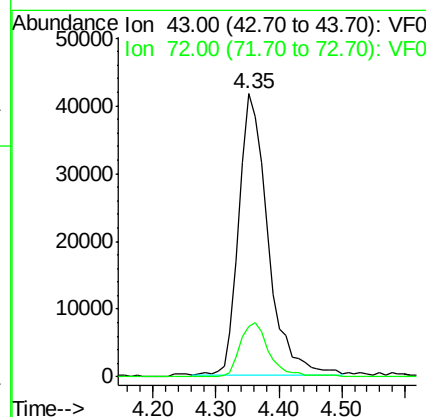
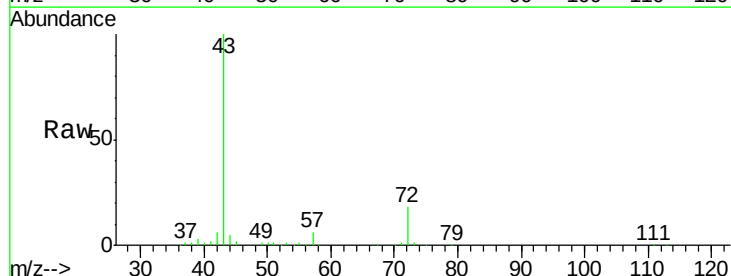
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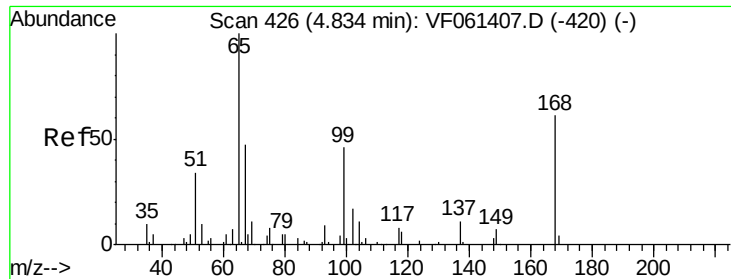
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#25  
2-Butanone  
Concen: 224.491 ug/l  
RT: 4.35 min Scan# 377  
Delta R.T. 0.03 min  
Lab File: VF061511.D  
Acq: 24 Jan 2019 20:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 17.9  | 15.8  | 23.6  |





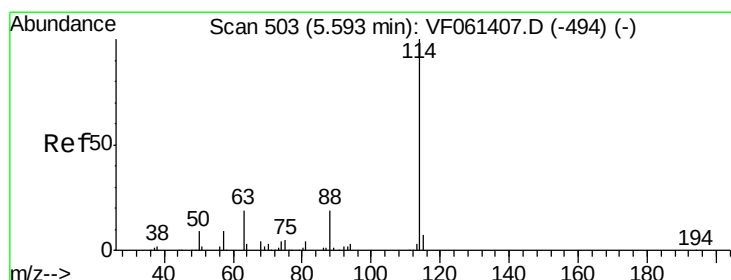
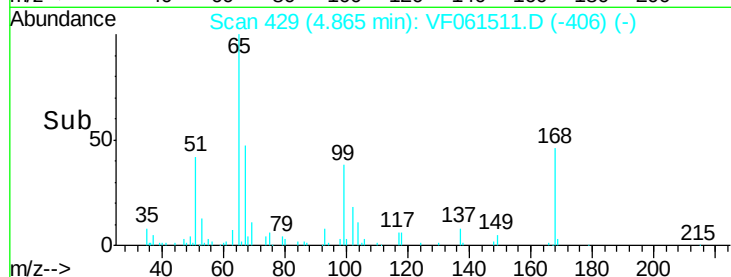
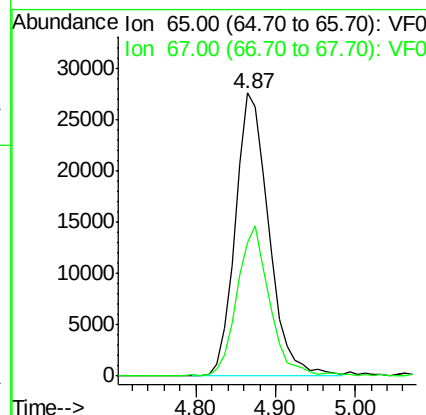
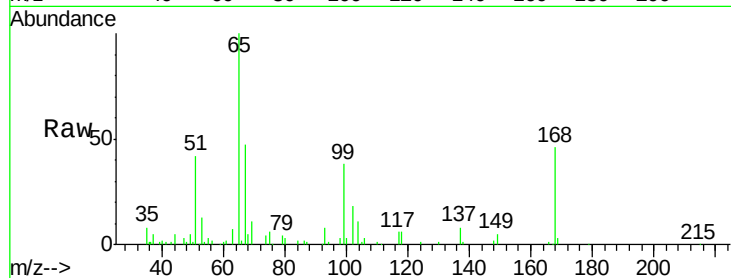
#33  
 1,2-Dichloroethane-d4  
 Concen: 45.868 ug/l  
 RT: 4.87 min Scan# 429  
 Delta R.T. 0.03 min  
 Lab File: VF061511.D  
 Acq: 24 Jan 2019 20:28

Instrument :  
 MSVOA\_F  
 ClientSampled :  
 TS-TRE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 65      | 100   |       |       |
| 67      | 47.3  | 0.0   | 99.8  |

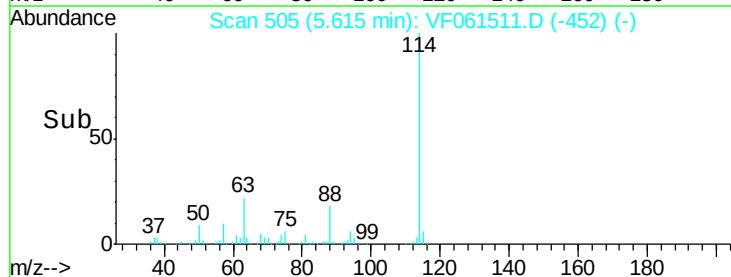
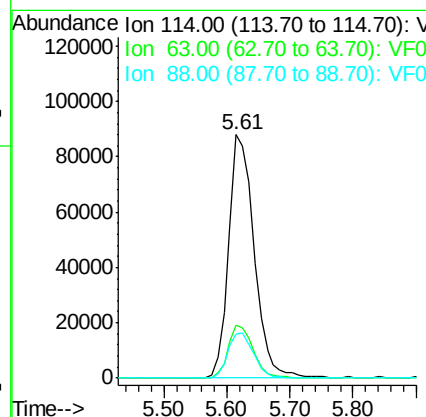
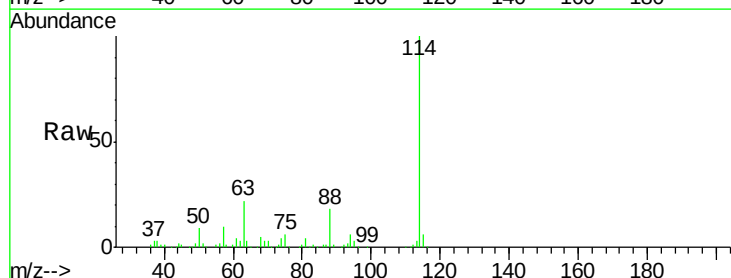
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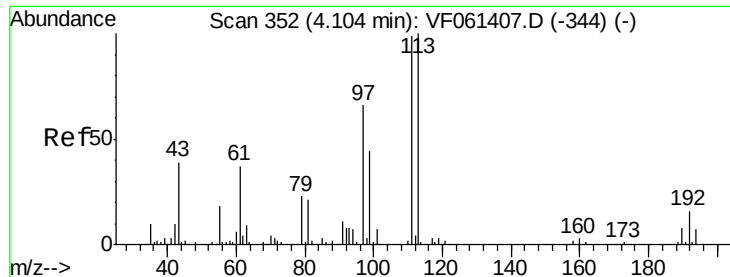
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#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.61 min Scan# 505  
 Delta R.T. 0.02 min  
 Lab File: VF061511.D  
 Acq: 24 Jan 2019 20:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 22.0  | 0.0   | 39.0  |
| 88      | 17.8  | 0.0   | 37.4  |





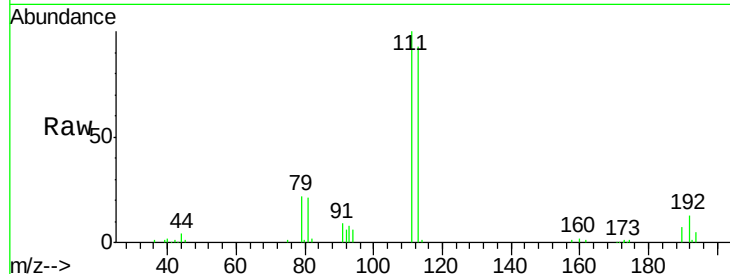
#35  
Dibromofluoromethane  
Concen: 46.018 ug/l  
RT: 4.14 min Scan# 355  
Delta R.T. 0.03 min  
Lab File: VF061511.D  
Acq: 24 Jan 2019 20:28

Instrument :  
MSVOA\_F  
ClientSampleId :  
TS-TRE

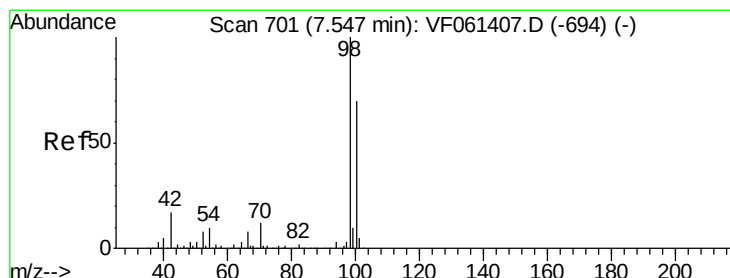
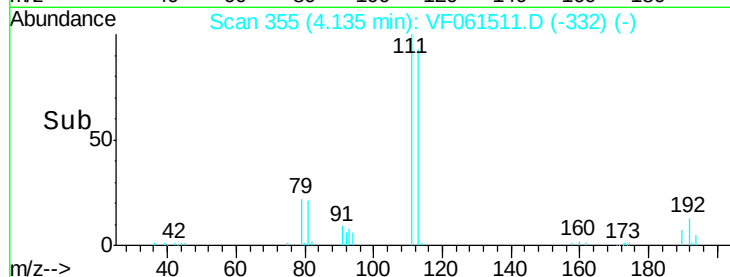
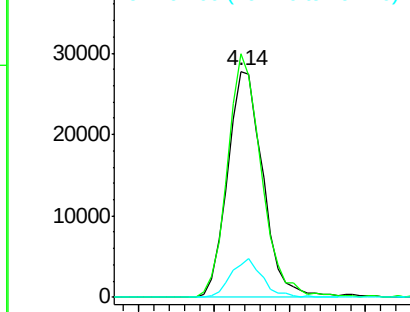
| Tot Ion | Ion   | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|-------|
| 113     | 100   |       | 90014 |       |       |
| 111     | 107.8 | 79.4  | 119.0 |       |       |
| 192     | 14.1  | 12.4  | 18.6  |       |       |

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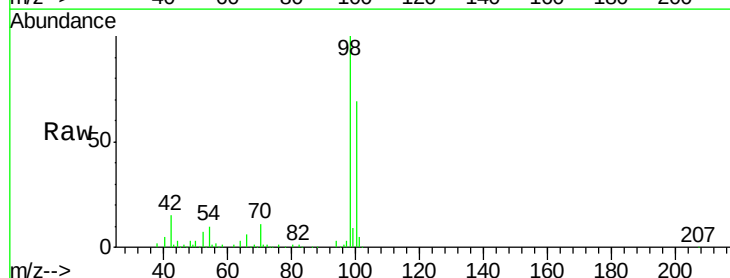


Abundance Ion 113.00 (112.70 to 113.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 192.00 (191.70 to 192.70): V

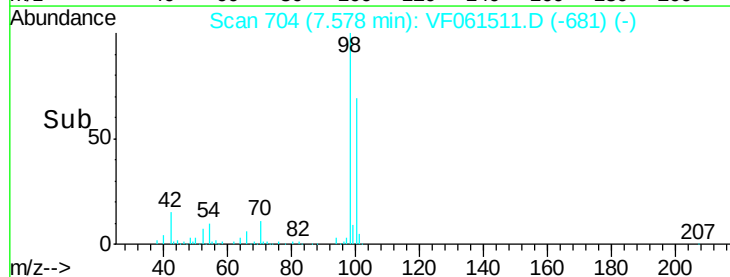
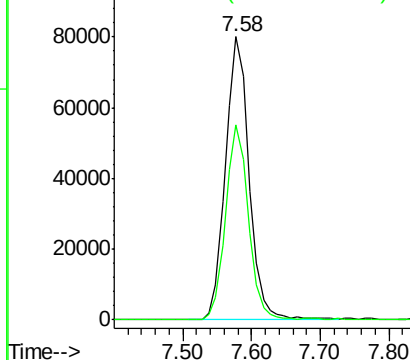


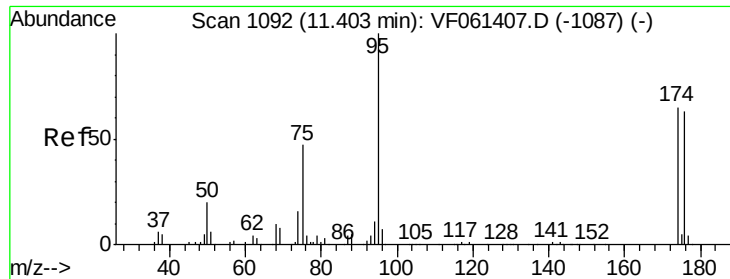
#50  
Toluene-d8  
Concen: 35.572 ug/l  
RT: 7.58 min Scan# 704  
Delta R.T. 0.03 min  
Lab File: VF061511.D  
Acq: 24 Jan 2019 20:28

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 98      | 100  |       | 190640 |       |       |
| 100     | 68.9 | 55.6  | 83.4   |       |       |



Abundance Ion 98.00 (97.70 to 98.70): VF0  
Ion 100.00 (99.70 to 100.70): VF0





#62

4-Bromofluorobenzene

Concen: 17.662 ug/l

RT: 11.42 min Scan# 1094

Delta R.T. 0.02 min

Lab File: VF061511.D

Acq: 24 Jan 2019 20:28

Instrument :

MSVOA\_F

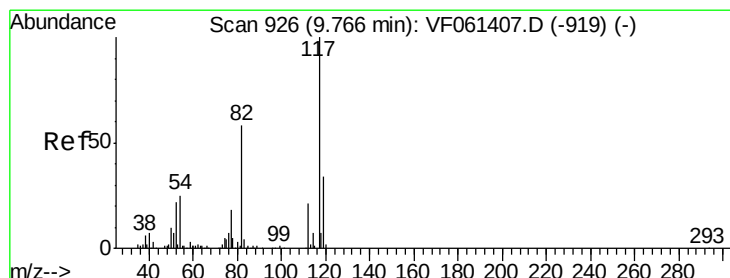
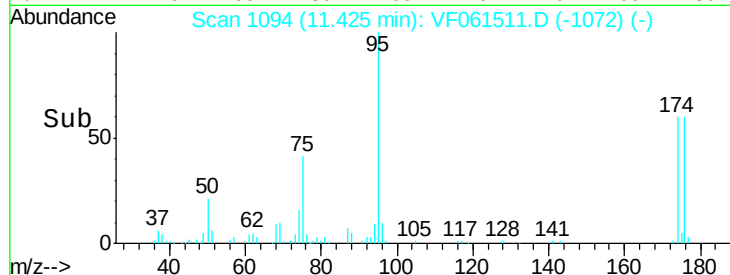
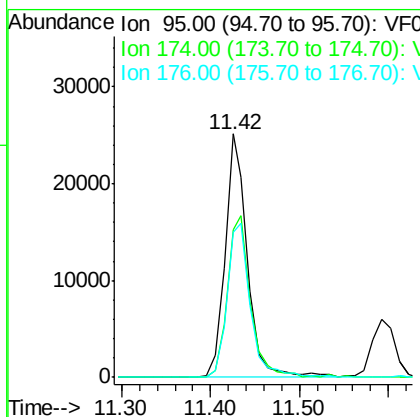
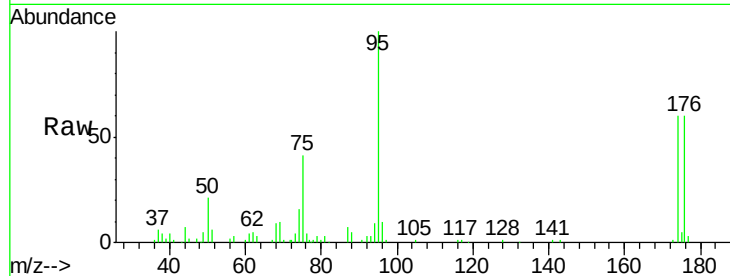
ClientSampleId :

TS-TRE

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 95    | Resp: | 44225 |
| Ion      | Ratio | Lower | Upper |
| 95       | 100   |       |       |
| 174      | 60.5  | 0.0   | 130.4 |
| 176      | 59.7  | 0.0   | 126.2 |

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#63

Chlorobenzene-d5

Concen: 50.000 ug/l

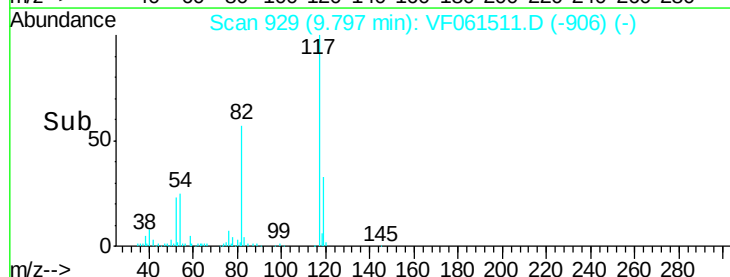
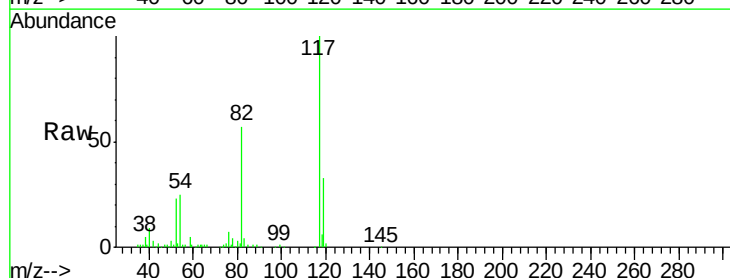
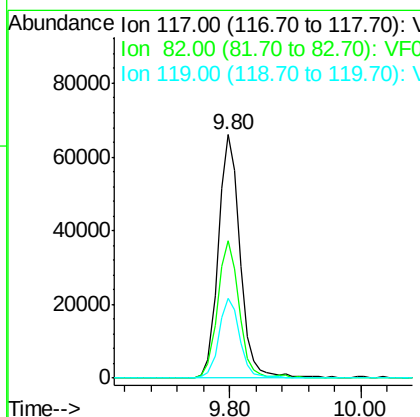
RT: 9.80 min Scan# 929

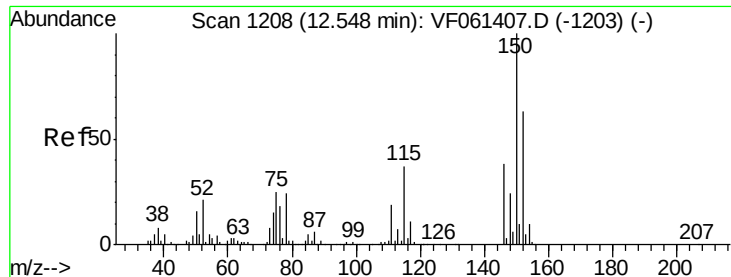
Delta R.T. 0.03 min

Lab File: VF061511.D

Acq: 24 Jan 2019 20:28

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 153376 |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 56.6  | 46.4  | 69.6   |
| 119      | 32.8  | 27.2  | 40.8   |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.57 min Scan# 1210

Delta R.T. 0.02 min

Lab File: VF061511.D

Acq: 24 Jan 2019 20:28

Instrument :

MSVOA\_F

ClientSampleId :

TS-TRE

Tot Ion:152 Resp: 36823

Ion Ratio Lower Upper

152 100

115 56.1 30.0 90.0

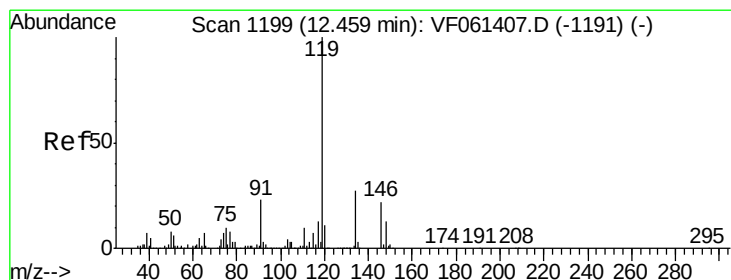
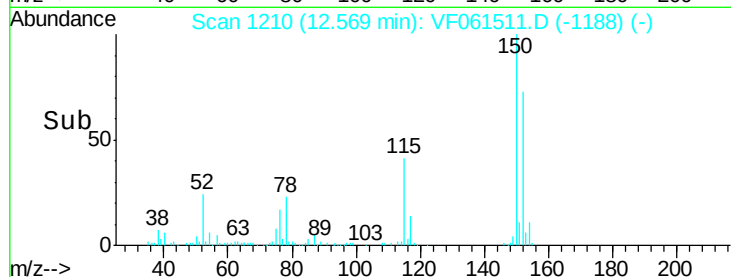
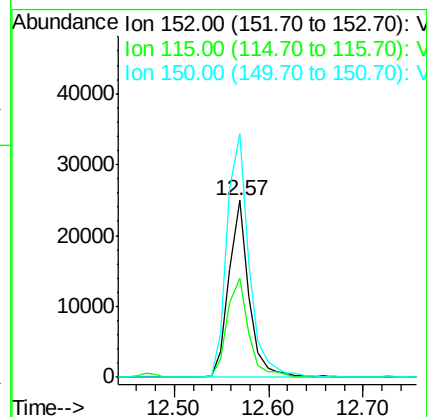
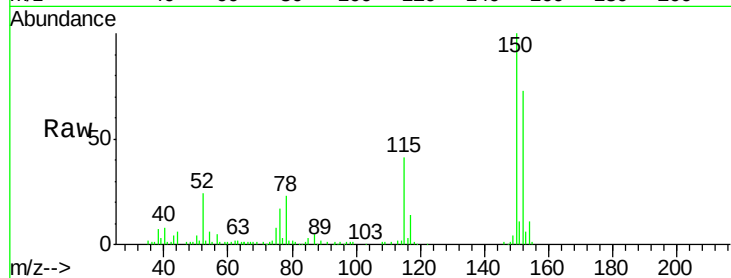
150 137.9 0.0 321.4

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#86

p-Isopropyltoluene

Concen: 4.600 ug/l

RT: 12.47 min Scan# 1200

Delta R.T. 0.01 min

Lab File: VF061511.D

Acq: 24 Jan 2019 20:28

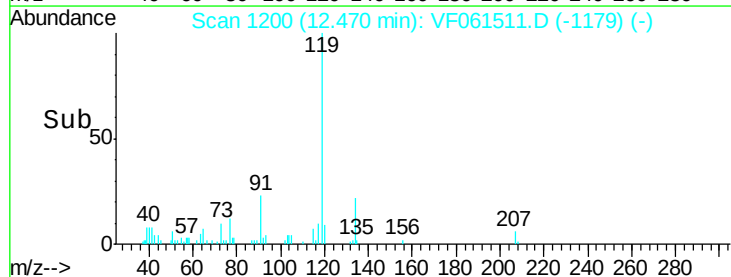
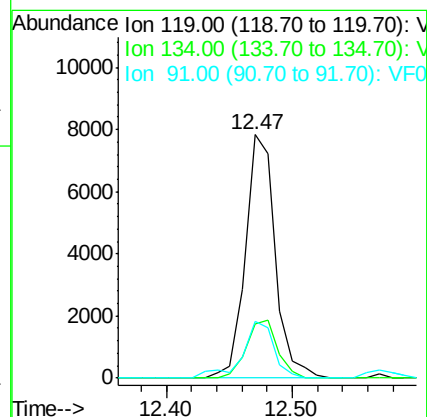
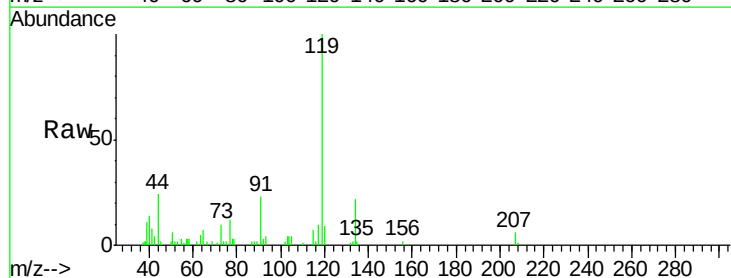
Tgt Ion:119 Resp: 12829

Ion Ratio Lower Upper

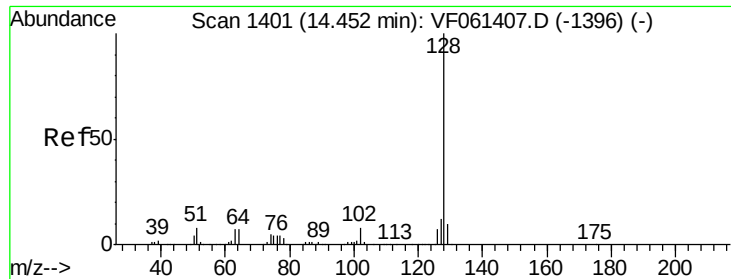
119 100

134 22.1 13.4 40.2

91 23.1 11.4 34.2







#95  
Naphthalene  
Concen: 1.516 ug/l  
RT: 14.47 min Scan# 1403  
Delta R.T. 0.02 min  
Lab File: VF061511.D  
Acq: 24 Jan 2019 20:28

Instrument :  
MSVOA\_F  
ClientSampleId :  
TS-TRE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 9.1   | 9.5   | 14.3# |
| 129     | 13.2  | 8.4   | 12.6# |

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