

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF052119\  
 Data File : VF062682.D  
 Acq On : 21 May 2019 14:50  
 Operator : FY/SY  
 Sample : K2970-14  
 Misc : 3.51u/5mL/MSVOA F/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 TP-9-S2

Quant Time: May 22 03:55:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F051619S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 17 05:49:09 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.06  | 168  | 726384   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.78  | 114  | 1187820  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 740698   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 207896   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.04  | 65   | 179279   | 34.93 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 69.86% |          |
| 35) Dibromofluoromethane    | 4.31  | 113  | 331976   | 36.52 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 73.04% |          |
| 50) Toluene-d8              | 7.71  | 98   | 651583   | 30.02 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 60.04% |          |
| 62) 4-Bromofluorobenzene    | 11.50 | 95   | 171117   | 20.79 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 41.58% |          |

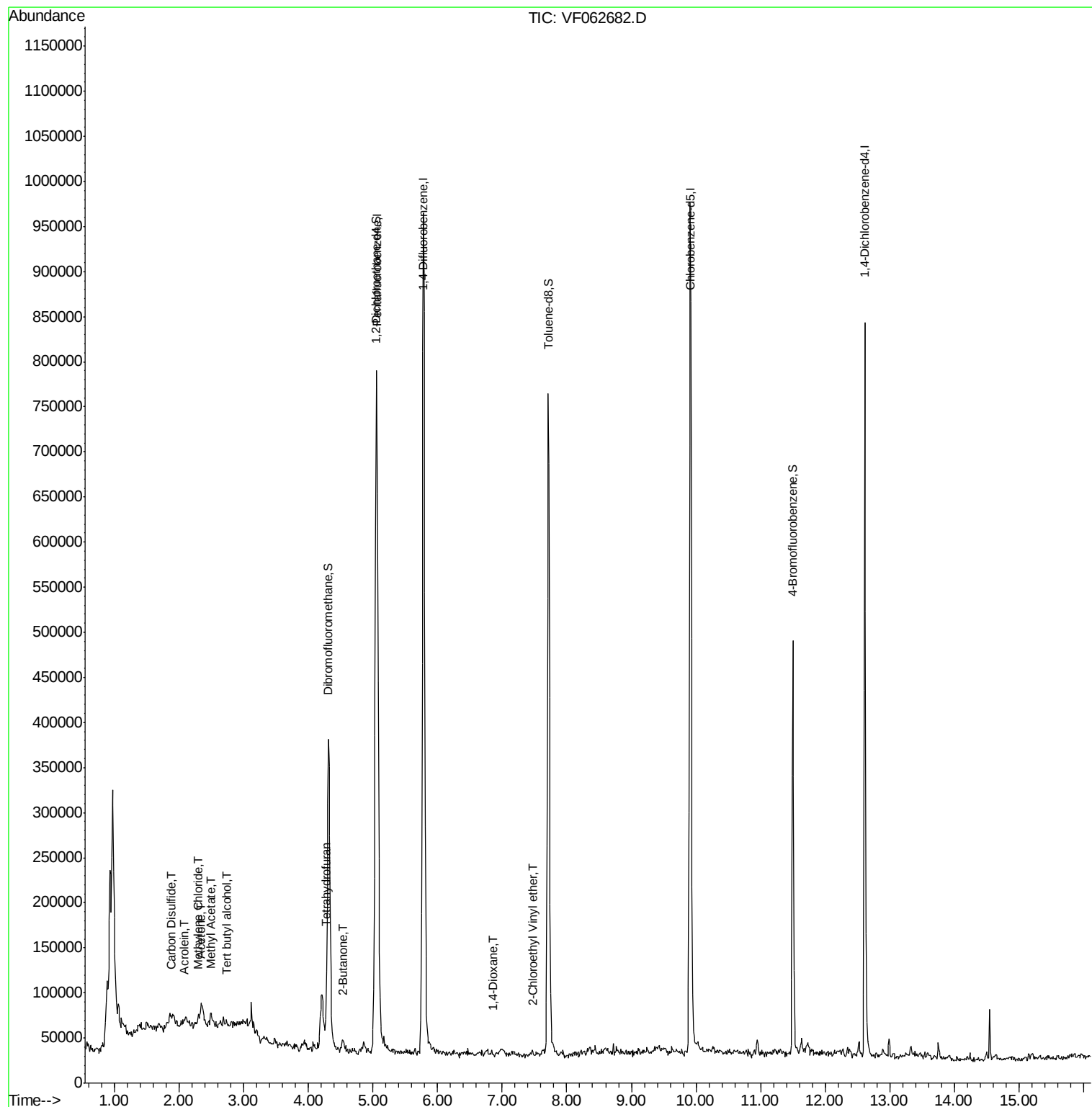
| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol        | 2.73  | 59   | 2662     | 7.855     | ug/l # | 1      |
| 13) Acrolein                  | 2.07  | 56   | 4884     | 13.806    | ug/l # | 76     |
| 16) Acetone                   | 2.35  | 43   | 38888    | 29.203    | ug/l # | 83     |
| 17) Carbon Disulfide          | 1.88  | 76   | 60207    | 3.113     | ug/l   | 95     |
| 18) Methyl Acetate            | 2.49  | 43   | 4681     | 2.237     | ug/l # | 63     |
| 20) Methylene Chloride        | 2.30  | 84   | 7325     | 1.097     | ug/l # | 90     |
| 25) 2-Butanone                | 4.53  | 43   | 22548    | 7.925     | ug/l   | 95     |
| 29) Tetrahydrofuran           | 4.27  | 42   | 3915     | 3.400     | ug/l # | 42     |
| 49) 1,4-Dioxane               | 6.88  | 88   | 199      | 4.617     | ug/l # | 25     |
| 58) 2-Chloroethyl Vinyl ether | 7.46  | 63   | 2469     | 1.237     | ug/l   | 99     |
| 59) 2-Hexanone                | 9.72  | 43   | 1744     | Below Cal |        | 64     |
| 74) N-amyl acetate            | 11.45 | 43   | 2886     | Below Cal | #      | 47     |

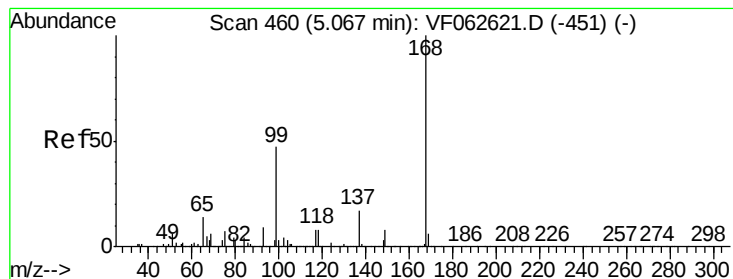
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_F  
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TP-9-S2

Quant Time: May 22 03:55:57 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_F\METHODS\82F051619S.M  
Quant Title : SW846 8260  
QLast Update : Fri May 17 05:49:09 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.06 min Scan# 459

Delta R.T. -0.01 min

Lab File: VF062682.D

Acq: 21 May 2019 14:50

Instrument :

MSVOA\_F

ClientSampled :

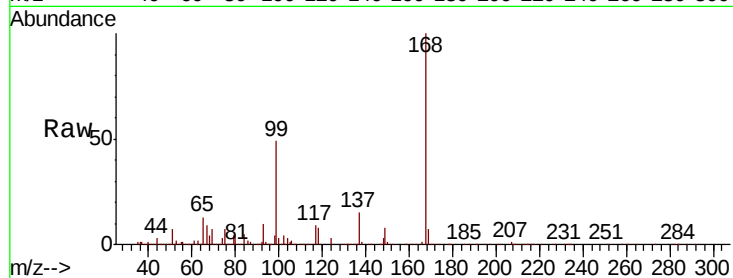
TP-9-S2

Tot Ion:168 Resp: 726384

Ion Ratio Lower Upper

168 100

99 48.8 37.8 56.8



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.06

250000

200000

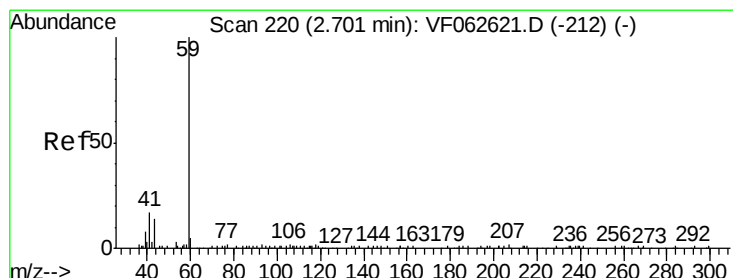
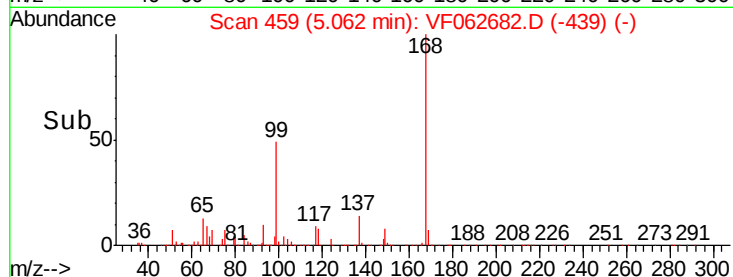
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 7.855 ug/l

RT: 2.73 min Scan# 222

Delta R.T. 0.02 min

Lab File: VF062682.D

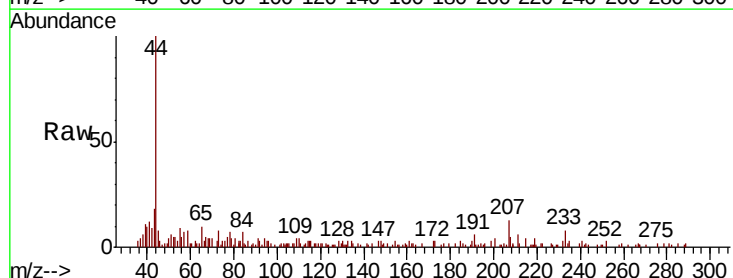
Acq: 21 May 2019 14:50

Tgt Ion: 59 Resp: 2662

Ion Ratio Lower Upper

59 100

57 85.1 9.3 13.9#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

2.73

800

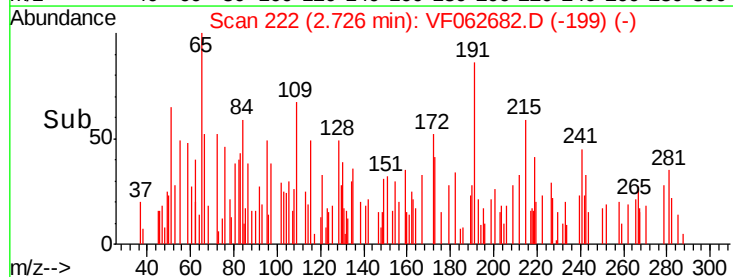
600

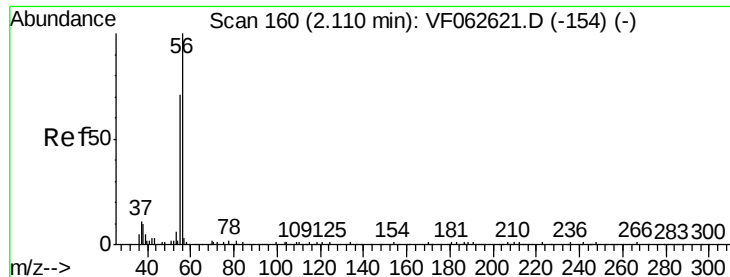
400

200

0

Time-->





#13

Acrolein

Concen: 13.806 ug/l

RT: 2.07 min Scan# 156

Delta R.T. -0.04 min

Lab File: VF062682.D

Acq: 21 May 2019 14:50

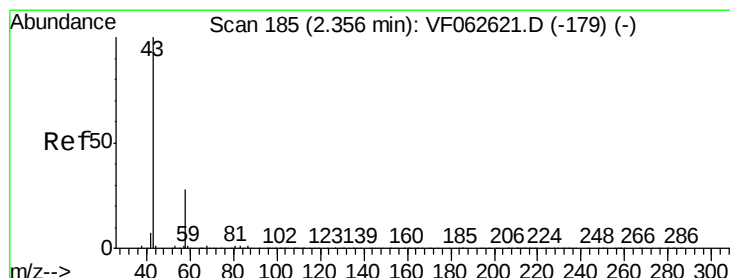
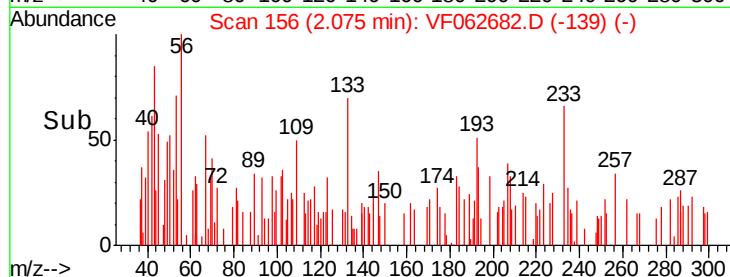
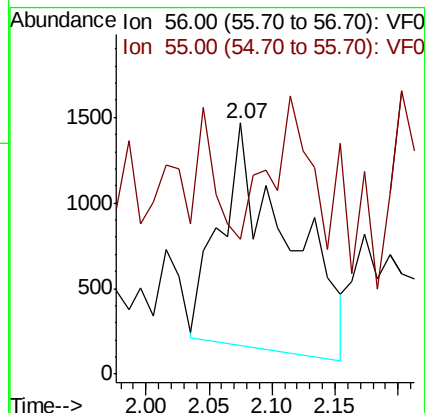
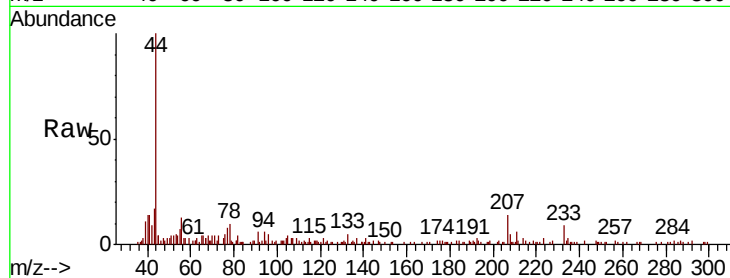
Instrument :  
MSVOA\_F  
ClientSampleId :  
TP-9-S2

Tot Ion: 56 Resp: 4884

Ion Ratio Lower Upper

56 100

55 53.8 59.4 89.0#



#16

Acetone

Concen: 29.203 ug/l

RT: 2.35 min Scan# 184

Delta R.T. -0.01 min

Lab File: VF062682.D

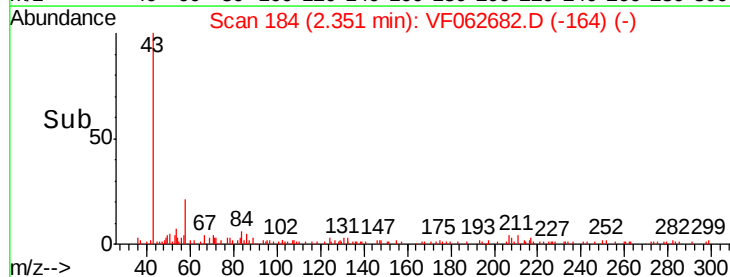
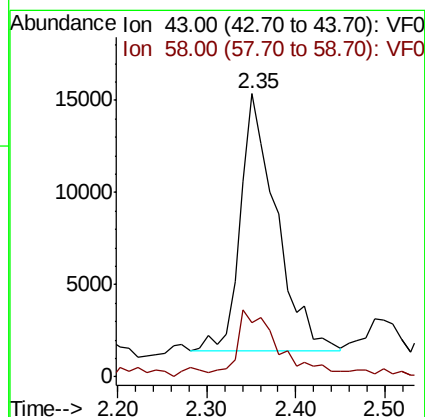
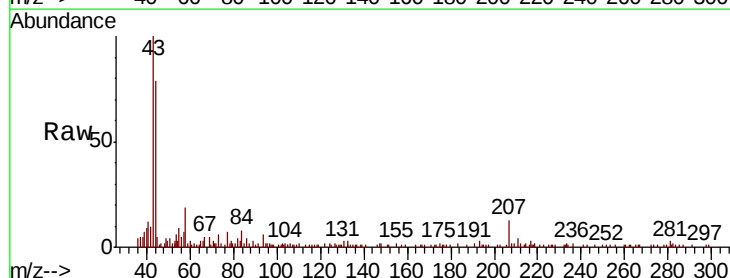
Acq: 21 May 2019 14:50

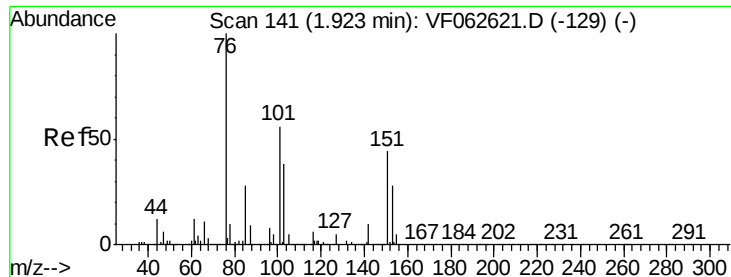
Tgt Ion: 43 Resp: 38888

Ion Ratio Lower Upper

43 100

58 19.2 22.6 33.8#

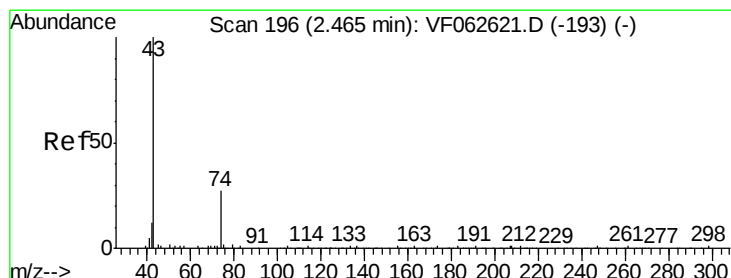
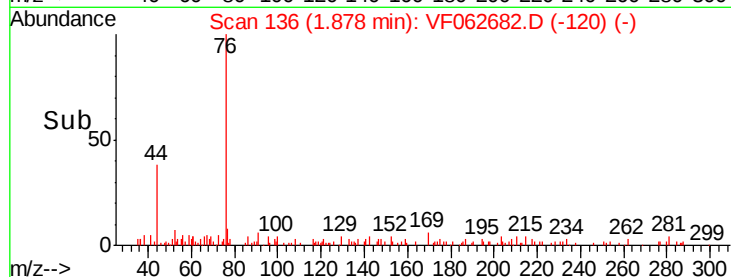
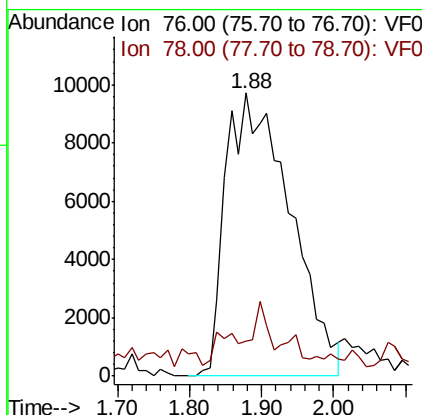
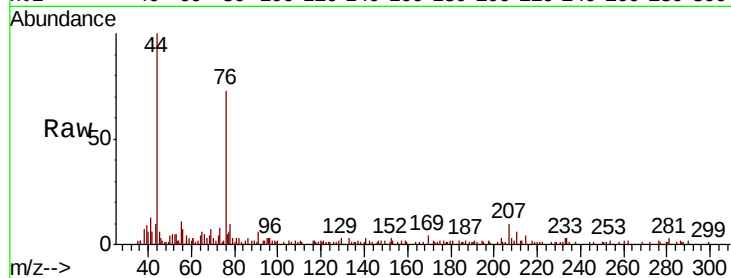




#17  
Carbon Disulfide  
Concen: 3.113 ug/l  
RT: 1.88 min Scan# 136  
Delta R.T. -0.04 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

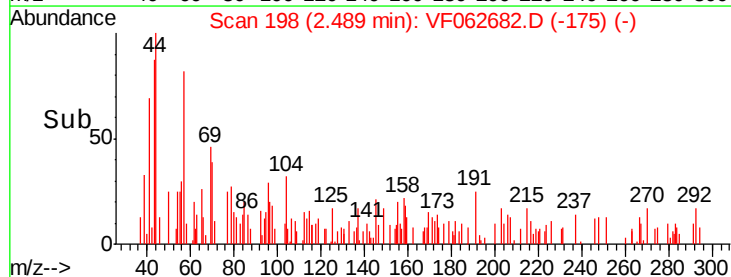
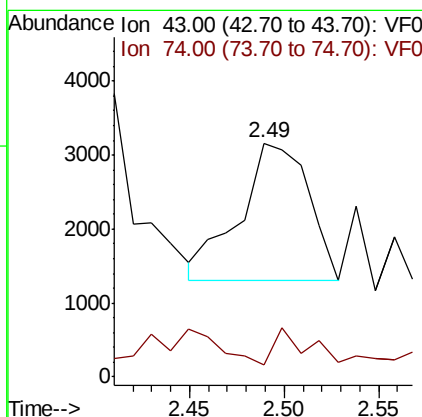
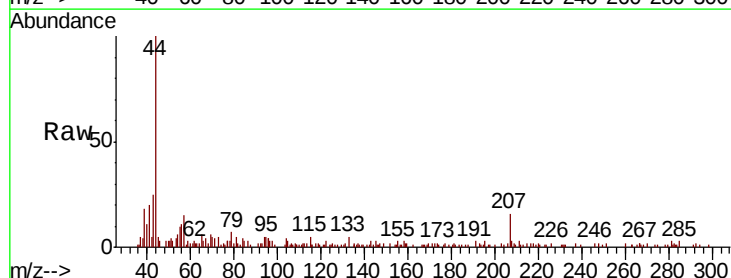
Instrument :  
MSVOA\_F  
ClientSampled :  
TP-9-S2

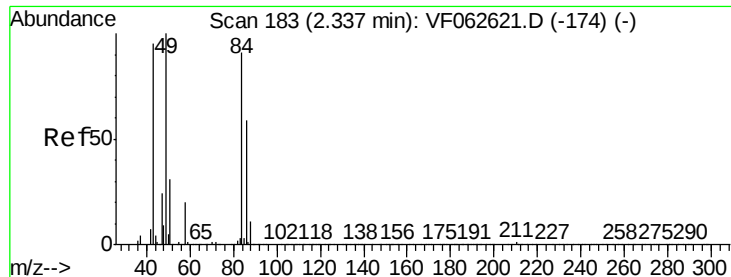
Tot Ion: 76 Resp: 60207  
Ion Ratio Lower Upper  
76 100  
78 12.4 8.4 12.6



#18  
Methyl Acetate  
Concen: 2.237 ug/l  
RT: 2.49 min Scan# 198  
Delta R.T. 0.02 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

Tgt Ion: 43 Resp: 4681  
Ion Ratio Lower Upper  
43 100  
74 5.3 18.9 28.3#

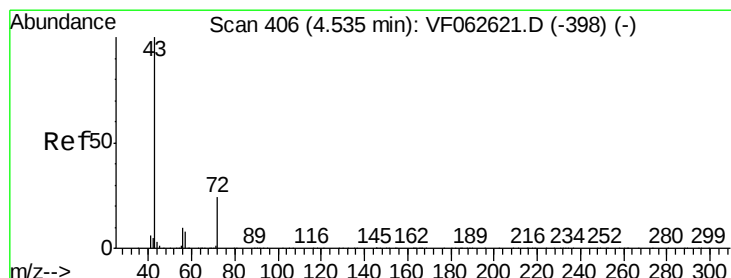
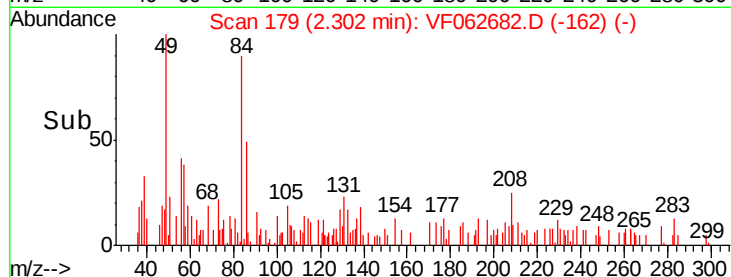
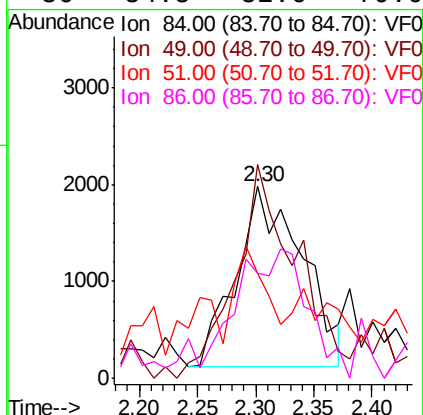
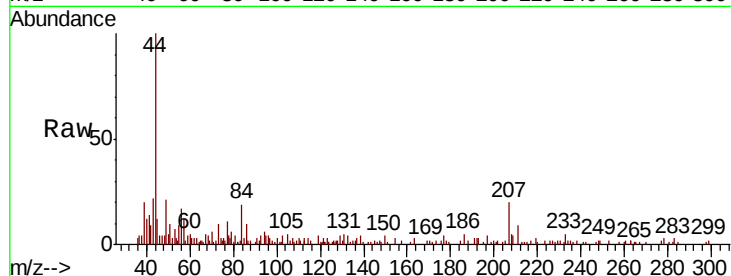




#20  
Methvlene Chloride  
Concen: 1.097 ug/l  
RT: 2.30 min Scan# 179  
Delta R.T. -0.04 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

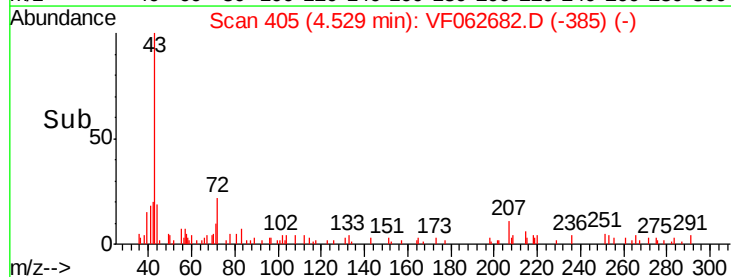
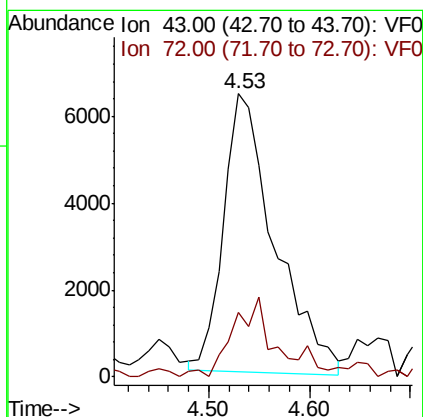
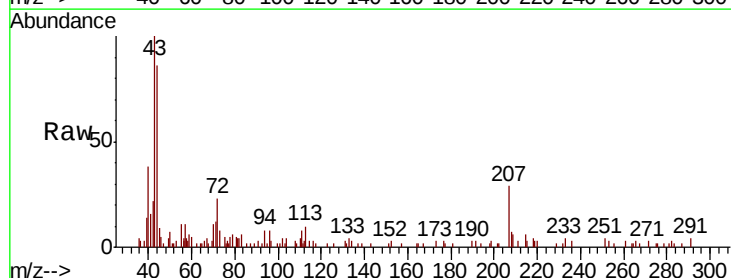
Instrument :  
MSVOA\_F  
ClientSampleId :  
TP-9-S2

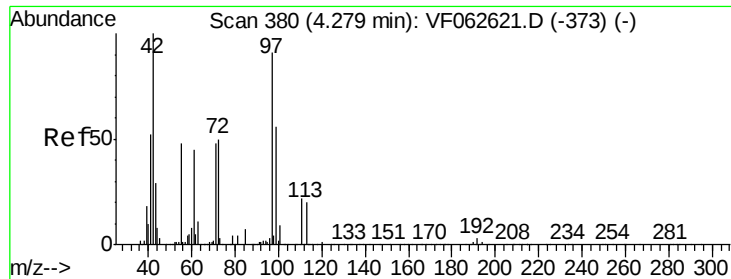
| Tot Ion: | 84    | Resp: | 7325  |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 111.3 | 89.8  | 134.8 |
| 51       | 54.6  | 28.4  | 42.6# |
| 86       | 54.5  | 52.6  | 79.0  |



#25  
2-Butanone  
Concen: 7.925 ug/l  
RT: 4.53 min Scan# 405  
Delta R.T. -0.01 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

| Tgt Ion: | 43    | Resp: | 22548 |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 22.6  | 20.1  | 30.1  |

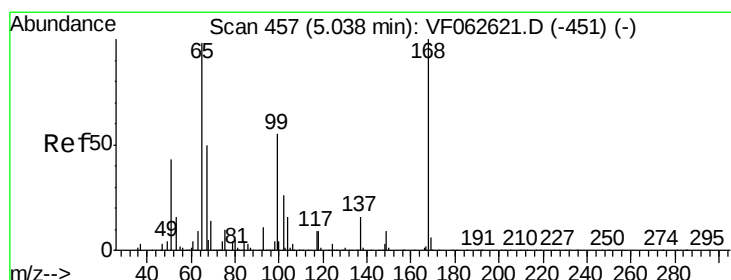
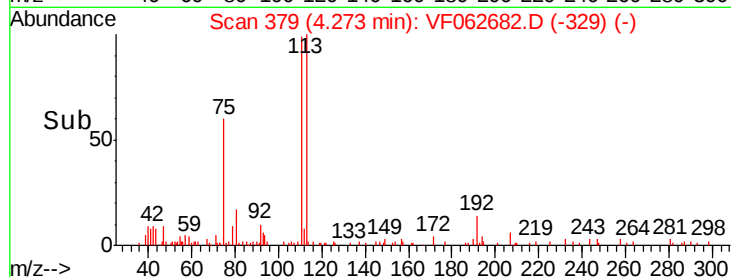
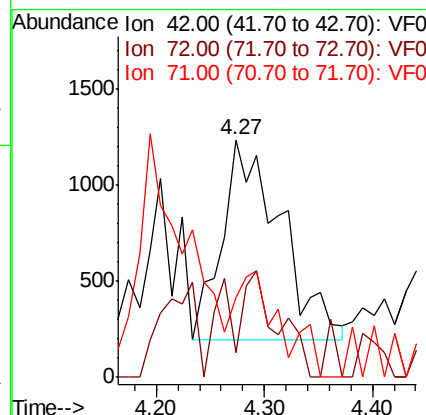
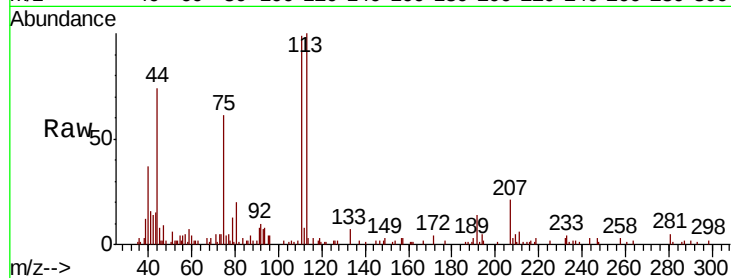




#29  
Tetrahydrofuran  
Concen: 3.400 ug/l  
RT: 4.27 min Scan# 379  
Delta R.T. -0.01 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

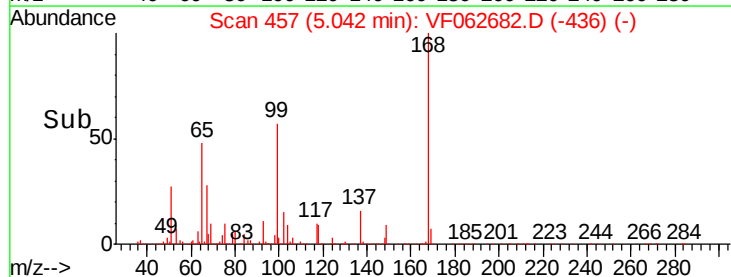
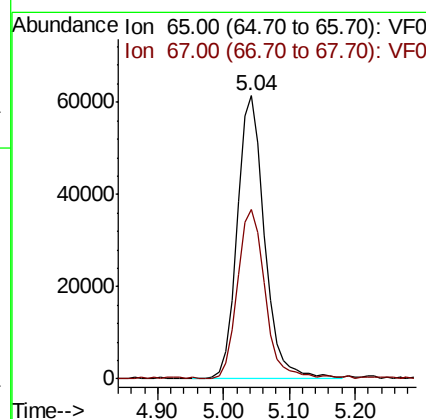
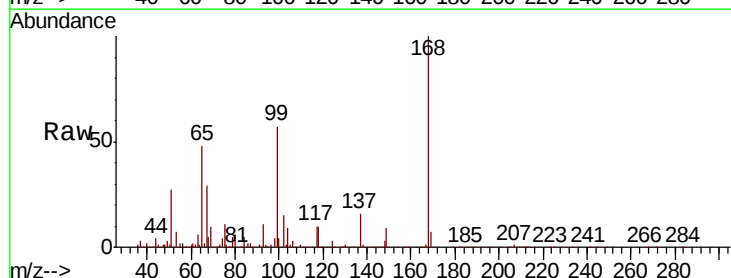
Instrument :  
MSVOA\_F  
ClientSampleId :  
TP-9-S2

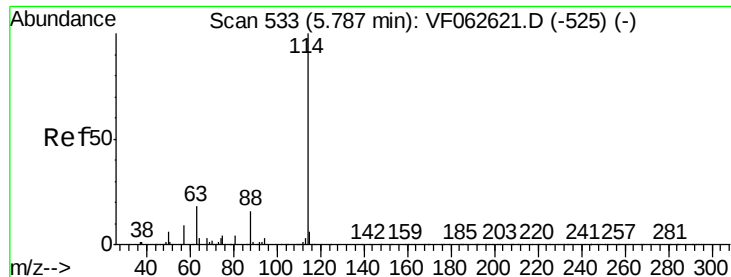
Tot Ion: 42 Resp: 3915  
Ion Ratio Lower Upper  
42 100  
72 14.9 38.2 57.2#  
71 0.0 35.8 53.6#



#33  
1,2-Dichloroethane-d4  
Concen: 34.927 ug/l  
RT: 5.04 min Scan# 457  
Delta R.T. 0.00 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

Tgt Ion: 65 Resp: 179279  
Ion Ratio Lower Upper  
65 100  
67 59.7 0.0 117.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.78 min Scan# 532

Delta R.T. -0.01 min

Lab File: VF062682.D

Acq: 21 May 2019 14:50

Instrument :

MSVOA\_F

ClientSampleId :

TP-9-S2

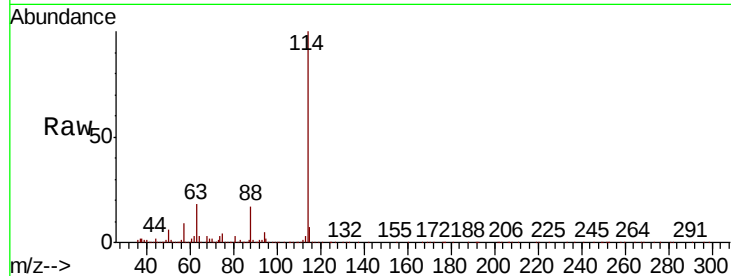
Tot Ion:114 Resp: 1187820

Ion Ratio Lower Upper

114 100

63 17.5 0.0 35.4

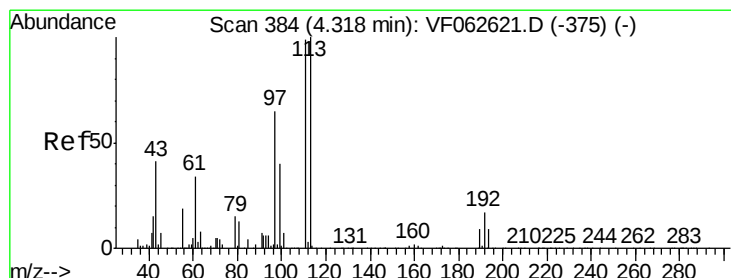
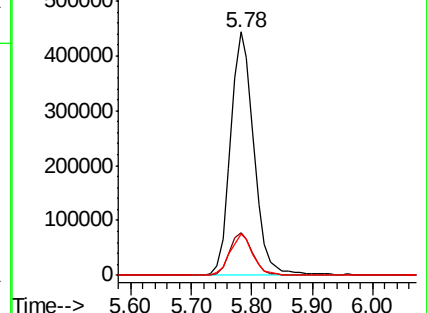
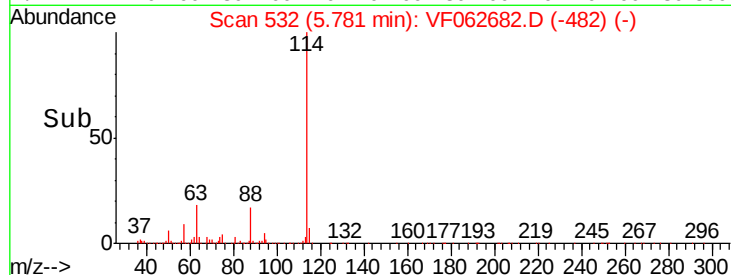
88 16.9 0.0 32.4



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: 36.524 ug/l

RT: 4.31 min Scan# 383

Delta R.T. -0.01 min

Lab File: VF062682.D

Acq: 21 May 2019 14:50

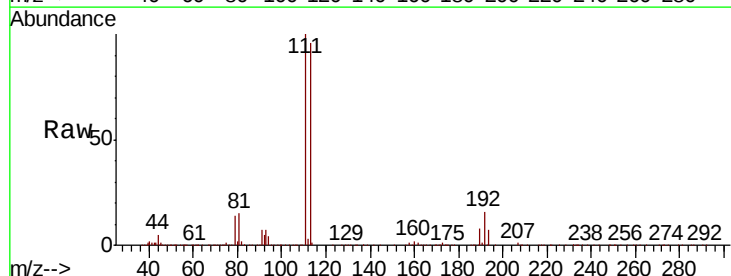
Tgt Ion:113 Resp: 331976

Ion Ratio Lower Upper

113 100

111 104.6 79.4 119.2

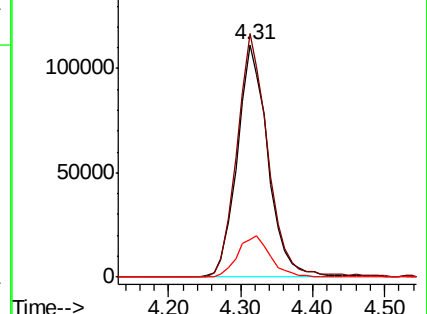
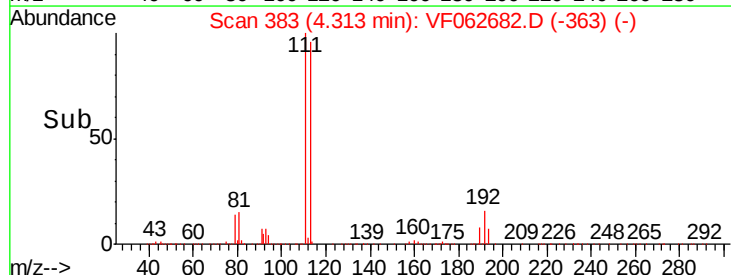
192 16.4 13.4 20.2

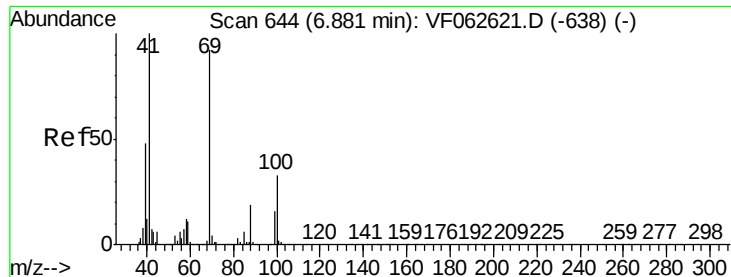


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





#49

1,4-Dioxane

Concen: 4.617 ug/l

RT: 6.88 min Scan# 643

Delta R.T. -0.01 min

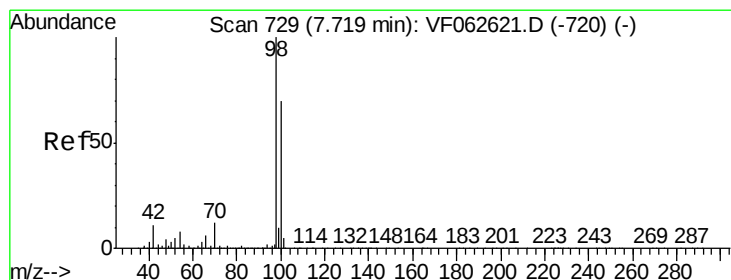
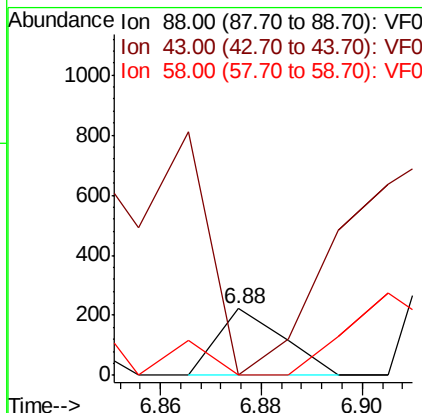
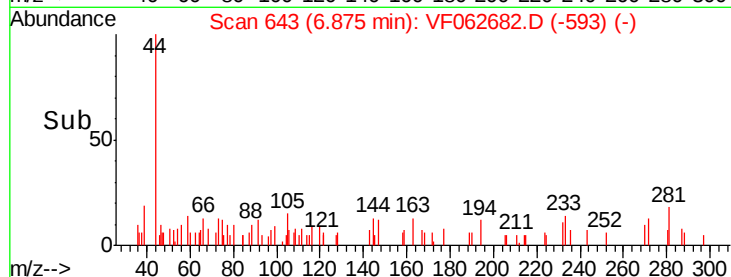
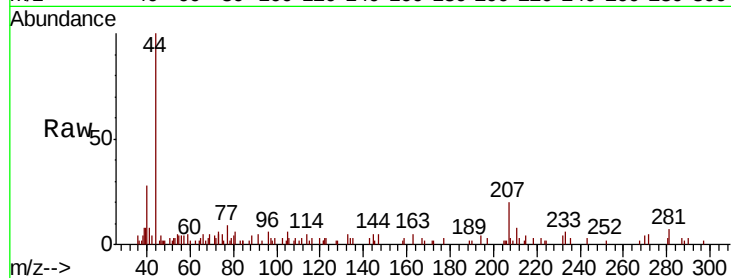
Lab File: VF062682.D

Acq: 21 May 2019 14:50

Instrument :  
MSVOA\_F  
ClientSampleId :  
TP-9-S2

Tot Ion: 88 Resp: 199

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 88  | 100   |       |       |
| 43  | 0.0   | 30.0  | 45.0# |
| 58  | 0.0   | 51.1  | 76.7# |



#50

Toluene-d8

Concen: 30.025 ug/l

RT: 7.71 min Scan# 728

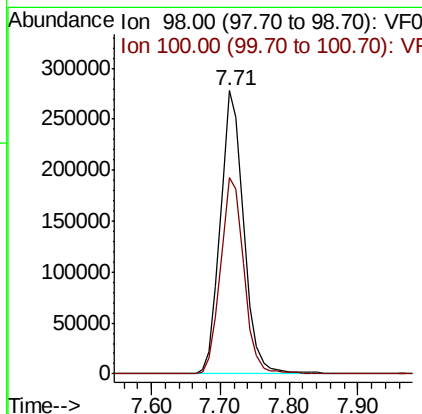
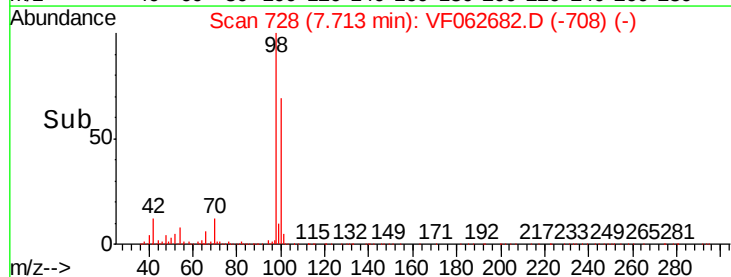
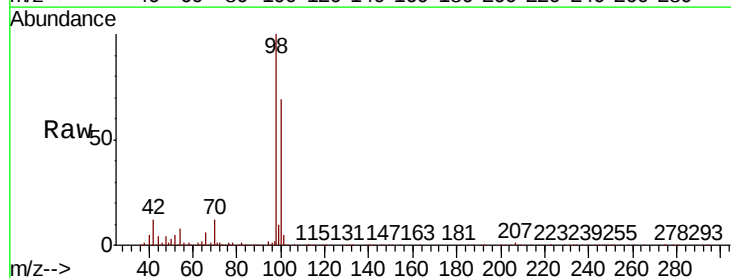
Delta R.T. -0.01 min

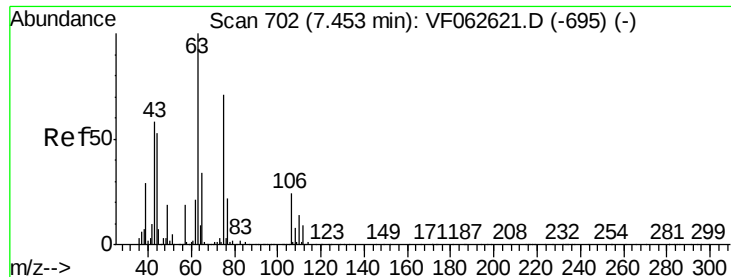
Lab File: VF062682.D

Acq: 21 May 2019 14:50

Tgt Ion: 98 Resp: 651583

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 98  | 100   |       |       |
| 100 | 69.2  | 56.2  | 84.2  |

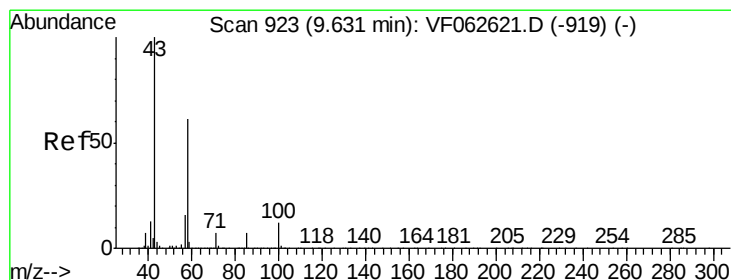
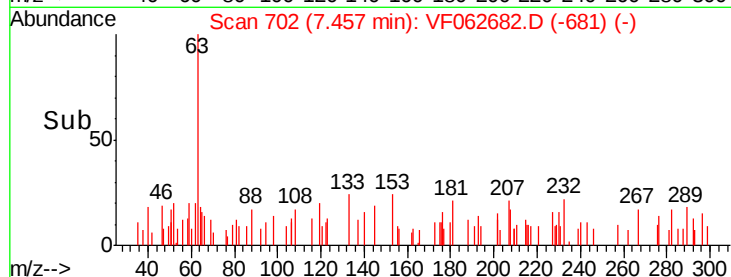
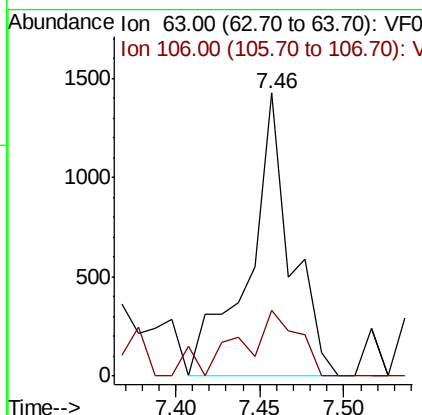
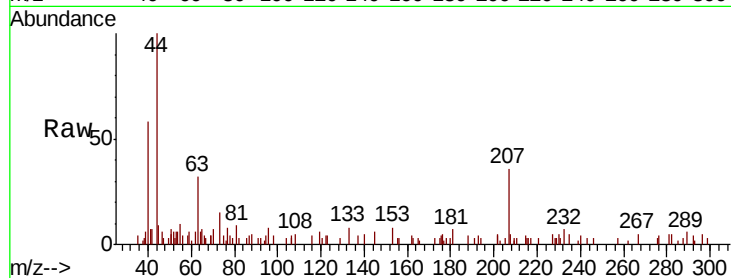




#58  
2-Chloroethyl Vinyl ether  
Concen: 1.237 ug/l  
RT: 7.46 min Scan# 702  
Delta R.T. 0.00 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

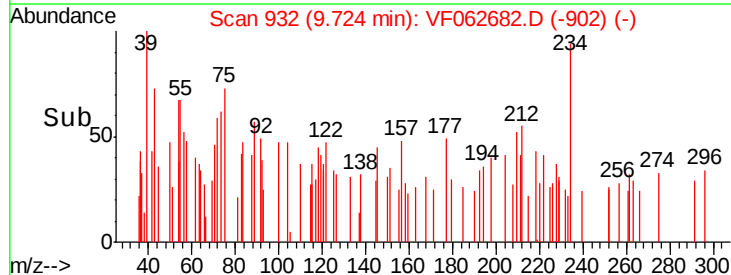
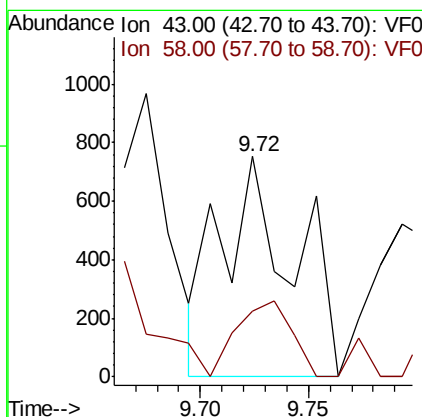
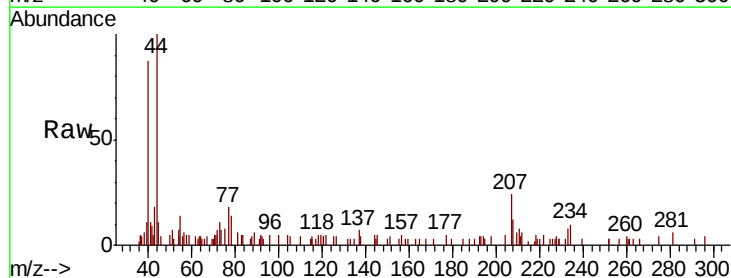
Instrument :  
MSVOA\_F  
ClientSampleId :  
TP-9-S2

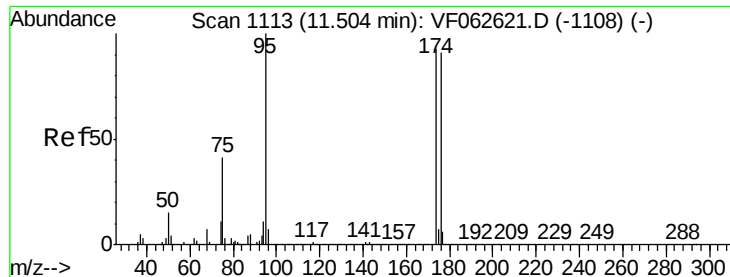
Tot Ion: 63 Resp: 2469  
Ion Ratio Lower Upper  
63 100  
106 23.2 19.1 28.7



#59  
2-Hexanone  
Concen: Below Cal  
RT: 9.72 min Scan# 932  
Delta R.T. 0.09 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

Tgt Ion: 43 Resp: 1744  
Ion Ratio Lower Upper  
43 100  
58 29.7 28.1 84.4





#62

4-Bromofluorobenzene

Concen: 20.790 ug/l

RT: 11.50 min Scan# 1112

Delta R.T. -0.01 min

Lab File: VF062682.D

Acq: 21 May 2019 14:50

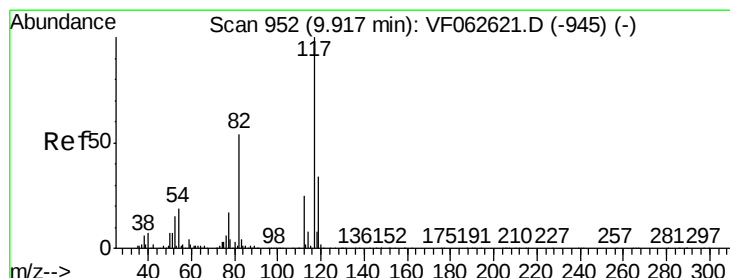
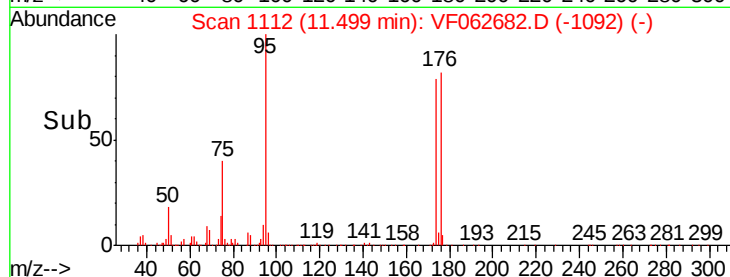
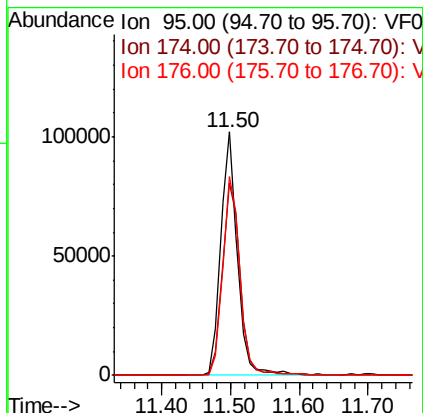
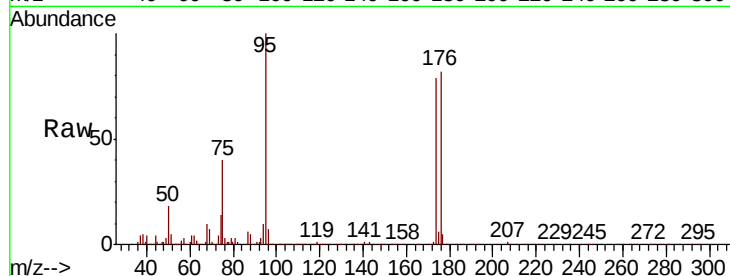
Instrument :

MSVOA\_F

ClientSampleId :

TP-9-S2

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 95    | Resp: | 171117 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 174      | 78.9  | 0.0   | 185.6  |
| 176      | 81.8  | 0.0   | 182.4  |



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

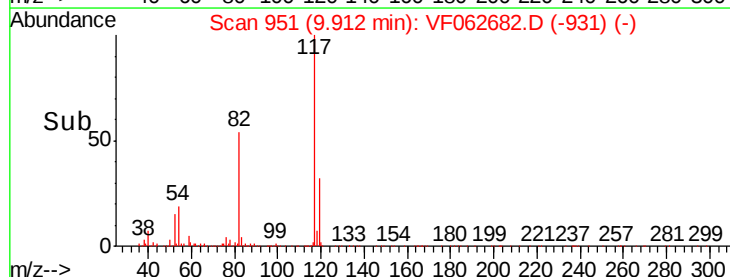
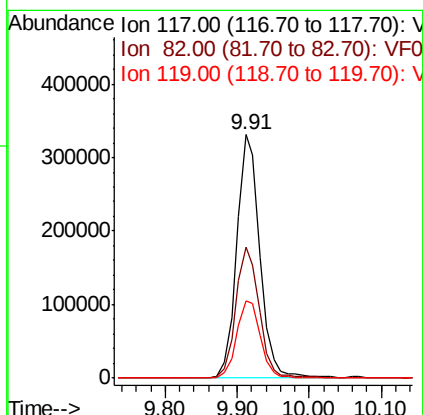
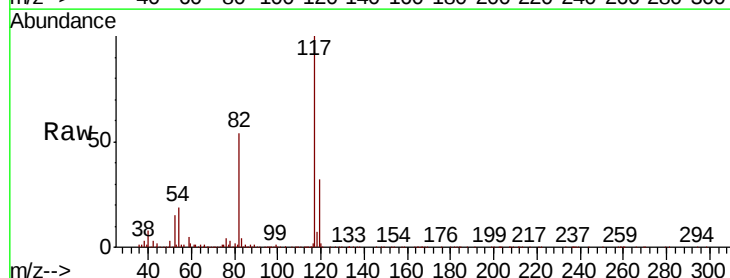
RT: 9.91 min Scan# 951

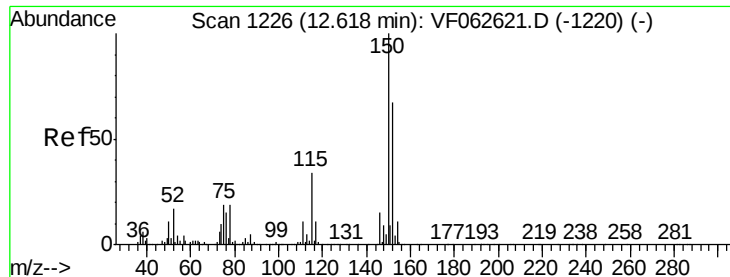
Delta R.T. -0.01 min

Lab File: VF062682.D

Acq: 21 May 2019 14:50

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 117   | Resp: | 740698 |
| Ion      | Ratio | Lower | Upper  |
| 117      | 100   |       |        |
| 82       | 54.0  | 43.3  | 64.9   |
| 119      | 31.9  | 27.4  | 41.0   |



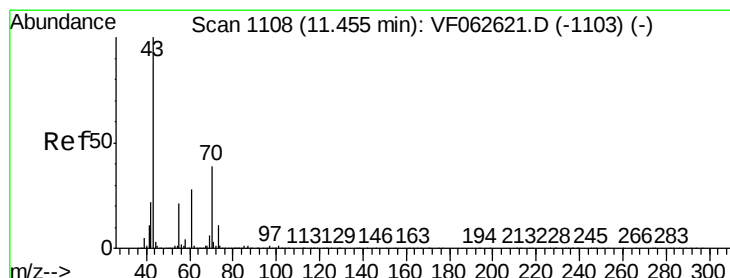
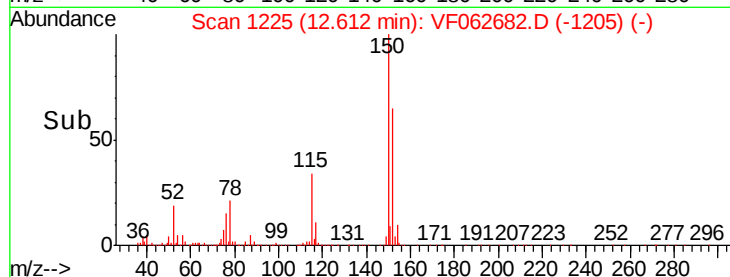
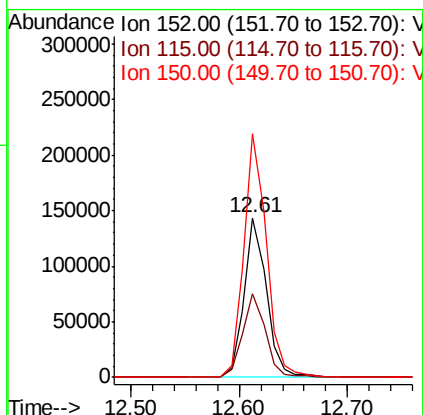
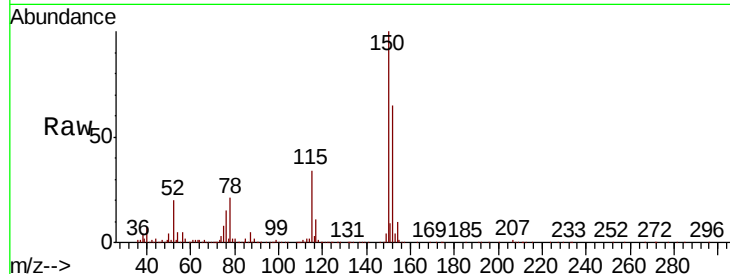


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.61 min Scan# 1225  
Delta R.T. -0.01 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

Instrument :  
MSVOA\_F  
ClientSampleId :  
TP-9-S2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 52.4  | 25.2  | 75.6  |
| 150     | 152.7 | 0.0   | 306.2 |



#74

N-ethyl acetate  
Concen: Below Cal  
RT: 11.45 min Scan# 1107  
Delta R.T. -0.00 min  
Lab File: VF062682.D  
Acq: 21 May 2019 14:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 70      | 88.5  | 30.9  | 46.3# |
| 55      | 35.1  | 17.0  | 25.4# |
| 61      | 44.2  | 22.6  | 34.0# |

