

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF052119\  
 Data File : VF062688.D  
 Acq On : 21 May 2019 17:39  
 Operator : FY/SY  
 Sample : K2971-03  
 Misc : 6.11g/5mL/MSVOA F/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 SUP-2A-G-3-052019

Quant Time: May 22 03:57:06 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  | 752319   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.78  | 114  | 1228228  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 855469   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 350439   | 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   | 198185   | 37.28 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 74.56% |          |
| 35) Dibromofluoromethane    | 4.31  | 113  | 360019   | 38.31 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 76.62% |          |
| 50) Toluene-d8              | 7.71  | 98   | 725471   | 32.33 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 64.66% |          |
| 62) 4-Bromofluorobenzene    | 11.49 | 95   | 261339   | 30.71 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 61.42% |          |

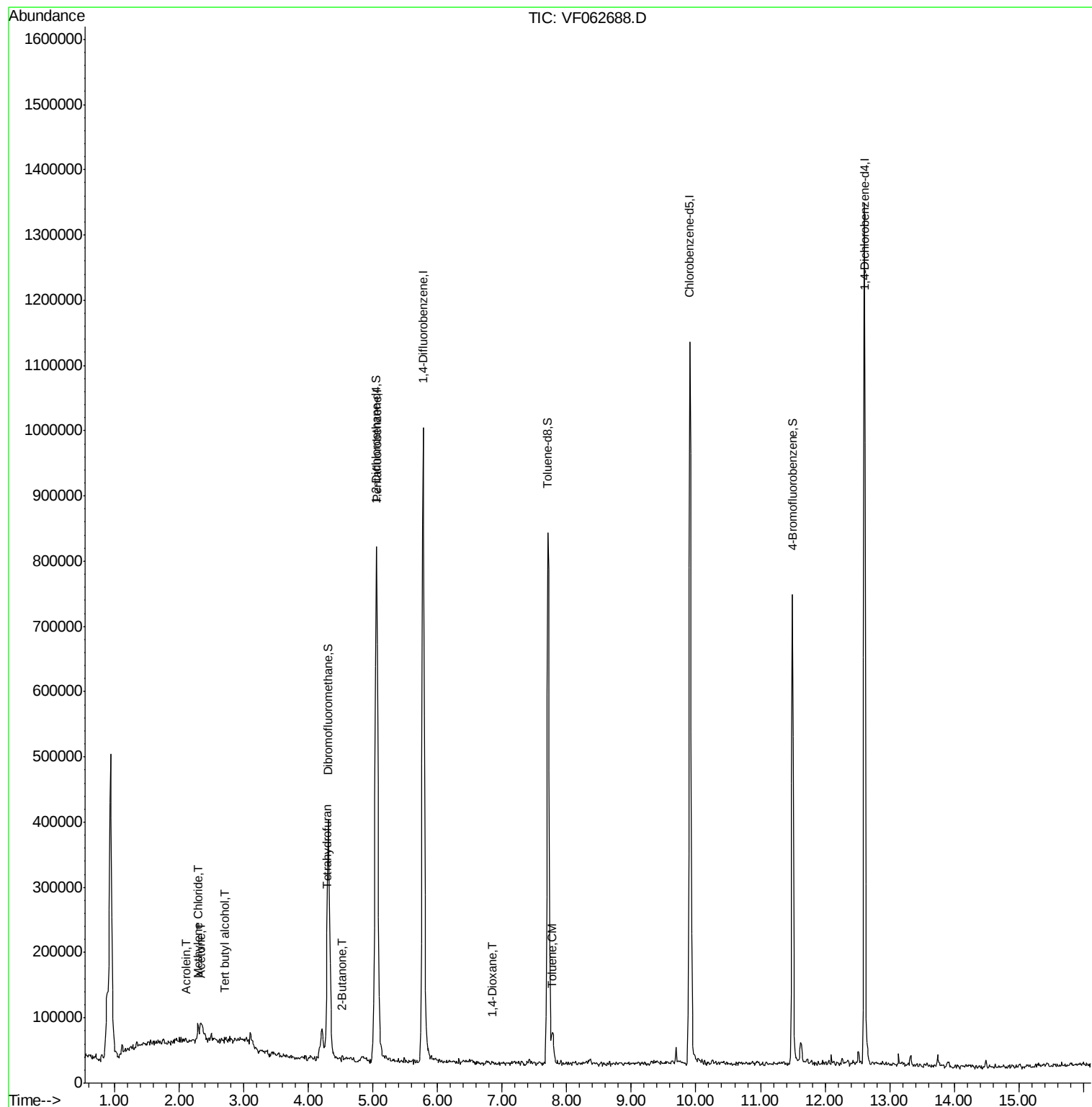
| Target Compounds       | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol | 2.70  | 59   | 1625     | 4.630     | ug/l # | 1      |
| 13) Acrolein           | 2.09  | 56   | 819      | 2.235     | ug/l   | 84     |
| 16) Acetone            | 2.35  | 43   | 22143    | 16.055    | ug/l   | 93     |
| 20) Methylene Chloride | 2.29  | 84   | 12448    | 1.801     | ug/l   | 93     |
| 25) 2-Butanone         | 4.53  | 43   | 5269     | 1.788     | ug/l   | 98     |
| 29) Tetrahydrofuran    | 4.28  | 42   | 3129     | 2.624     | ug/l # | 77     |
| 49) 1,4-Dioxane        | 6.85  | 88   | 266      | 5.968     | ug/l # | 1      |
| 52) Toluene            | 7.79  | 92   | 24830    | 1.381     | ug/l   | 83     |
| 59) 2-Hexanone         | 9.63  | 43   | 6254     | Below Cal |        | 77     |
| 74) N-amyl acetate     | 11.43 | 43   | 962      | Below Cal | #      | 65     |

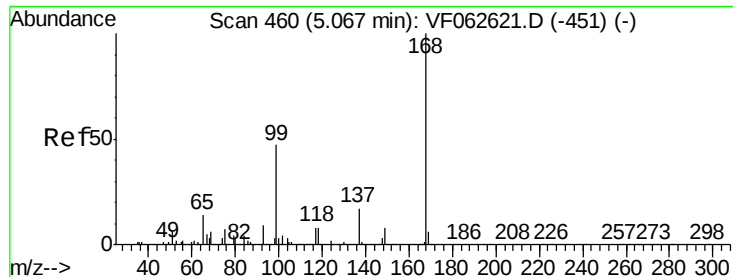
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

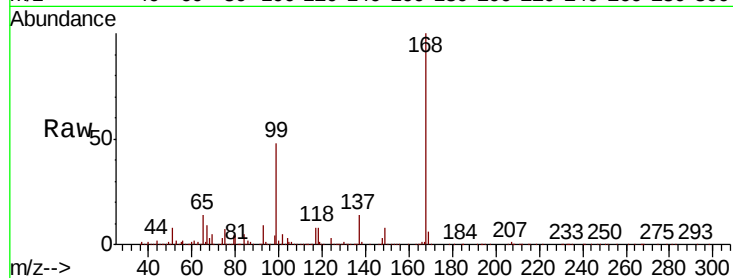
SUP-2A-G-3-052019

Tot Ion:168 Resp: 752319

Ion Ratio Lower Upper

168 100

99 48.0 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

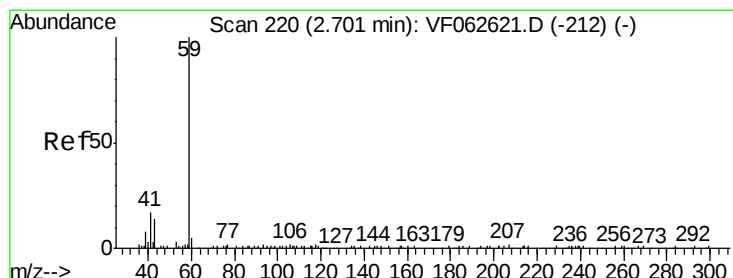
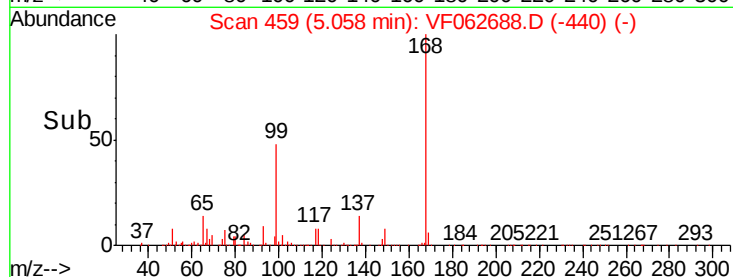
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 4.630 ug/l

RT: 2.70 min Scan# 220

Delta R.T. 0.00 min

Lab File: VF062688.D

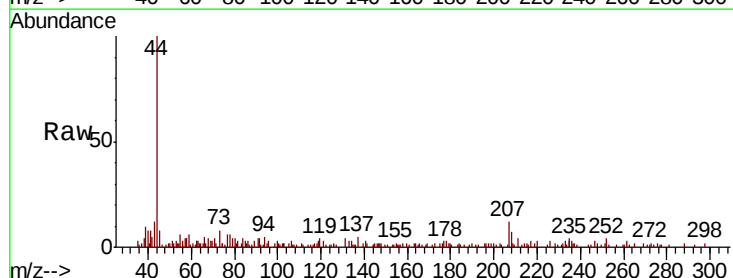
Acq: 21 May 2019 17:39

Tgt Ion: 59 Resp: 1625

Ion Ratio Lower Upper

59 100

57 71.6 9.3 13.9#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

2.70

800

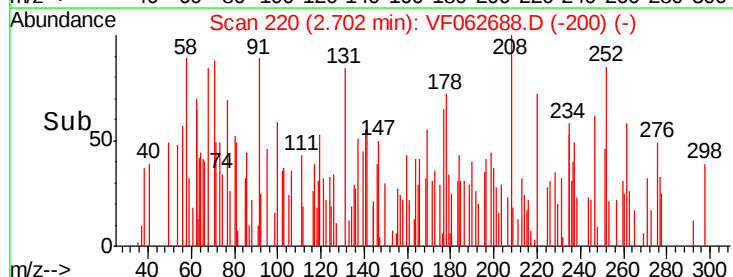
600

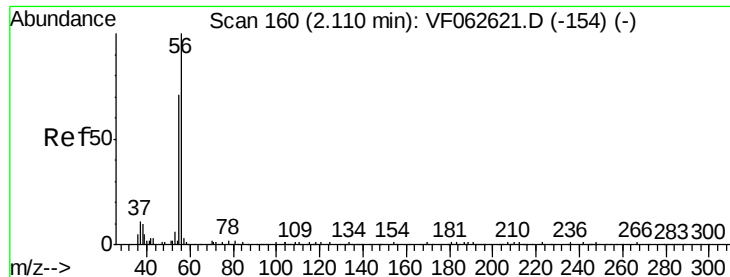
400

200

0

Time-->

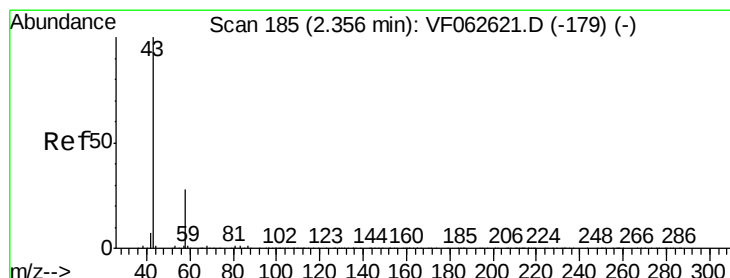
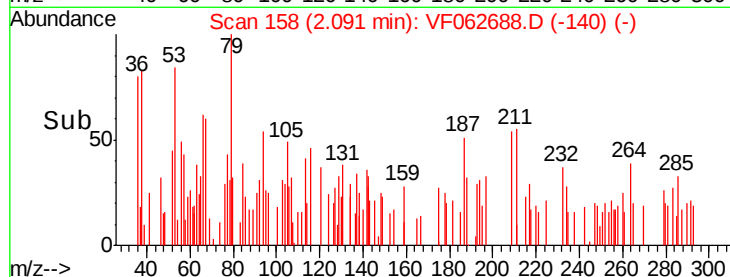
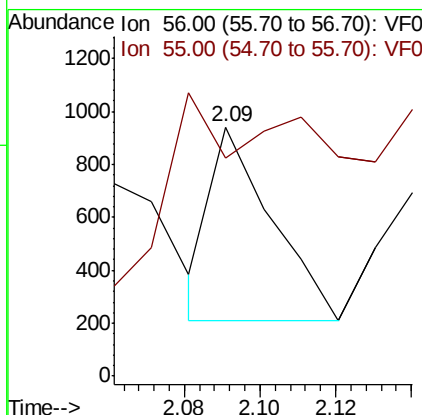
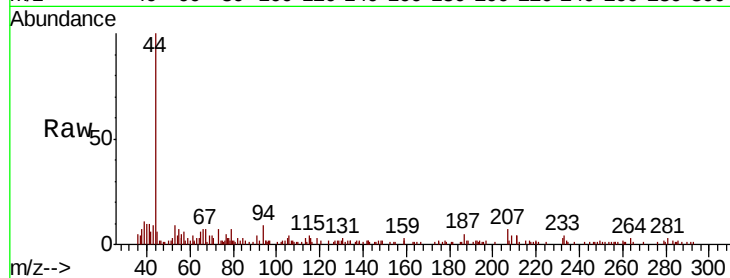




#13  
Acrolein  
Concen: 2.235 ug/l  
RT: 2.09 min Scan# 158  
Delta R.T. -0.02 min  
Lab File: VF062688.D  
Acq: 21 May 2019 17:39

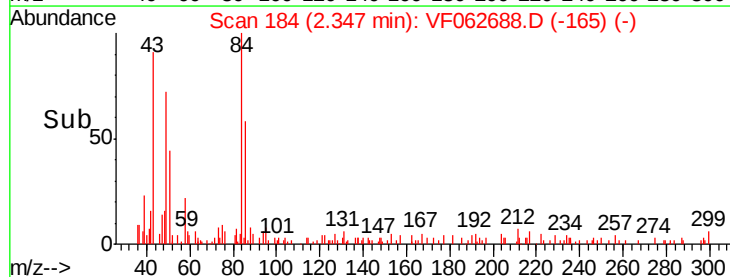
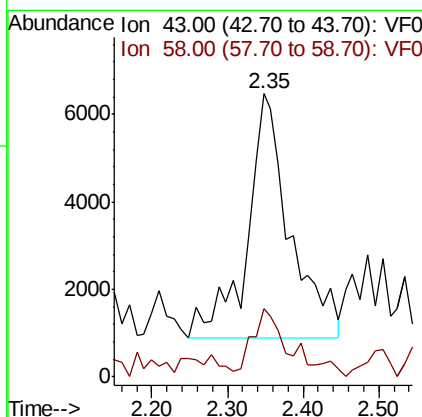
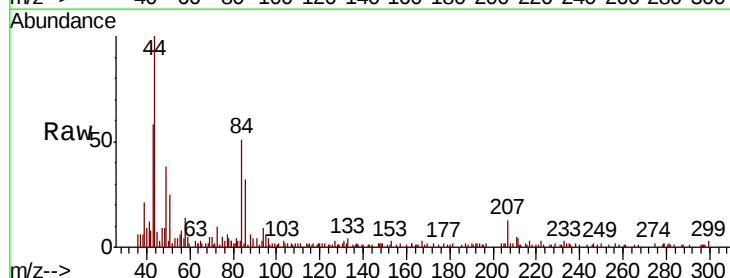
Instrument :  
MSVOA\_F  
ClientSampleId :  
SUP-2A-G-3-052019

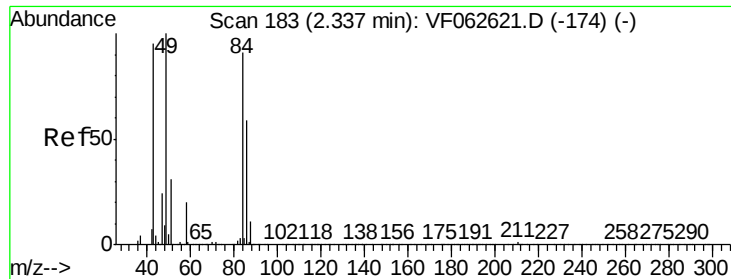
Tot Ion: 56 Resp: 819  
Ion Ratio Lower Upper  
56 100  
55 87.6 59.4 89.0



#16  
Acetone  
Concen: 16.055 ug/l  
RT: 2.35 min Scan# 184  
Delta R.T. -0.01 min  
Lab File: VF062688.D  
Acq: 21 May 2019 17:39

Tgt Ion: 43 Resp: 22143  
Ion Ratio Lower Upper  
43 100  
58 24.3 22.6 33.8

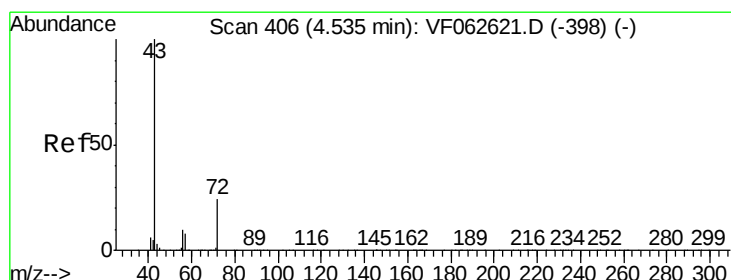
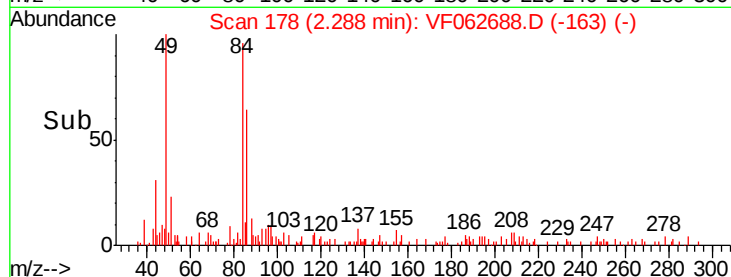
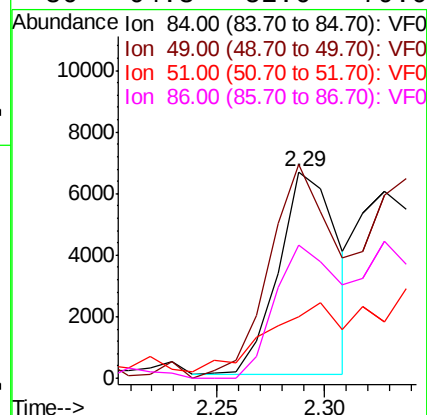
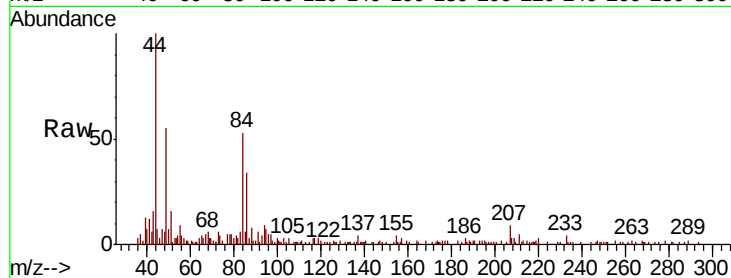




#20  
Methvlene Chloride  
Concen: 1.801 ug/l  
RT: 2.29 min Scan# 178  
Delta R.T. -0.05 min  
Lab File: VF062688.D  
Acq: 21 May 2019 17:39

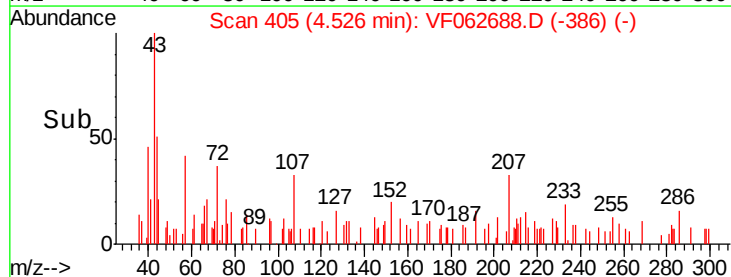
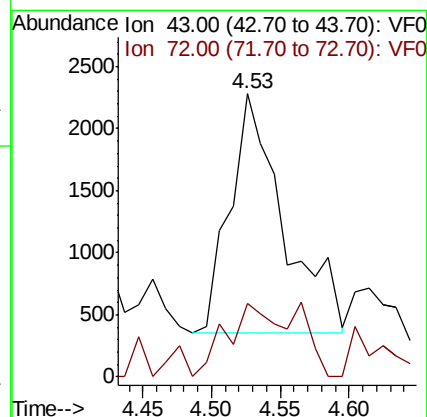
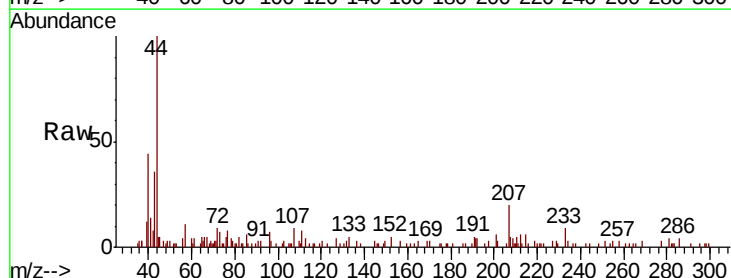
Instrument :  
MSVOA\_F  
ClientSampleId :  
SUP-2A-G-3-052019

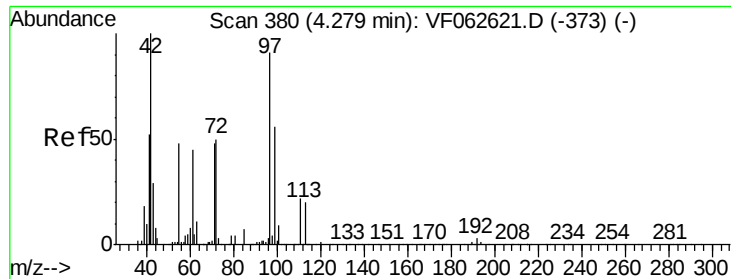
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 12448 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 103.4 | 89.8  | 134.8 |
| 51       | 29.9  | 28.4  | 42.6  |
| 86       | 64.3  | 52.6  | 79.0  |



#25  
2-Butanone  
Concen: 1.788 ug/l  
RT: 4.53 min Scan# 405  
Delta R.T. -0.01 min  
Lab File: VF062688.D  
Acq: 21 May 2019 17:39

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 5269  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 26.0  | 20.1  | 30.1  |





#29

Tetrahydrofuran

Concen: 2.624 ug/l

RT: 4.28 min Scan# 380

Delta R.T. 0.00 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

SUP-2A-G-3-052019

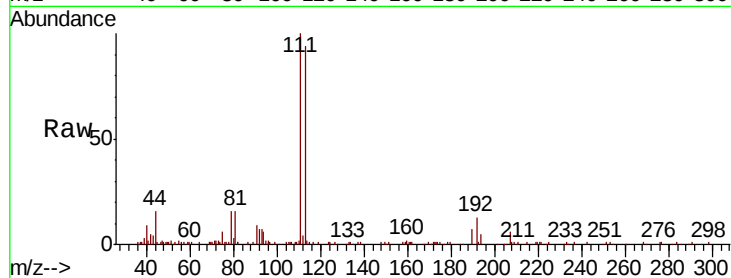
Tot Ion: 42 Resp: 3129

Ion Ratio Lower Upper

42 100

72 69.3 38.2 57.2#

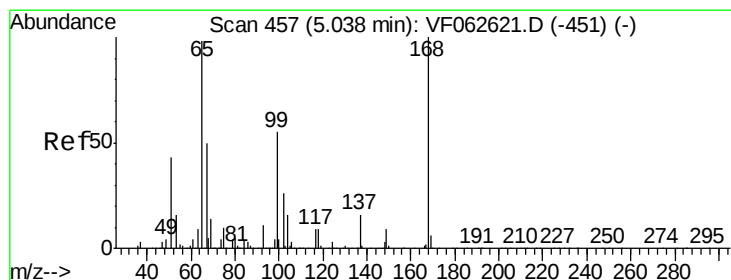
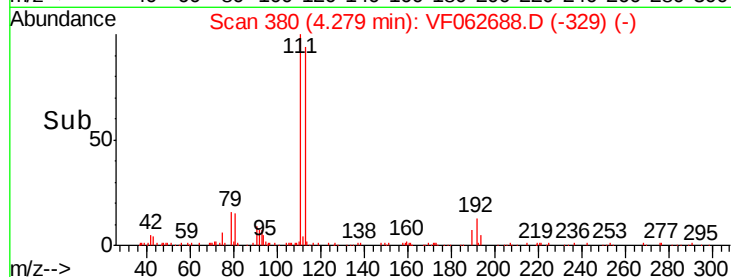
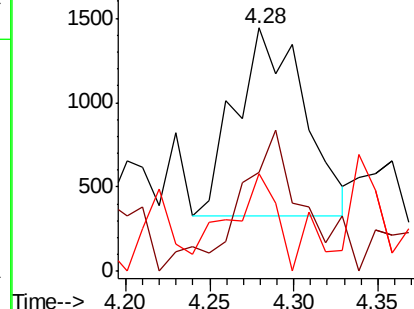
71 35.6 35.8 53.6#



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: 37.279 ug/l

RT: 5.04 min Scan# 457

Delta R.T. 0.00 min

Lab File: VF062688.D

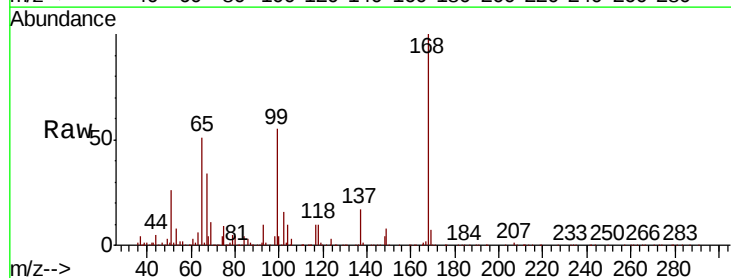
Acq: 21 May 2019 17:39

Tgt Ion: 65 Resp: 198185

Ion Ratio Lower Upper

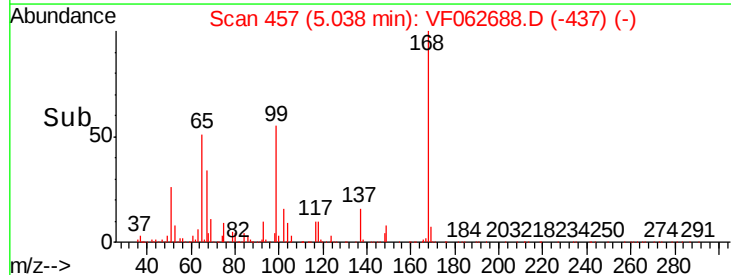
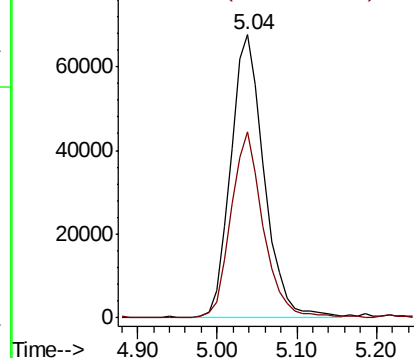
65 100

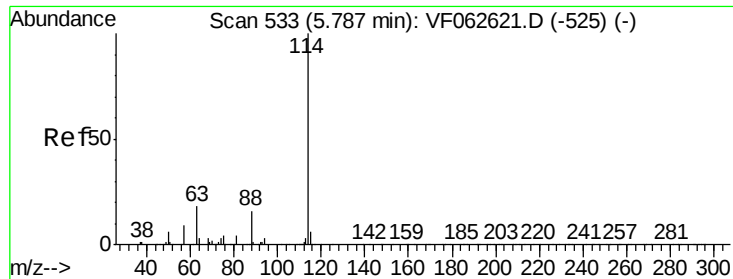
67 65.8 0.0 117.6



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: 5.78 min Scan# 532

Delta R.T. -0.01 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

SUP-2A-G-3-052019

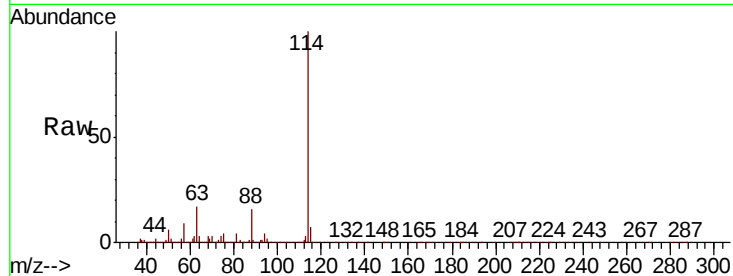
Tot Ion:114 Resp: 1228228

Ion Ratio Lower Upper

114 100

63 16.9 0.0 35.4

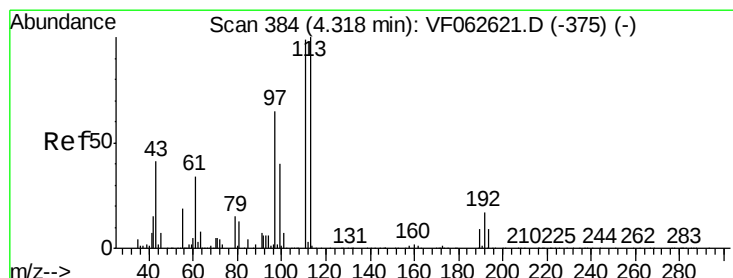
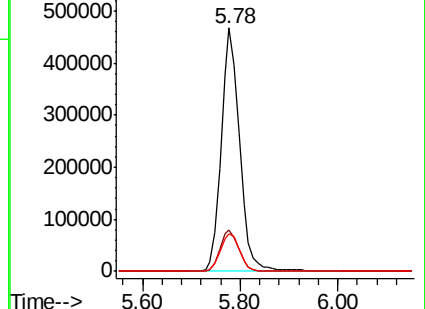
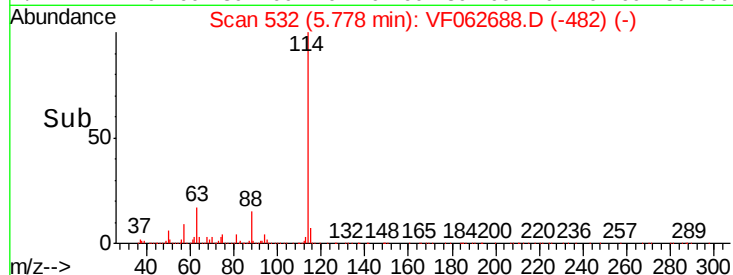
88 15.5 0.0 32.4



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: 38.306 ug/l

RT: 4.31 min Scan# 383

Delta R.T. -0.01 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

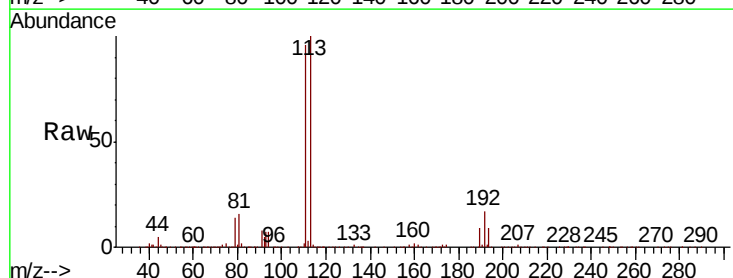
Tgt Ion:113 Resp: 360019

Ion Ratio Lower Upper

113 100

111 96.2 79.4 119.2

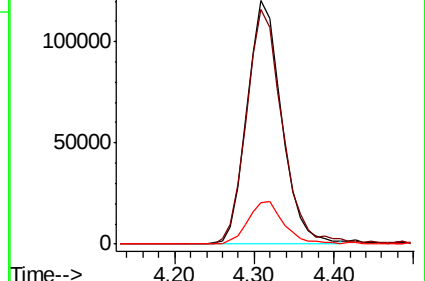
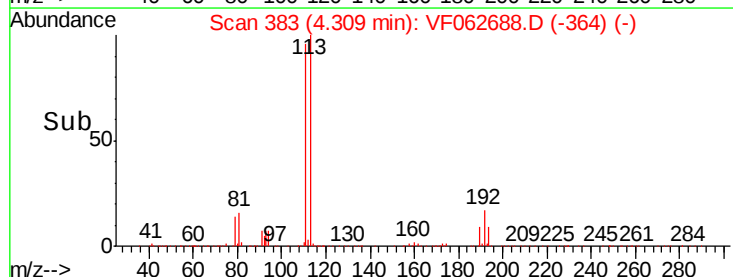
192 16.8 13.4 20.2

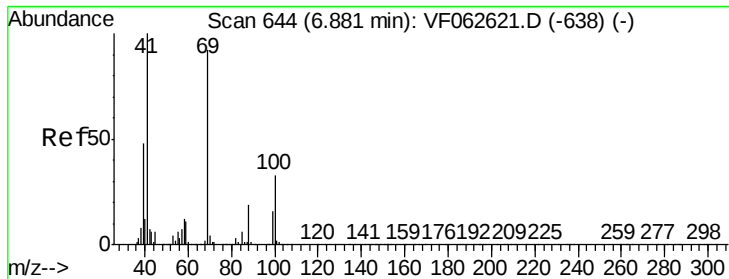


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





#49

1,4-Dioxane

Concen: 5.968 ug/l

RT: 6.85 min Scan# 641

Delta R.T. -0.03 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

SUP-2A-G-3-052019

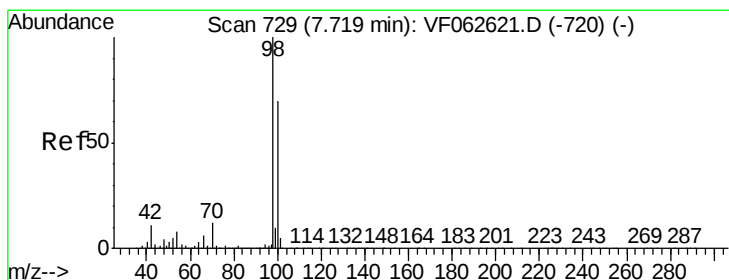
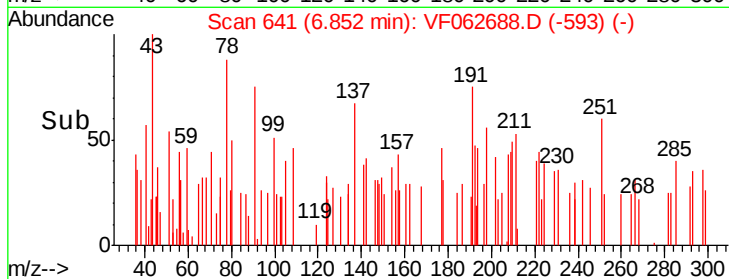
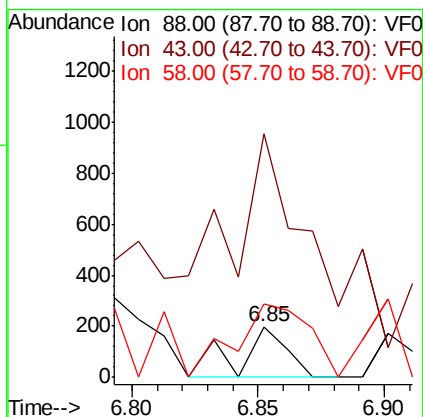
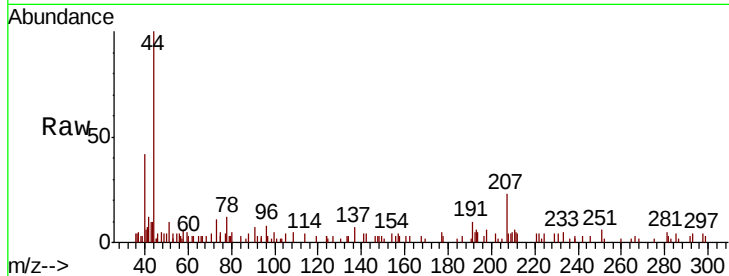
Tot Ion: 88 Resp: 266

Ion Ratio Lower Upper

88 100

43 484.3 30.0 45.0#

58 145.7 51.1 76.7#



#50

Toluene-d8

Concen: 32.330 ug/l

RT: 7.71 min Scan# 728

Delta R.T. -0.01 min

Lab File: VF062688.D

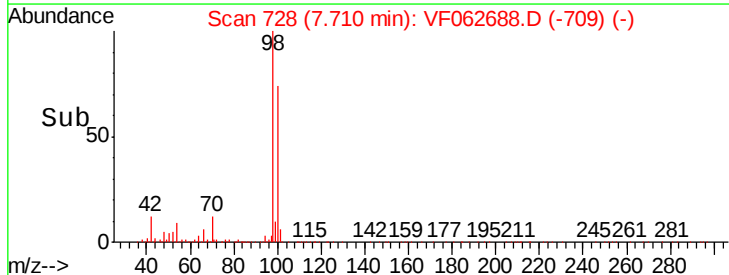
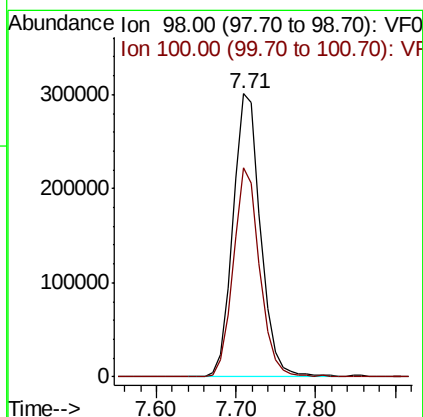
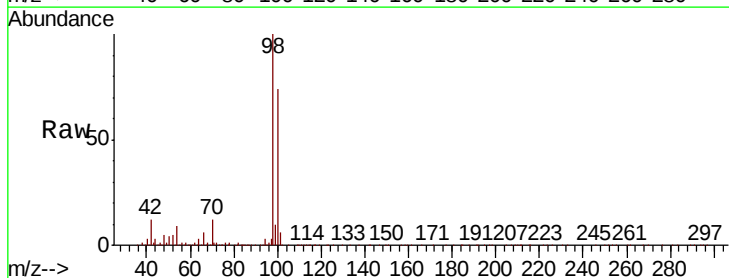
Acq: 21 May 2019 17:39

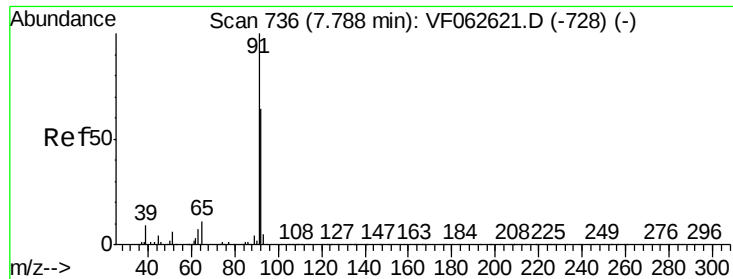
Tgt Ion: 98 Resp: 725471

Ion Ratio Lower Upper

98 100

100 74.0 56.2 84.2





#52

Toluene

Concen: 1.381 ug/l

RT: 7.79 min Scan# 736

Delta R.T. 0.00 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

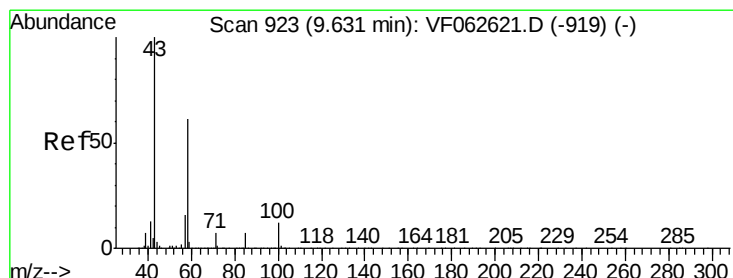
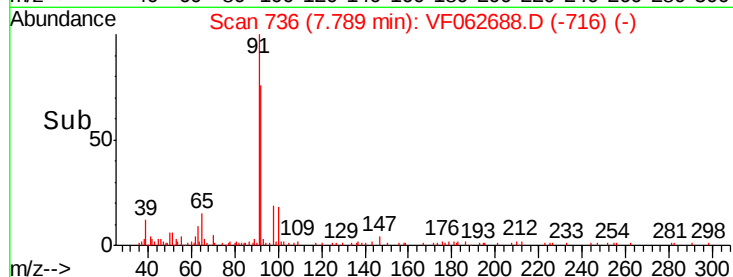
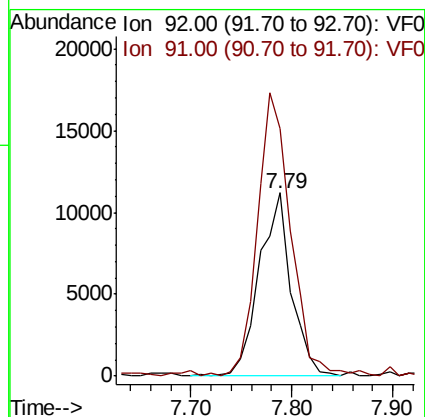
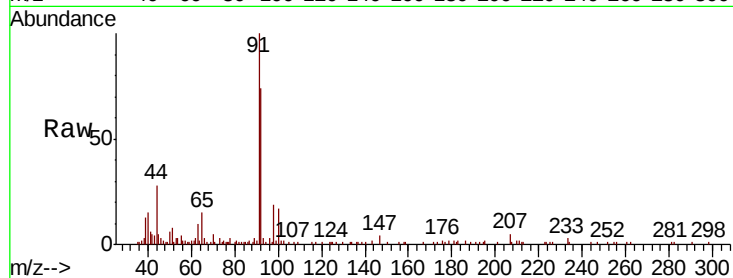
SUP-2A-G-3-052019

Tot Ion: 92 Resp: 24830

Ion Ratio Lower Upper

92 100

91 135.0 125.4 188.0



#59

2-Hexanone

Concen: Below Cal

RT: 9.63 min Scan# 923

Delta R.T. 0.00 min

Lab File: VF062688.D

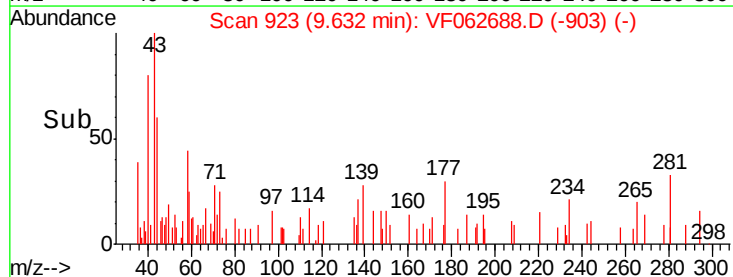
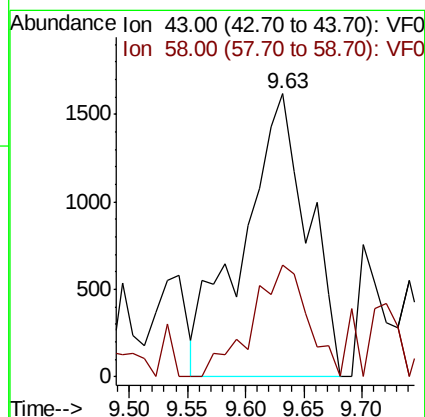
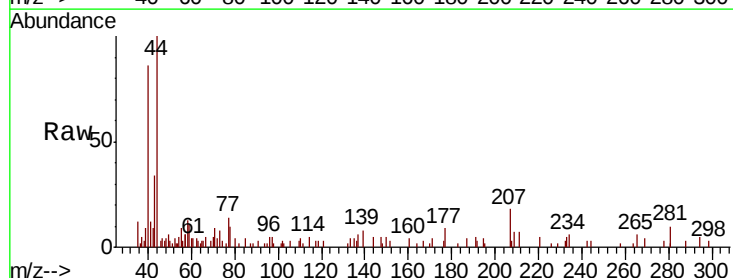
Acq: 21 May 2019 17:39

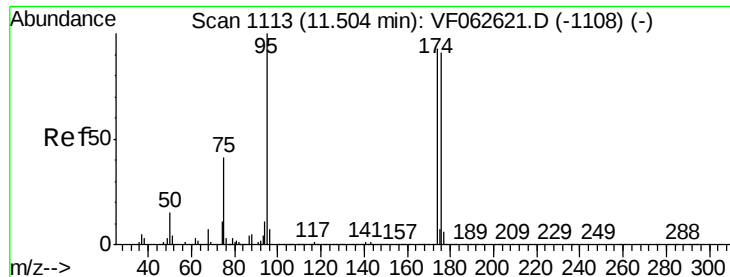
Tgt Ion: 43 Resp: 6254

Ion Ratio Lower Upper

43 100

58 39.3 28.1 84.4





#62

4-Bromofluorobenzene

Concen: 30.707 ug/l

RT: 11.49 min Scan# 1112

Delta R.T. -0.01 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

SUP-2A-G-3-052019

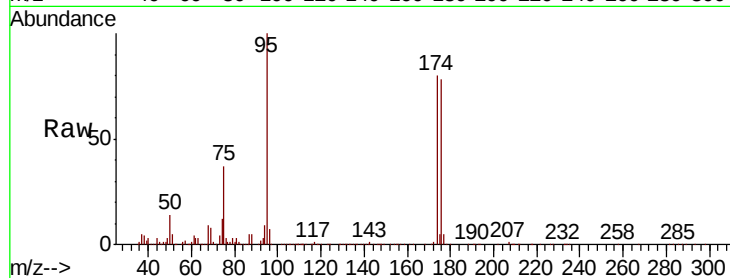
Tot Ion: 95 Resp: 261339

Ion Ratio Lower Upper

95 100

174 79.7 0.0 185.6

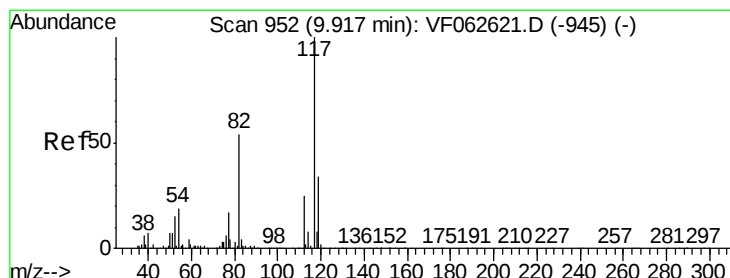
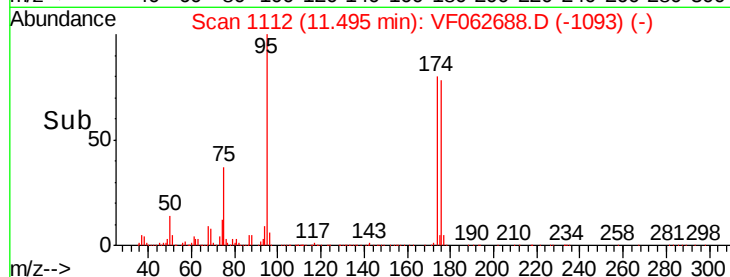
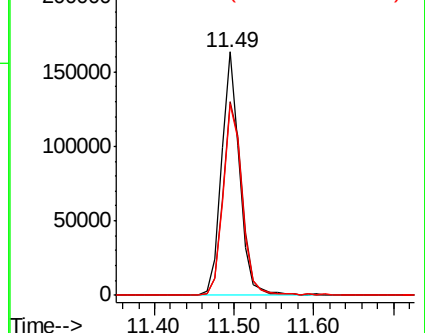
176 78.4 0.0 182.4



Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): VF0

Ion 176.00 (175.70 to 176.70): VF0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.91 min Scan# 951

Delta R.T. -0.01 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

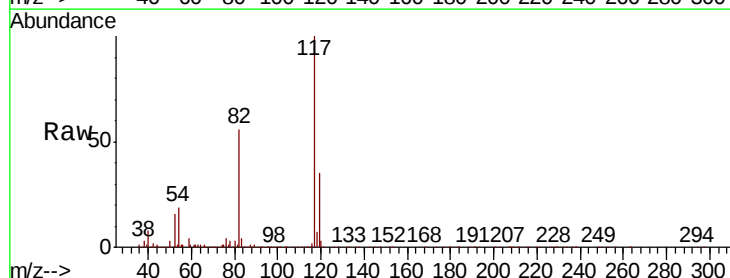
Tgt Ion: 117 Resp: 855469

Ion Ratio Lower Upper

117 100

82 55.5 43.3 64.9

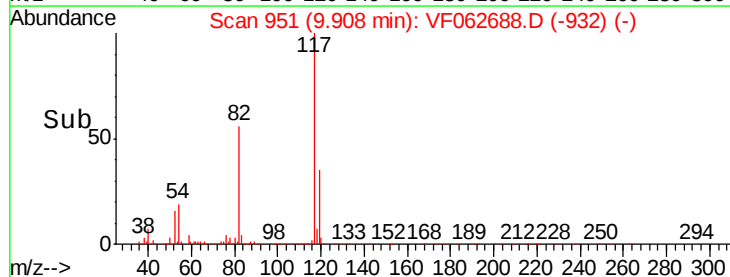
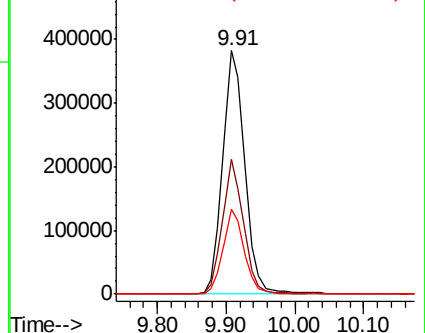
119 35.1 27.4 41.0

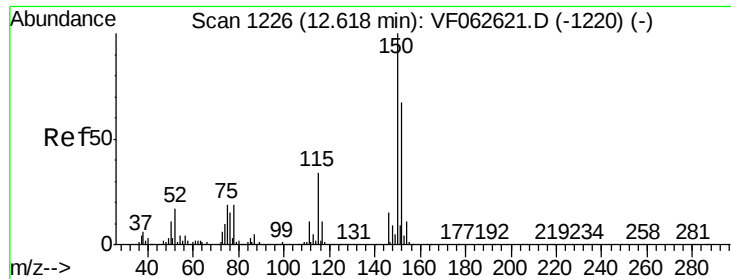


Abundance Ion 117.00 (116.70 to 117.70): VF0

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): VF0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.61 min Scan# 1225

Delta R.T. -0.01 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Instrument :

MSVOA\_F

ClientSampleId :

SUP-2A-G-3-052019

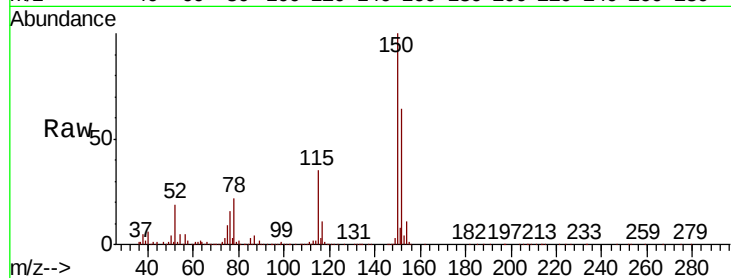
Tot Ion:152 Resp: 350439

Ion Ratio Lower Upper

152 100

115 55.2 25.2 75.6

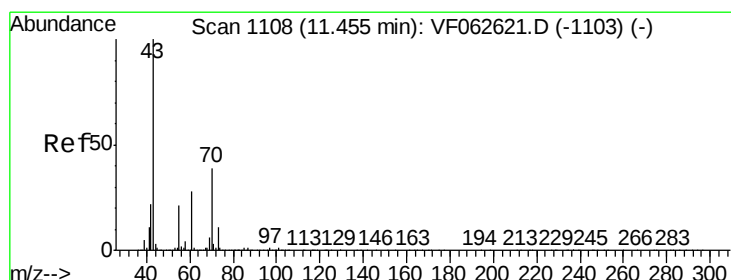
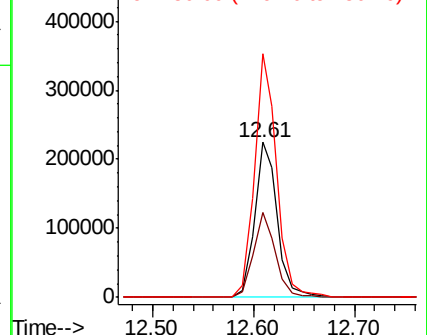
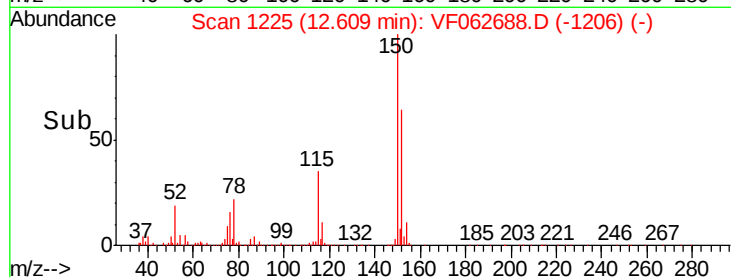
150 157.4 0.0 306.2



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-amil acetate

Concen: Below Cal

RT: 11.43 min Scan# 1105

Delta R.T. -0.03 min

Lab File: VF062688.D

Acq: 21 May 2019 17:39

Tgt Ion: 43 Resp: 962

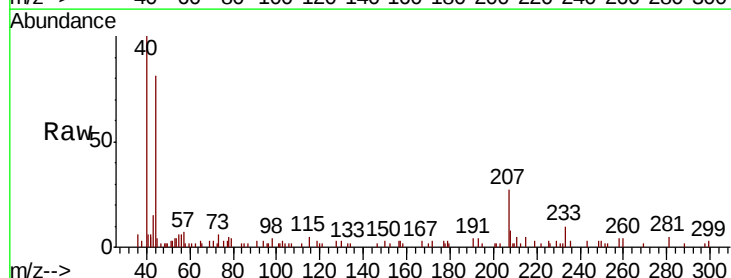
Ion Ratio Lower Upper

43 100

70 18.4 30.9 46.3#

55 41.6 17.0 25.4#

61 11.1 22.6 34.0#



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

