

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF051119\  
 Data File : VF062493.D  
 Acq On : 12 May 2019 8:02  
 Operator : FY/SY  
 Sample : K2756-10  
 Misc : 5.37g/5mL/MSVOA\_F/SOIL  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 P021-SS006-1824-01

Quant Time: May 12 10:07:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 04:34:57 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.07  | 168  | 164089   | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 5.79  | 114  | 242146   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 9.92  | 117  | 195521   | 50.00 | ug/l  | 0.02     |
| 72) 1,4-Dichlorobenzene-d4 | 12.62 | 152  | 102801   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 5.05   | 65  | 105125   | 67.79 | ug/l    | 0.03 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 135.58% |      |
| 35) Dibromofluoromethane    | 4.32   | 113 | 111772   | 57.94 | ug/l    | 0.02 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 115.88% |      |
| 50) Toluene-d8              | 7.73   | 98  | 159767   | 34.21 | ug/l    | 0.03 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 68.42%  |      |
| 62) 4-Bromofluorobenzene    | 11.50  | 95  | 80416    | 38.17 | ug/l    | 0.02 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 76.34%  |      |

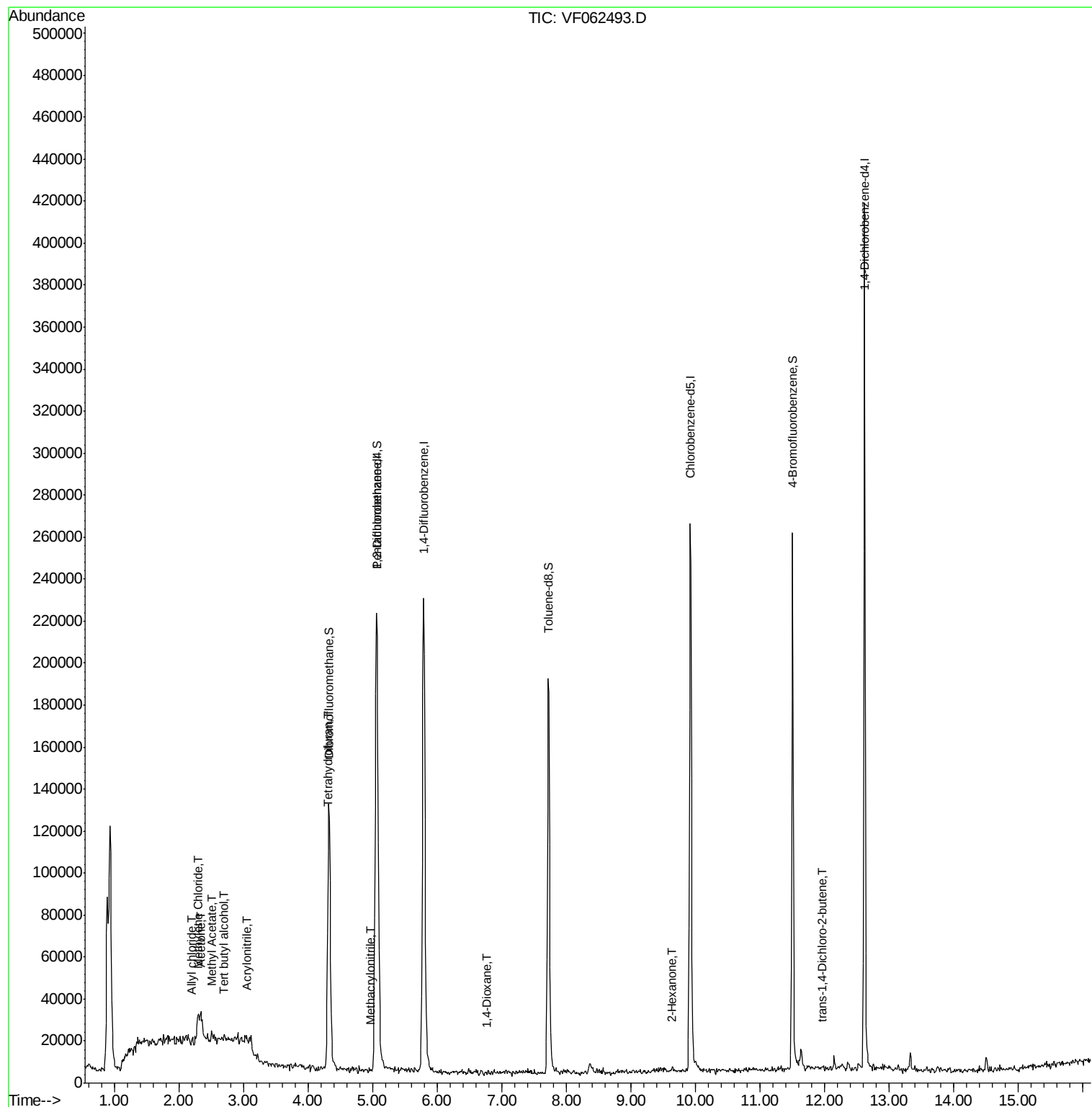
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.40  | 94   | 705      | Below Cal | #      | 13     |
| 11) Tert butyl alcohol         | 2.68  | 59   | 539      | 6.150     | ug/l # | 70     |
| 13) Acrolein                   | 2.09  | 56   | 212      | Below Cal | #      | 30     |
| 14) Allyl chloride             | 2.19  | 41   | 1403     | 1.262     | ug/l # | 77     |
| 15) Acrylonitrile              | 3.06  | 53   | 1266     | 7.626     | ug/l # | 10     |
| 16) Acetone                    | 2.35  | 43   | 6425     | 20.482    | ug/l # | 77     |
| 18) Methyl Acetate             | 2.50  | 43   | 2442     | 1.213     | ug/l # | 79     |
| 20) Methylene Chloride         | 2.30  | 84   | 11647    | 10.262    | ug/l # | 89     |
| 29) Tetrahydrofuran            | 4.30  | 42   | 568      | 3.136     | ug/l # | 65     |
| 37) Ethyl Acetate              | 4.35  | 43   | 252      | Below Cal | #      | 73     |
| 38) Carbon Tetrachloride       | 4.21  | 117  | 81       | Below Cal | #      | 1      |
| 41) Methacrylonitrile          | 4.98  | 41   | 718      | 1.440     | ug/l # | 42     |
| 49) 1,4-Dioxane                | 6.76  | 88   | 128      | 5.620     | ug/l # | 16     |
| 59) 2-Hexanone                 | 9.63  | 43   | 1091     | 2.200     | ug/l # | 55     |
| 81) trans-1,4-Dichloro-2-buten | 11.97 | 75   | 438      | 1.601     | ug/l # | 5      |

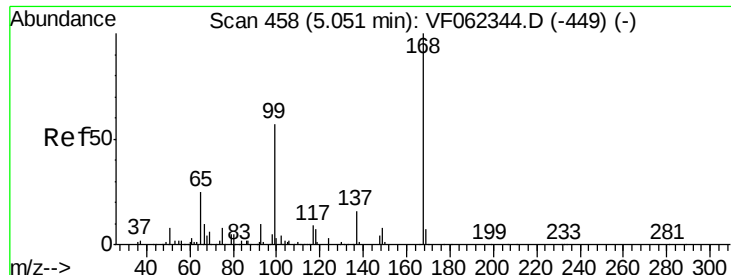
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_F\DATA\VF051119\  
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Quant Time: May 12 10:07:31 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82F050619S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 07 04:34:57 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.07 min Scan# 460

Delta R.T. 0.02 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Instrument :

MSVOA\_F

ClientSampleId :

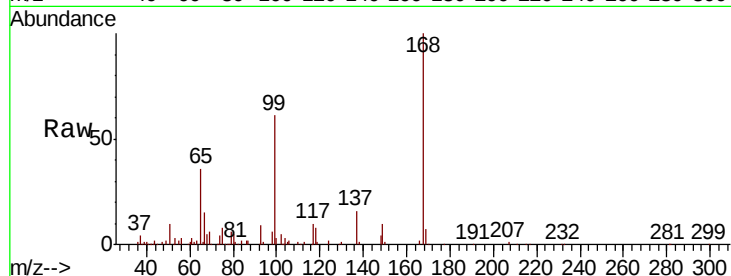
P021-SS006-1824-01

Tgt Ion:168 Resp: 164089

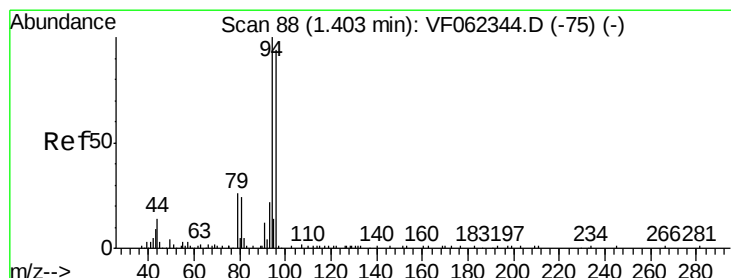
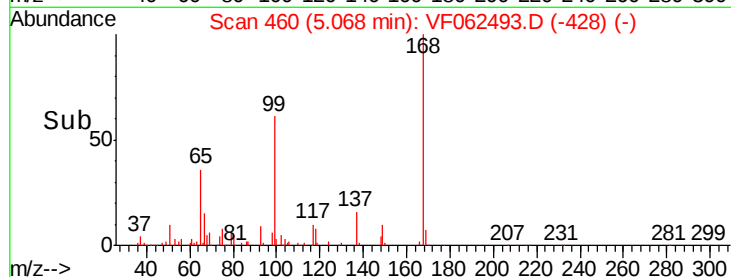
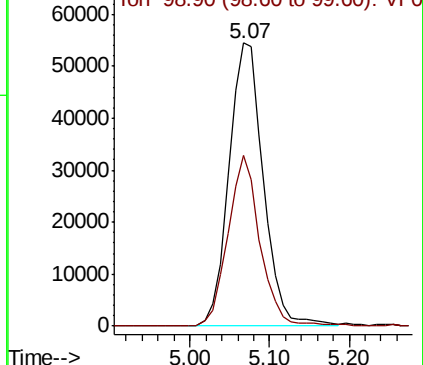
Ion Ratio Lower Upper

168 100

99 60.3 45.9 68.9



Abundance Ion 167.90 (167.60 to 168.60): VF0



#5

Bromomethane

Concen: Below Cal

RT: 1.40 min Scan# 88

Delta R.T. -0.00 min

Lab File: VF062493.D

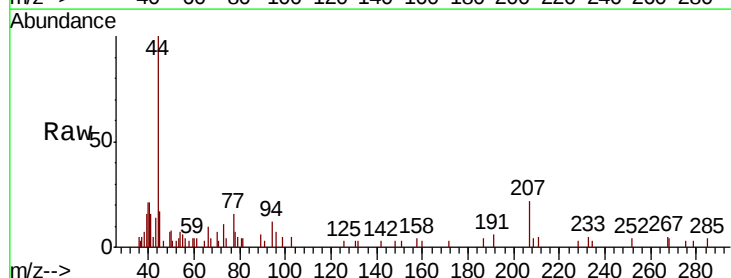
Acq: 12 May 2019 8:02

Tgt Ion: 94 Resp: 705

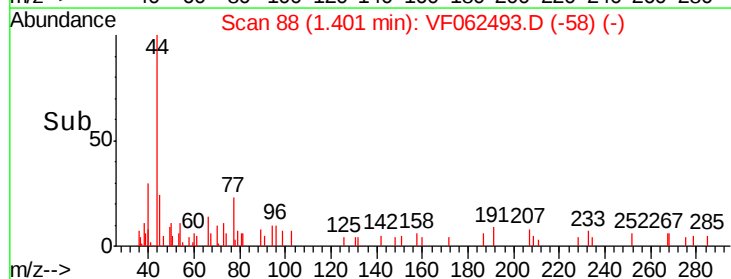
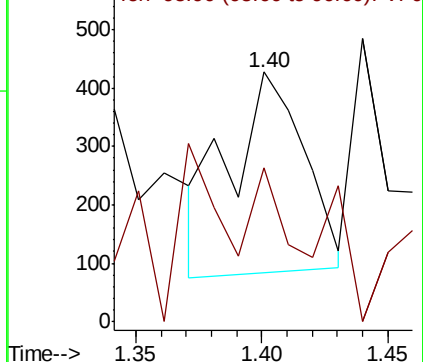
Ion Ratio Lower Upper

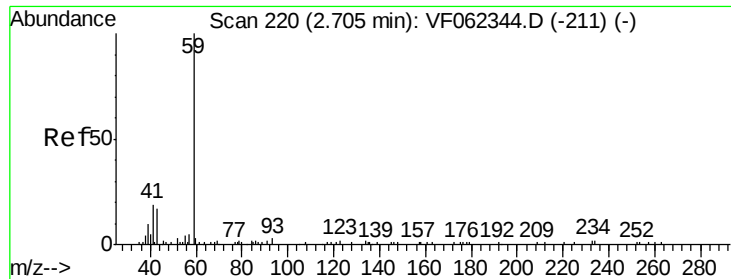
94 100

96 9.8 75.4 113.2#



Abundance Ion 93.90 (93.60 to 94.60): VF0

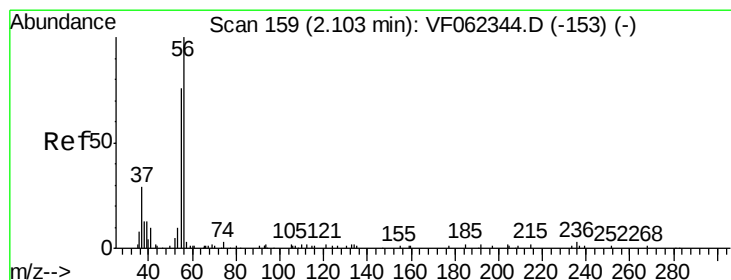
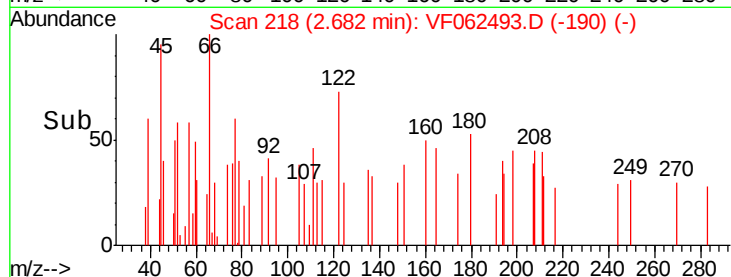
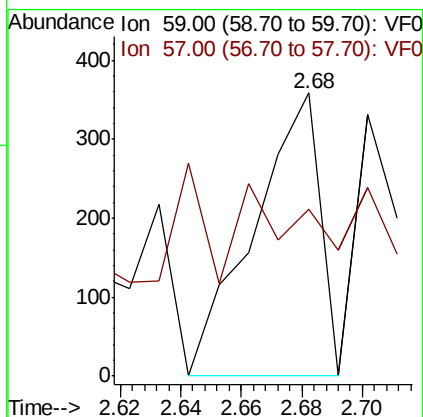
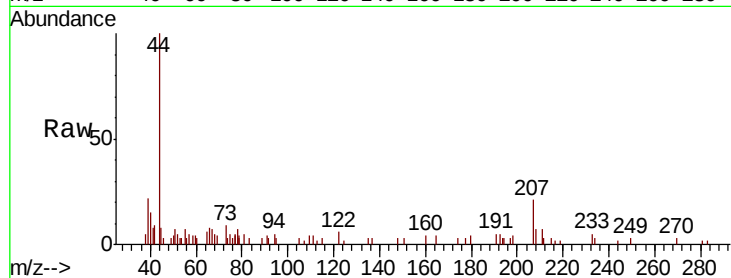




#11  
Tert butyl alcohol  
Concen: 6.150 ug/l  
RT: 2.68 min Scan# 218  
Delta R.T. -0.02 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

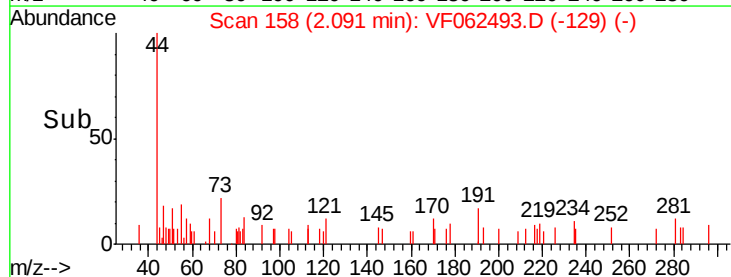
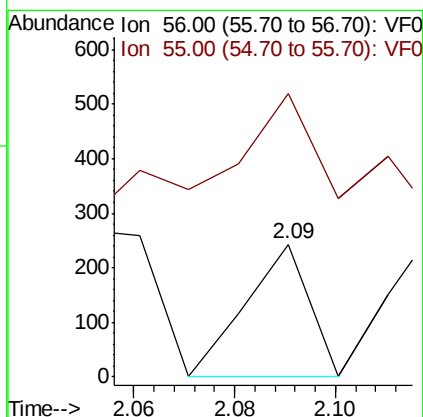
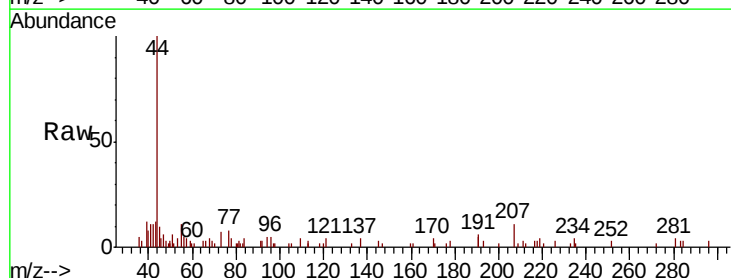
Instrument :  
MSVOA\_F  
ClientSampleId :  
P021-SS006-1824-01

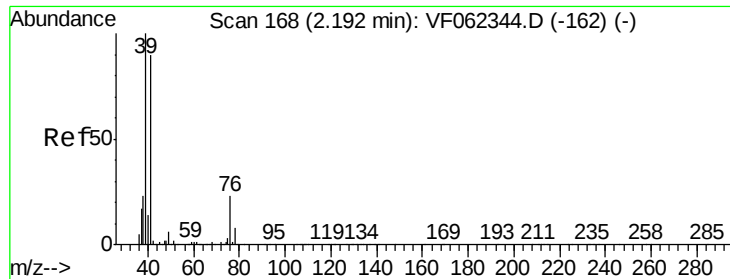
Tgt Ion: 59 Resp: 539  
Ion Ratio Lower Upper  
59 100  
57 0.0 9.3 13.9#



#13  
Acrolein  
Concen: Below Cal  
RT: 2.09 min Scan# 158  
Delta R.T. -0.01 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

Tgt Ion: 56 Resp: 212  
Ion Ratio Lower Upper  
56 100  
55 132.1 58.4 87.6#

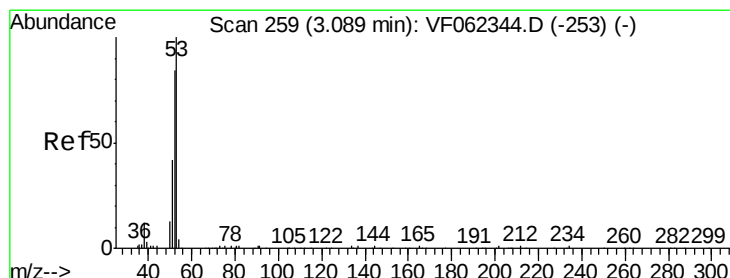
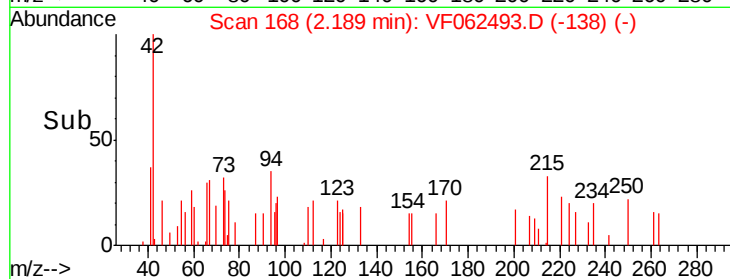
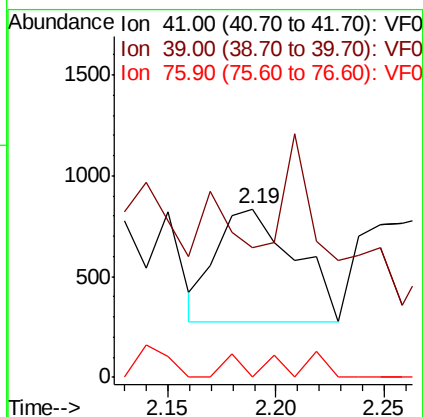
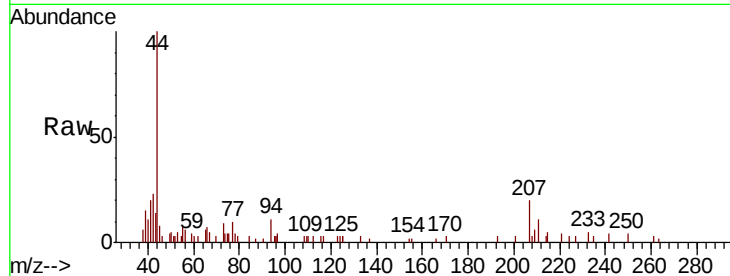




#14  
 Allyl chloride  
 Concen: 1.262 ug/l  
 RT: 2.19 min Scan# 168  
 Delta R.T. -0.00 min  
 Lab File: VF062493.D  
 Acq: 12 May 2019 8:02

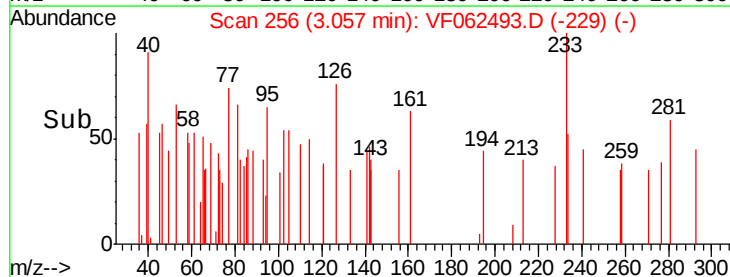
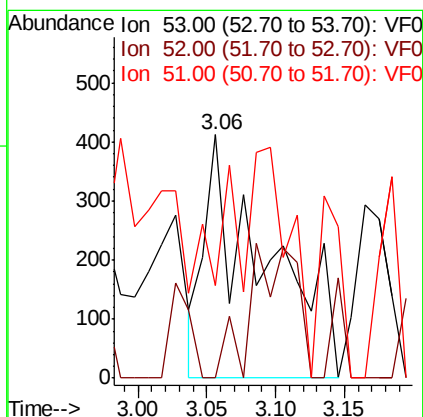
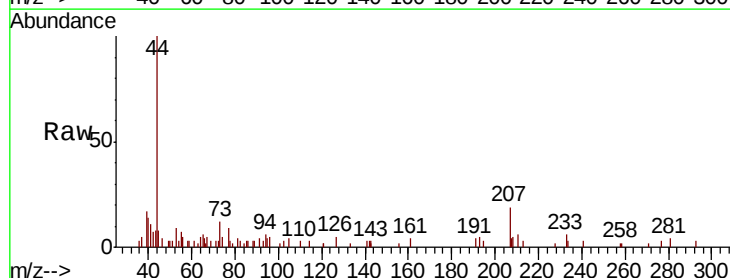
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 P021-SS006-1824-01

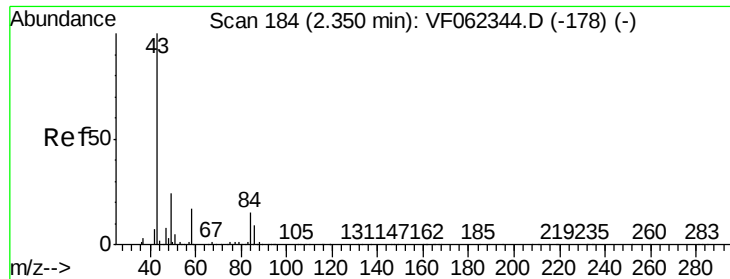
Tgt Ion: 41 Resp: 1403  
 Ion Ratio Lower Upper  
 41 100  
 39 93.9 90.8 136.2  
 76 4.7 22.2 33.4#



#15  
 Acrylonitrile  
 Concen: 7.626 ug/l  
 RT: 3.06 min Scan# 256  
 Delta R.T. -0.03 min  
 Lab File: VF062493.D  
 Acq: 12 May 2019 8:02

Tgt Ion: 53 Resp: 1266  
 Ion Ratio Lower Upper  
 53 100  
 52 0.0 77.2 115.8#  
 51 0.0 40.6 61.0#





#16

Acetone

Concen: 20.482 ug/l

RT: 2.35 min Scan# 184

Delta R.T. -0.00 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Instrument :

MSVOA\_F

ClientSampleId :

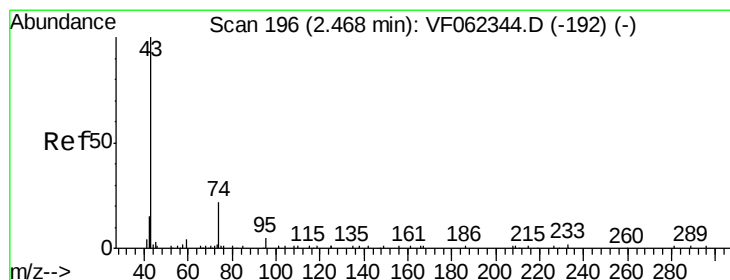
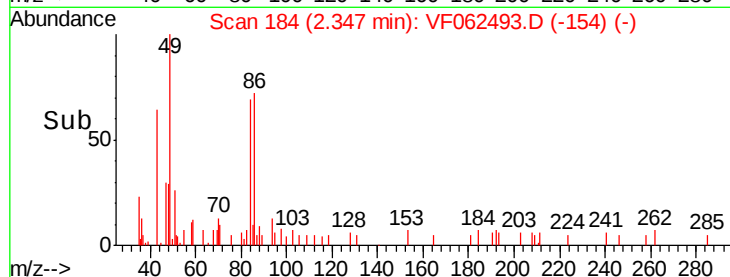
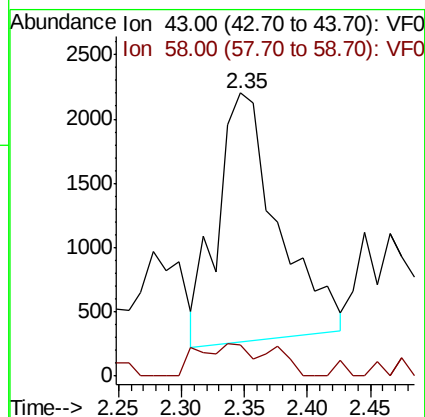
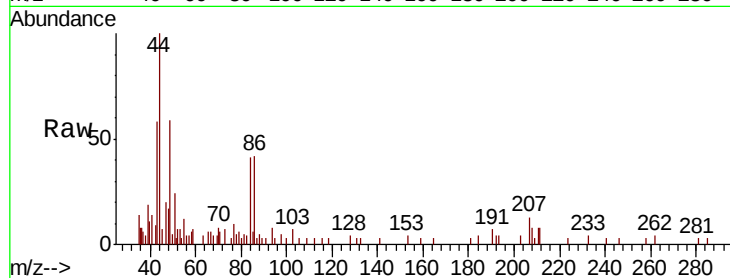
P021-SS006-1824-01

Tgt Ion: 43 Resp: 6425

Ion Ratio Lower Upper

43 100

58 6.7 13.1 19.7#



#18

Methyl Acetate

Concen: 1.213 ug/l

RT: 2.50 min Scan# 200

Delta R.T. 0.04 min

Lab File: VF062493.D

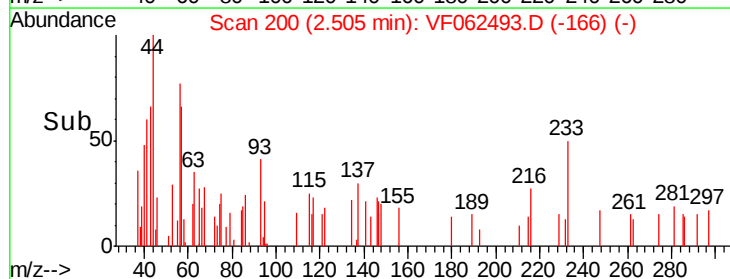
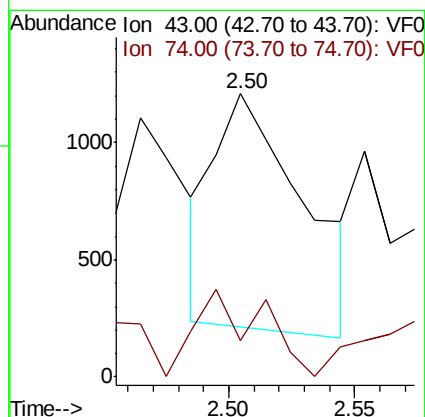
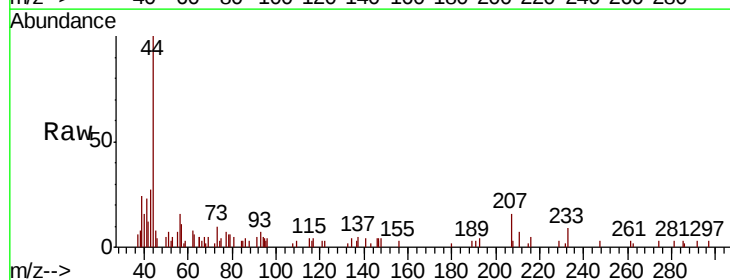
Acq: 12 May 2019 8:02

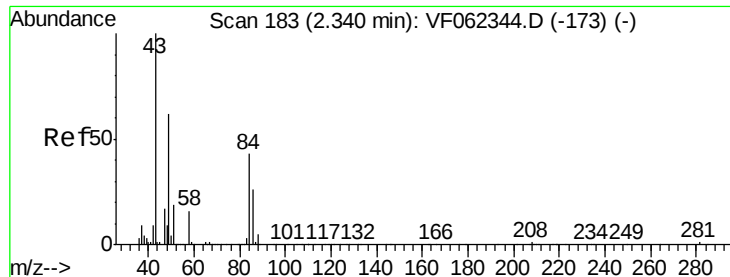
Tgt Ion: 43 Resp: 2442

Ion Ratio Lower Upper

43 100

74 28.1 15.0 22.4#

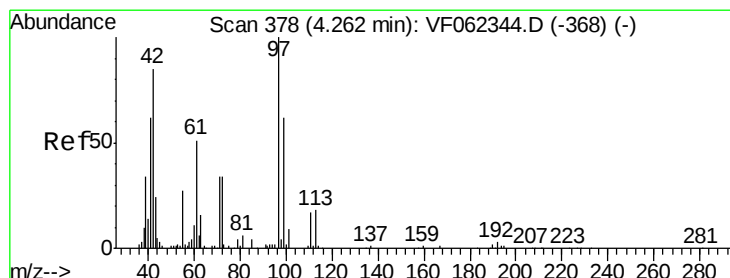
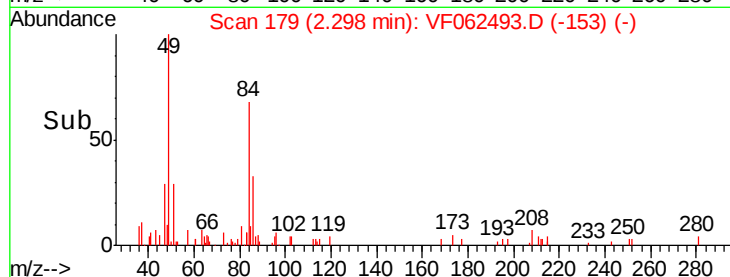
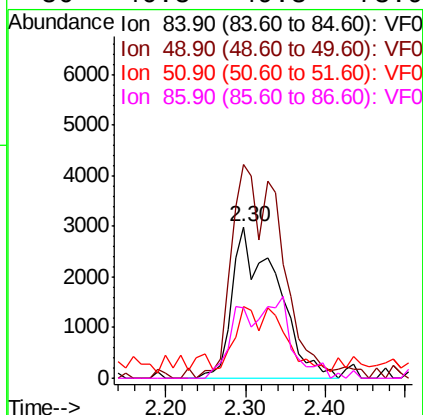
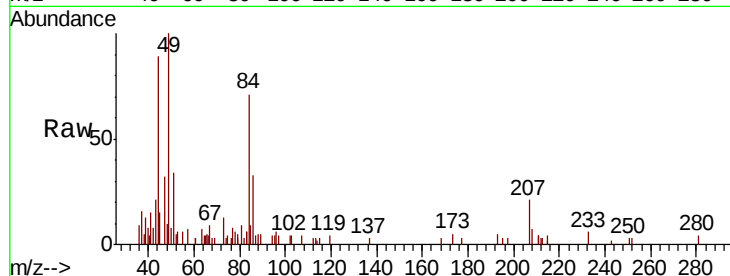




#20  
Methylene Chloride  
Concen: 10.262 ug/l  
RT: 2.30 min Scan# 179  
Delta R.T. -0.04 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

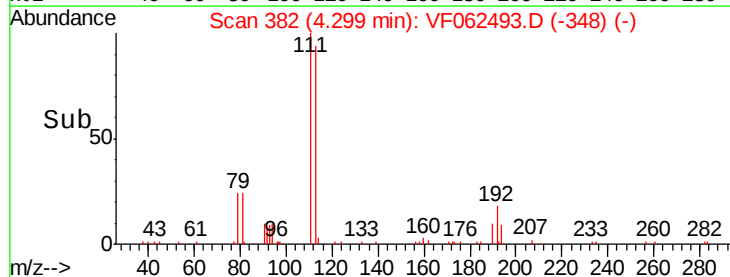
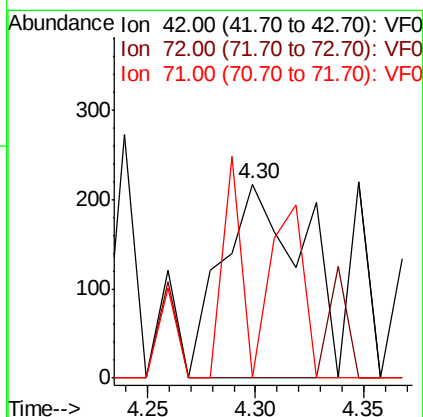
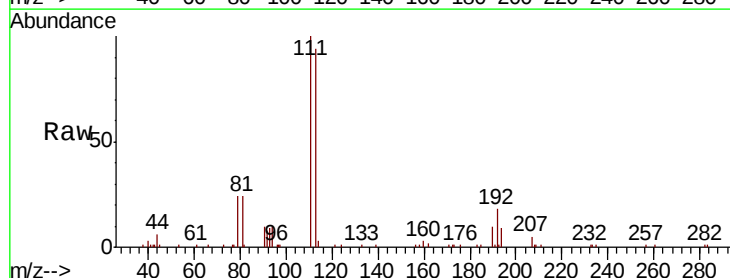
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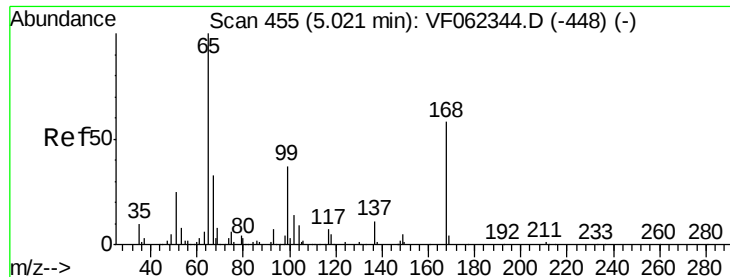
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 11647 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 135.5 | 117.5 | 176.3 |
| 51       | 42.9  | 37.0  | 55.4  |
| 86       | 46.8  | 49.3  | 73.9# |



#29  
Tetrahydrofuran  
Concen: 3.136 ug/l  
RT: 4.30 min Scan# 382  
Delta R.T. 0.04 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 568   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 31.4  | 47.0# |
| 71       | 36.3  | 31.7  | 47.5  |





#33

1,2-Dichloroethane-d4

Concen: 67.791 ug/l

RT: 5.05 min Scan# 458

Delta R.T. 0.03 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Instrument :

MSVOA\_F

ClientSampleId :

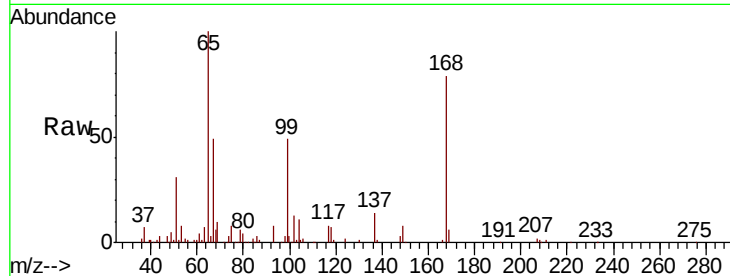
P021-SS006-1824-01

Tgt Ion: 65 Resp: 105125

Ion Ratio Lower Upper

65 100

67 46.4 0.0 85.8



Abundance Ion 64.90 (64.60 to 65.60): VF0

Ion 66.90 (66.60 to 67.60): VF0

5.05

40000

30000

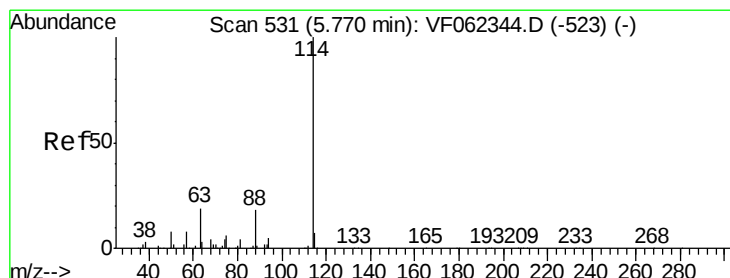
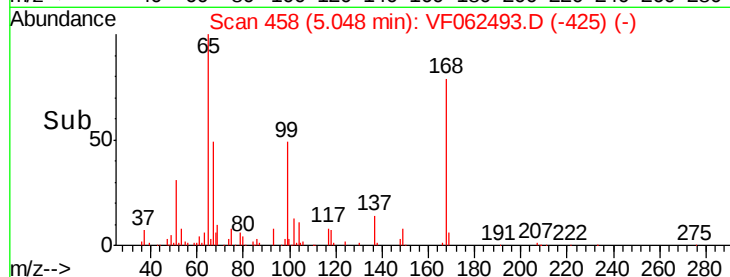
20000

10000

0

4.90 5.00 5.10 5.20

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.79 min Scan# 533

Delta R.T. 0.02 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

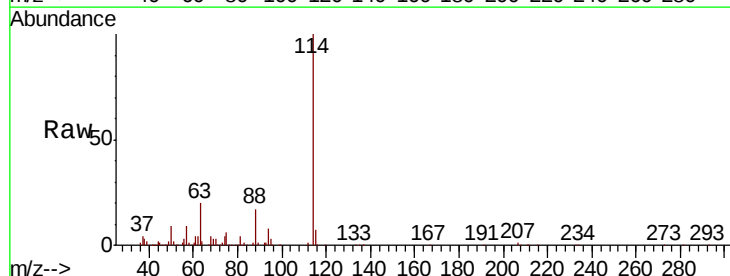
Tgt Ion: 114 Resp: 242146

Ion Ratio Lower Upper

114 100

63 20.4 0.0 37.4

88 17.4 0.0 36.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 87.90 (87.60 to 88.60): VF0

120000

100000

80000

60000

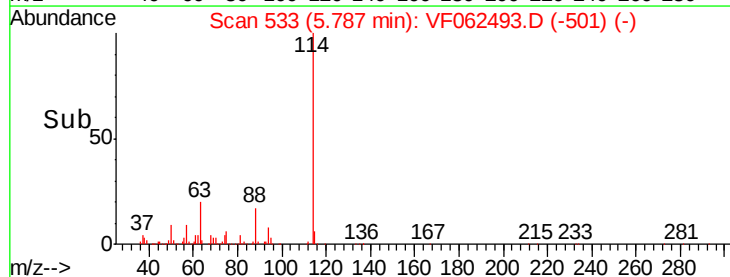
40000

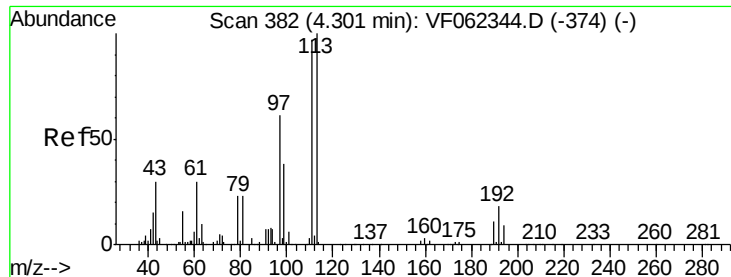
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0

5.60 5.70 5.80 5.90 6.00

Time-->

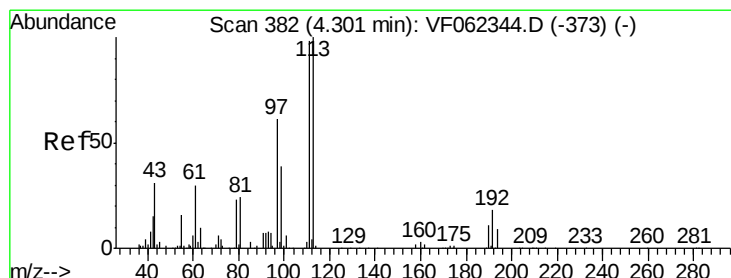
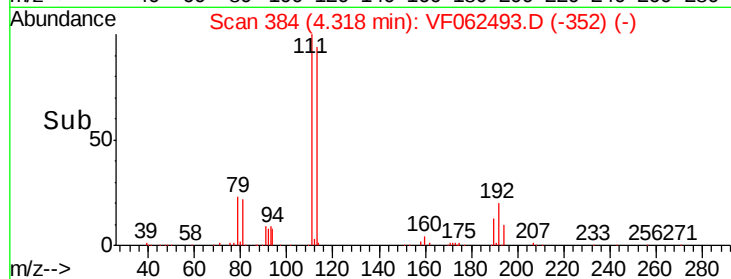
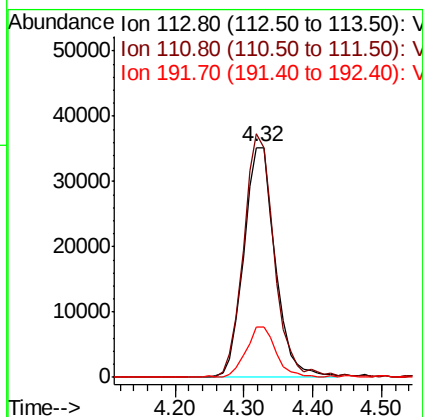
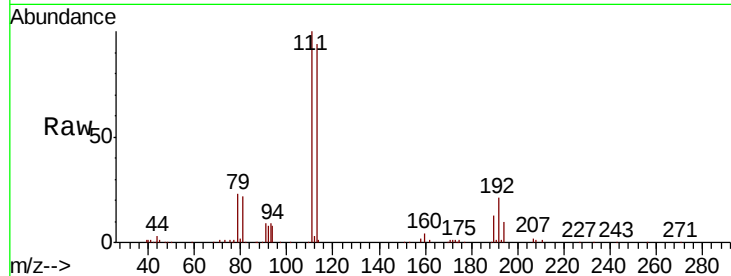




#35  
 Dibromofluoromethane  
 Concen: 57.939 ug/l  
 RT: 4.32 min Scan# 384  
 Delta R.T. 0.02 min  
 Lab File: VF062493.D  
 Acq: 12 May 2019 8:02

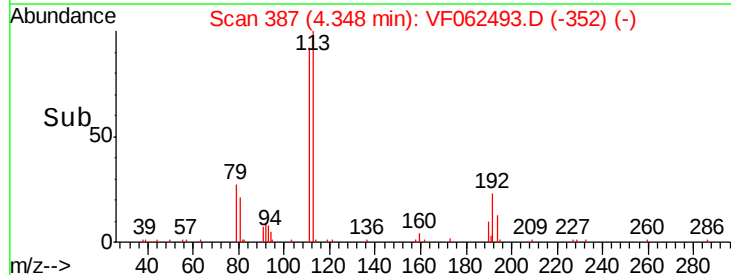
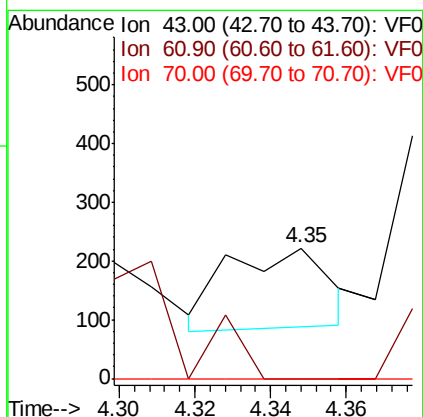
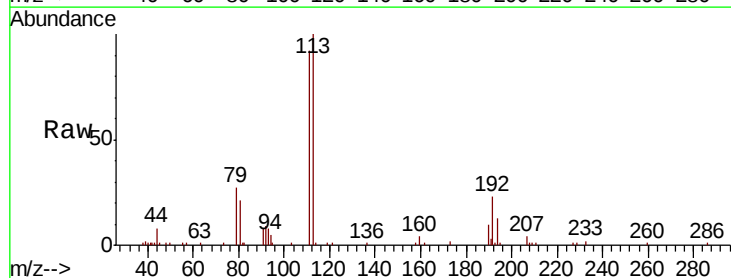
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 P021-SS006-1824-01

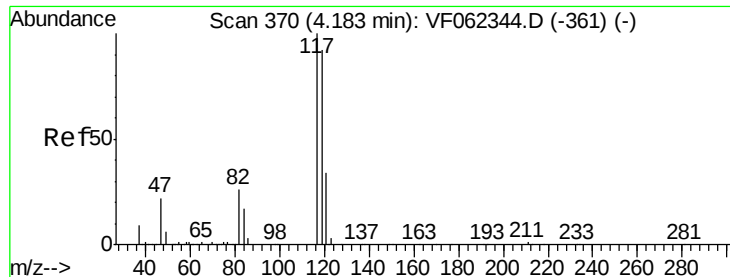
Tgt Ion: 113 Resp: 111772  
 Ion Ratio Lower Upper  
 113 100  
 111 103.7 79.4 119.0  
 192 21.4 16.0 24.0



#37  
 Ethyl Acetate  
 Concen: Below Cal  
 RT: 4.35 min Scan# 387  
 Delta R.T. 0.05 min  
 Lab File: VF062493.D  
 Acq: 12 May 2019 8:02

Tgt Ion: 43 Resp: 252  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 0.0 0.0  
 70 0.0 8.2 12.2#





#38

Carbon Tetrachloride

Concen: Below Cal

RT: 4.21 min Scan# 373

Delta R.T. 0.03 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Instrument :

MSVOA\_F

ClientSampleId :

P021-SS006-1824-01

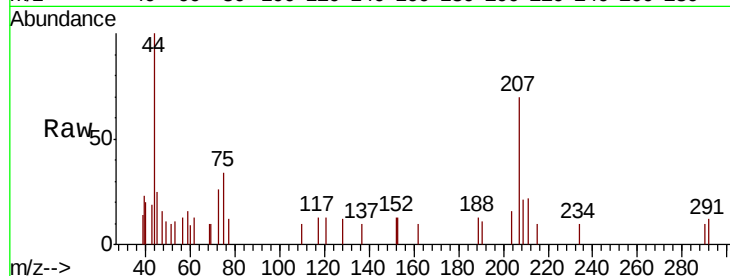
Tgt Ion: 117 Resp: 81

Ion Ratio Lower Upper

117 100

119 0.0 73.4 110.2#

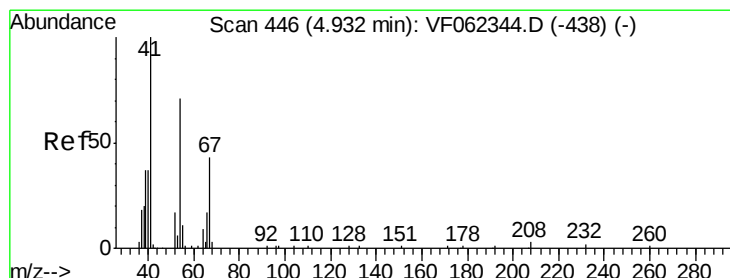
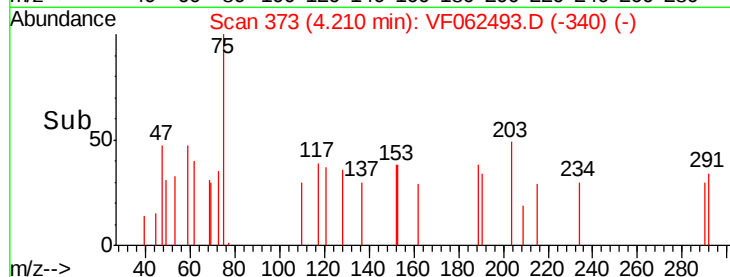
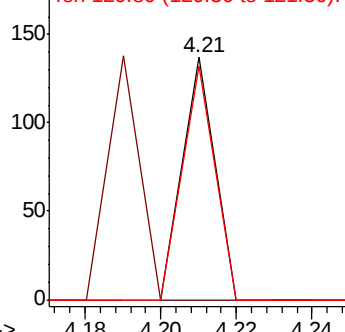
121 96.4 27.4 41.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 1.440 ug/l

RT: 4.98 min Scan# 451

Delta R.T. 0.05 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Tgt Ion: 41 Resp: 718

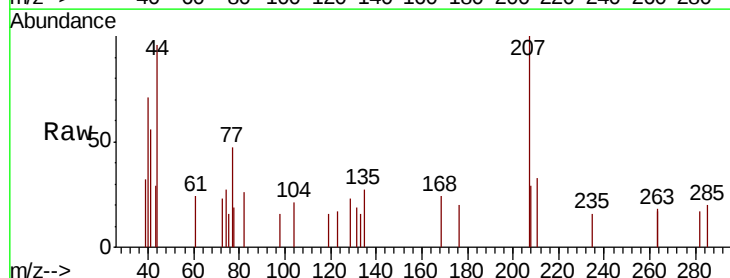
Ion Ratio Lower Upper

41 100

39 39.7 54.3 81.5#

67 0.0 37.8 56.8#

52 12.0 58.2 87.4#

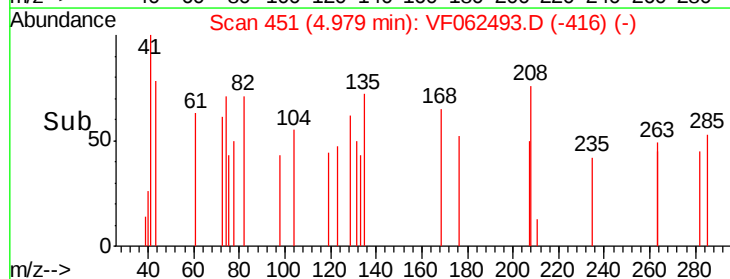
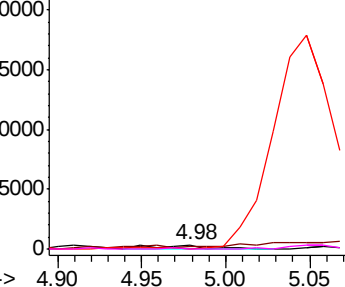


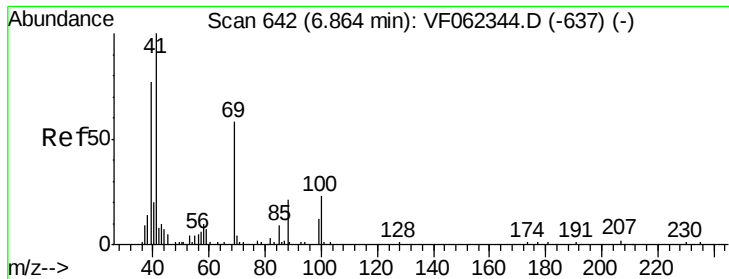
Abundance Ion 41.00 (40.70 to 41.70): VF0

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





#49

1,4-Dioxane

Concen: 5.620 ug/l

RT: 6.76 min Scan# 632

Delta R.T. -0.10 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Instrument :

MSVOA\_F

ClientSampleId :

P021-SS006-1824-01

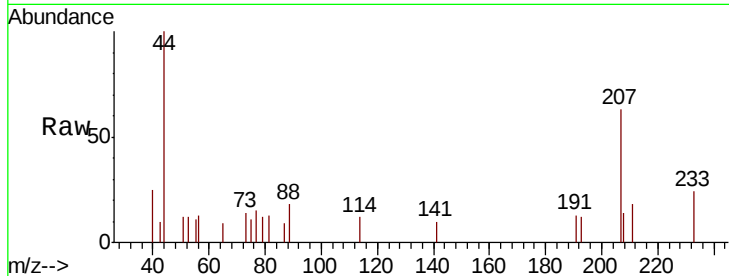
Tgt Ion: 88 Resp: 128

Ion Ratio Lower Upper

88 100

43 0.0 55.6 83.4#

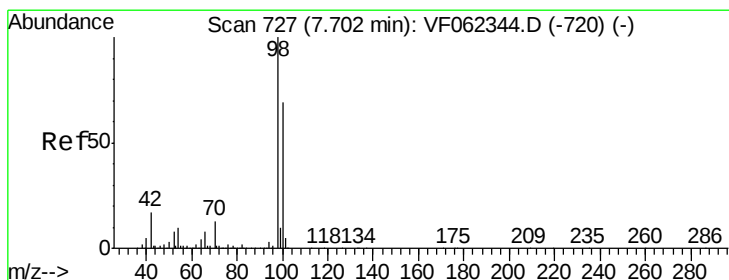
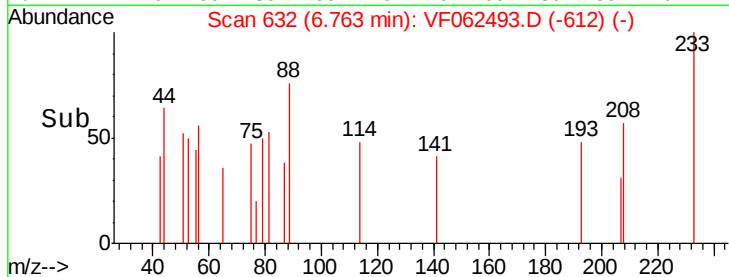
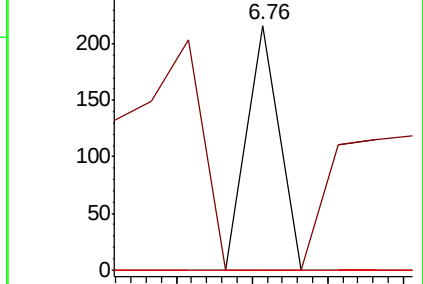
58 0.0 52.8 79.2#



Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#50

Toluene-d8

Concen: 34.213 ug/l

RT: 7.73 min Scan# 730

Delta R.T. 0.03 min

Lab File: VF062493.D

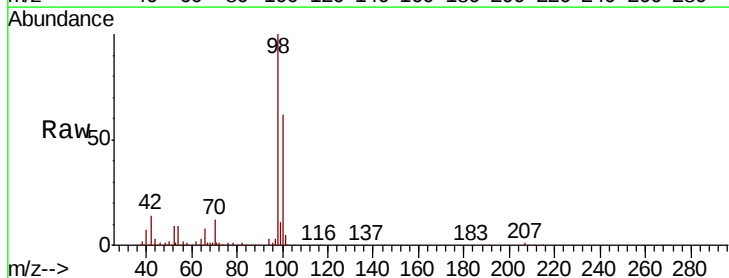
Acq: 12 May 2019 8:02

Tgt Ion: 98 Resp: 159767

Ion Ratio Lower Upper

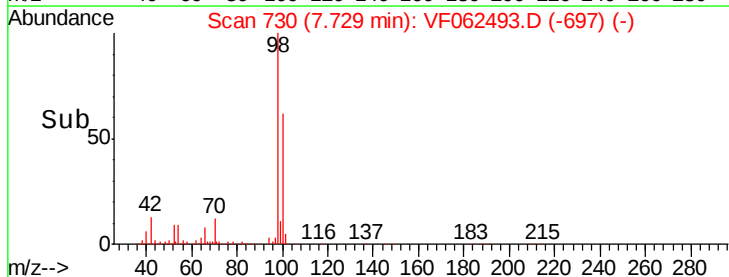
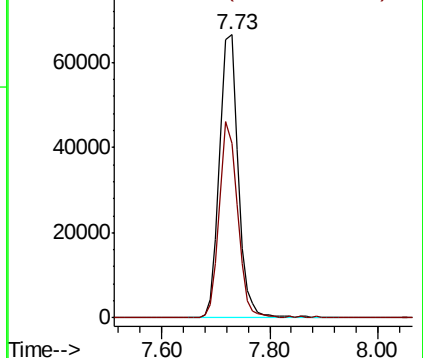
98 100

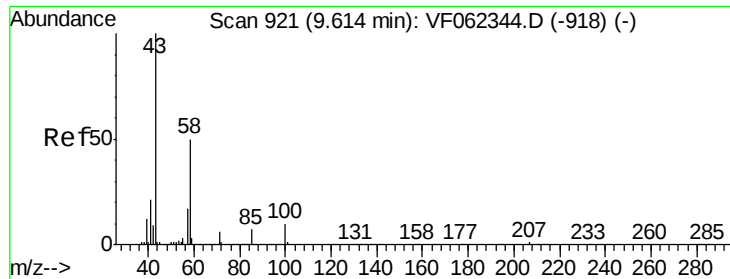
100 67.1 53.3 79.9



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0

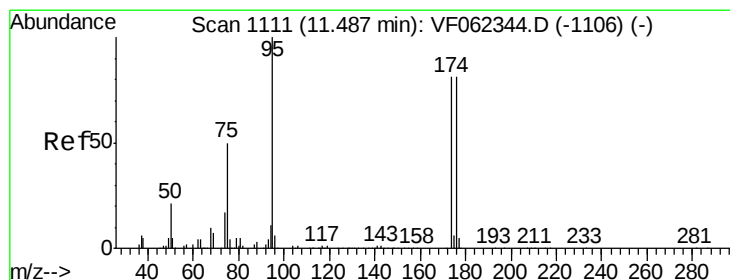
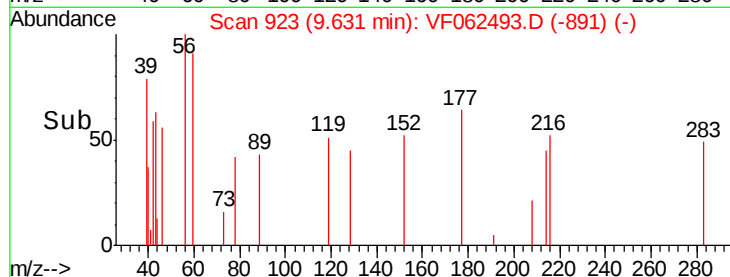
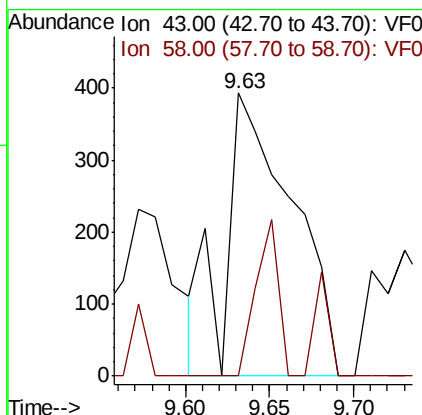
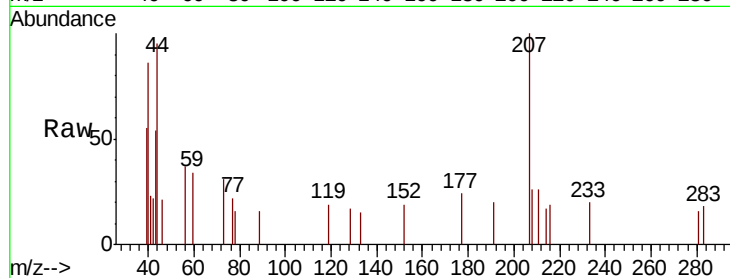




#59  
2-Hexanone  
Concen: 2.200 ug/l  
RT: 9.63 min Scan# 923  
Delta R.T. 0.02 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

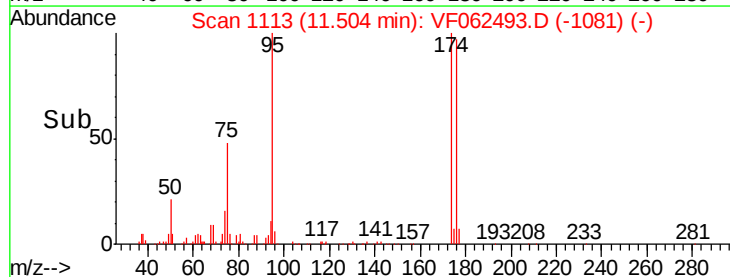
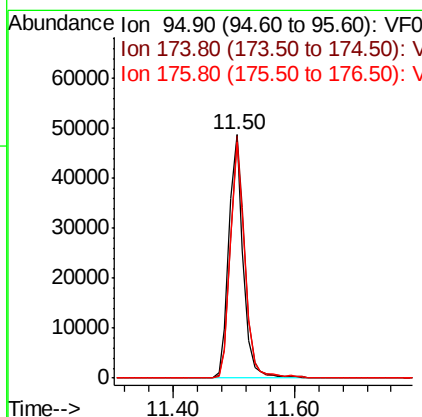
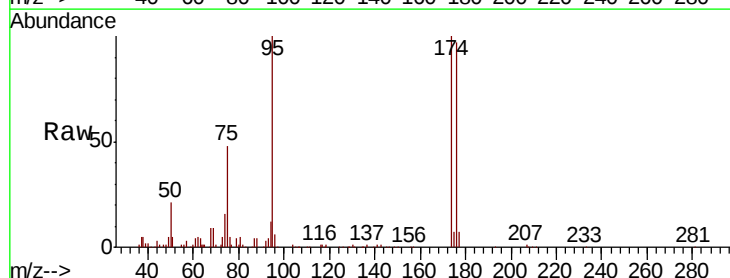
Instrument :  
MSVOA\_F  
ClientSampleId :  
P021-SS006-1824-01

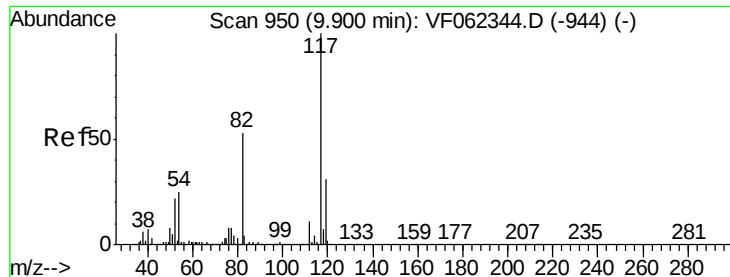
Tgt Ion: 43 Resp: 1091  
Ion Ratio Lower Upper  
43 100  
58 18.4 24.3 73.0#



#62  
4-Bromofluorobenzene  
Concen: 38.169 ug/l  
RT: 11.50 min Scan# 1113  
Delta R.T. 0.02 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

Tgt Ion: 95 Resp: 80416  
Ion Ratio Lower Upper  
95 100  
174 100.6 0.0 191.8  
176 98.3 0.0 193.2

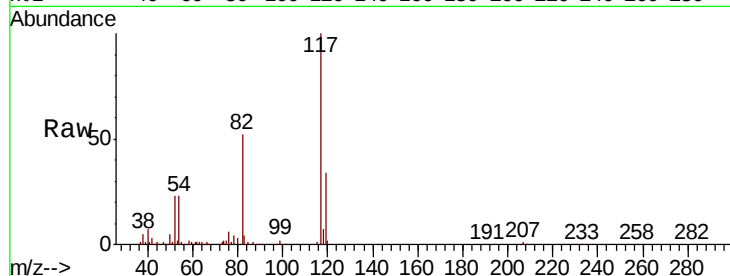




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.92 min Scan# 952  
Delta R.T. 0.02 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

Instrument :  
MSVOA\_F  
ClientSampleId :  
P021-SS006-1824-01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 52.1  | 42.2  | 63.2  |
| 119     | 34.0  | 25.0  | 37.4  |

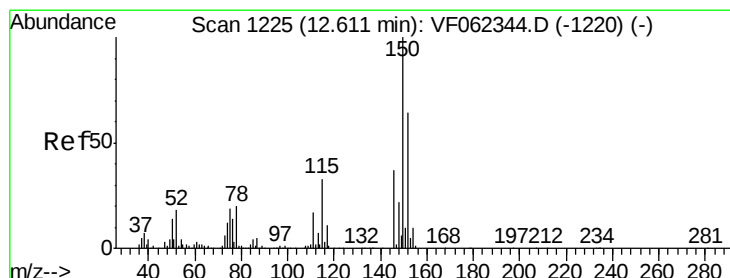
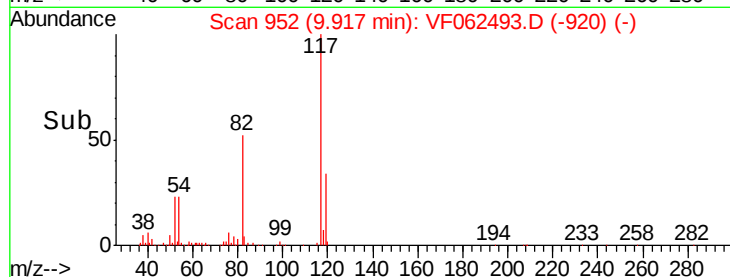
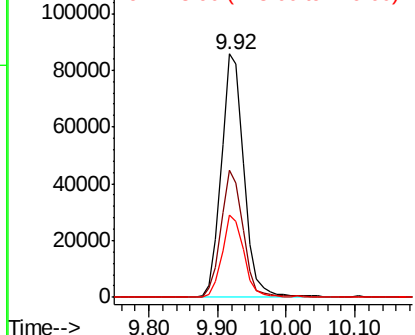


Abundance

Ion 116.90 (116.60 to 117.60): V

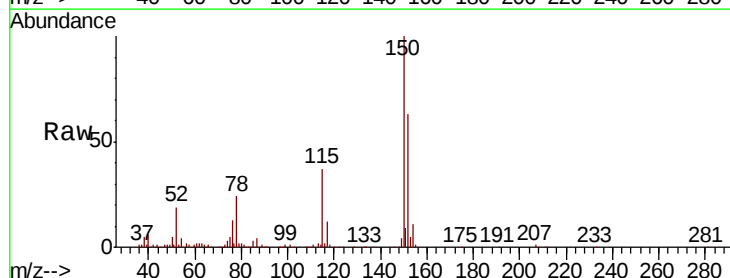
Ion 82.00 (81.70 to 82.70): VF0

Ion 118.90 (118.60 to 119.60): V



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.62 min Scan# 1226  
Delta R.T. 0.01 min  
Lab File: VF062493.D  
Acq: 12 May 2019 8:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 58.4  | 26.4  | 79.2  |
| 150     | 157.0 | 0.0   | 335.0 |

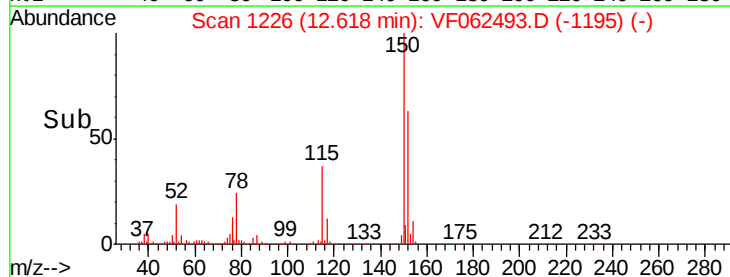
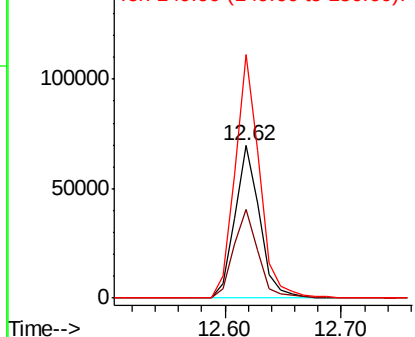


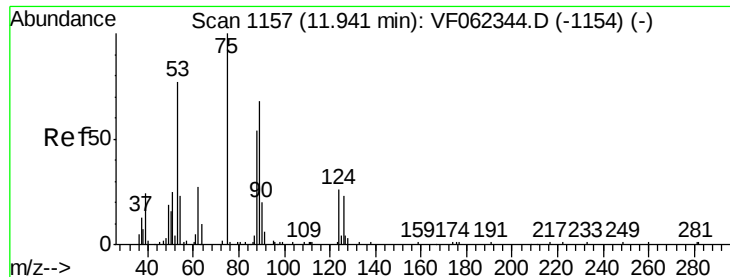
Abundance

Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#81

trans-1,4-Dichloro-2-butene

Concen: 1.601 ug/l

RT: 11.97 min Scan# 1160

Delta R.T. 0.03 min

Lab File: VF062493.D

Acq: 12 May 2019 8:02

Instrument :

MSVOA\_F

ClientSampleId :

P021-SS006-1824-01

Tgt Ion: 75 Resp: 438

Ion Ratio Lower Upper

75 100

53 0.0 71.9 107.9#

89 0.0 0.0 0.0

