

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF051019\  
 Data File : VF062431.D  
 Acq On : 10 May 2019 18:50  
 Operator : FY/SY  
 Sample : K2750-03RE  
 Misc : 1.05g/5mL/MSVOA F/SOIL  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 72-11995RE

Quant Time: May 11 05:13:43 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      | 5.05  | 168  | 310352   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.77  | 114  | 379897   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.91  | 117  | 205566   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 72627    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.03  | 65   | 161310   | 55.00 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 110.00% |          |
| 35) Dibromofluoromethane    | 4.31  | 113  | 189962   | 62.76 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 125.52% |          |
| 50) Toluene-d8              | 7.71  | 98   | 293968   | 40.13 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 80.26%  |          |
| 62) 4-Bromofluorobenzene    | 11.50 | 95   | 90865    | 27.49 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 54.98%  |          |

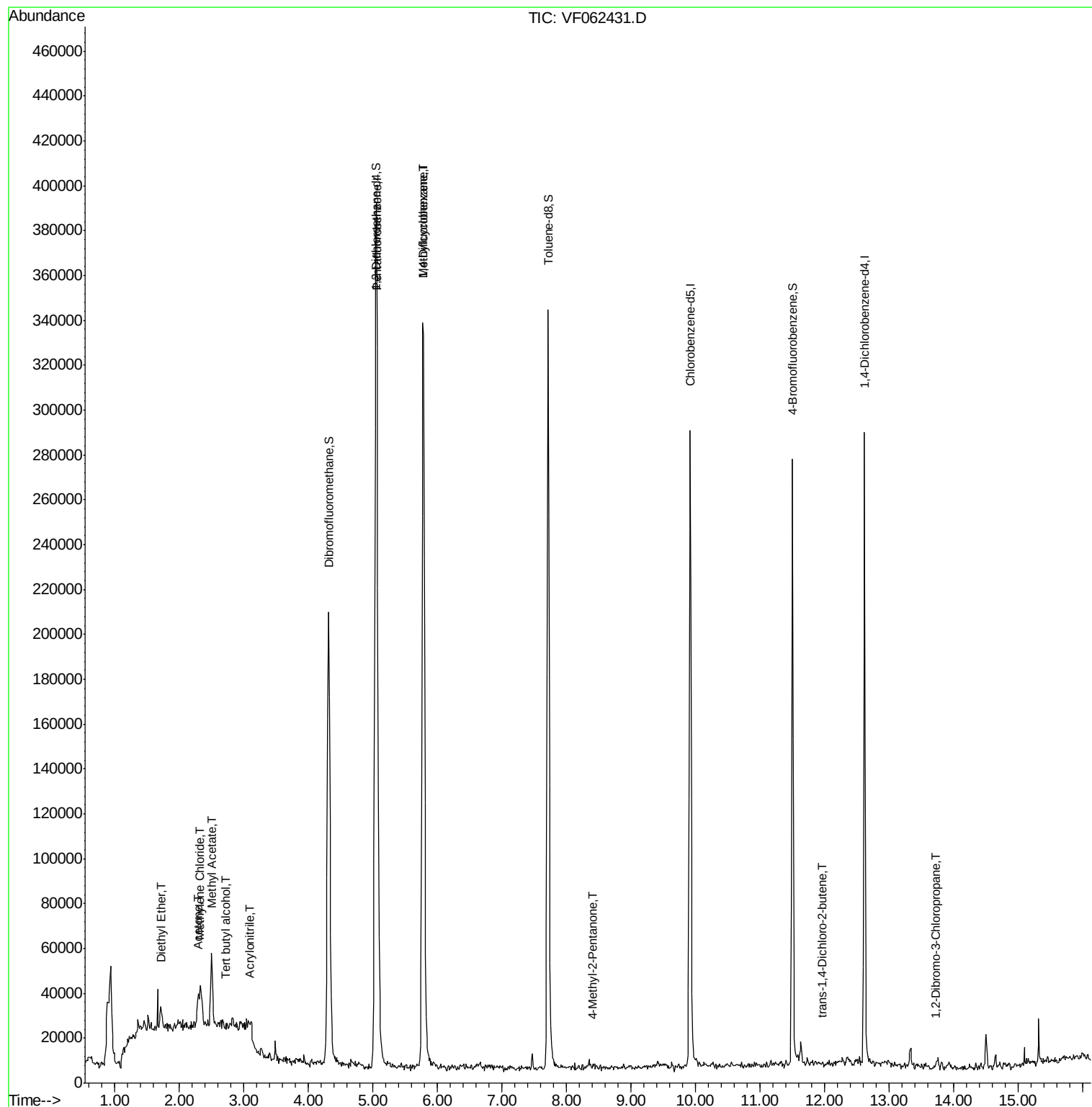
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.36  | 94   | 725      | Below Cal | #      | 55     |
| 8) Diethyl Ether               | 1.71  | 74   | 3048     | 4.109     | ug/l   | 65     |
| 11) Tert butyl alcohol         | 2.71  | 59   | 633      | 3.819     | ug/l # | 1      |
| 13) Acrolein                   | 2.13  | 56   | 680      | Below Cal | #      | 1      |
| 15) Acrylonitrile              | 3.09  | 53   | 809      | 2.576     | ug/l # | 52     |
| 16) Acetone                    | 2.28  | 43   | 1366     | 2.302     | ug/l # | 62     |
| 18) Methyl Acetate             | 2.49  | 43   | 15955    | 12.390    | ug/l # | 58     |
| 20) Methylene Chloride         | 2.32  | 84   | 16343    | 7.613     | ug/l # | 94     |
| 37) Ethyl Acetate              | 4.29  | 43   | 467      | Below Cal | #      | 73     |
| 38) Carbon Tetrachloride       | 4.19  | 117  | 198      | Below Cal | #      | 14     |
| 39) Methylcyclohexane          | 5.77  | 83   | 5413     | 1.654     | ug/l # | 31     |
| 49) 1,4-Dioxane                | 6.82  | 88   | 64       | Below Cal | #      | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.40  | 43   | 1254     | 1.115     | ug/l # | 73     |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 528      | 2.731     | ug/l # | 5      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 174      | 1.152     | ug/l # | 1      |

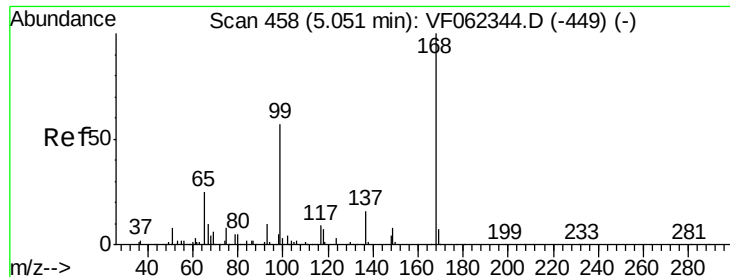
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF051019\  
Data File : VF062431.D  
Acq On : 10 May 2019 18:50  
Operator : FY/SY  
Sample : K2750-03RE  
Misc : 1.05g/5mL/MSVOA F/SOIL  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
72-11995RE

Quant Time: May 11 05:13:43 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: 5.05 min Scan# 459

Delta R.T. 0.00 min

Lab File: VF062431.D

Acq: 10 May 2019 18:50

Instrument :

MSVOA\_F

ClientSampleId :

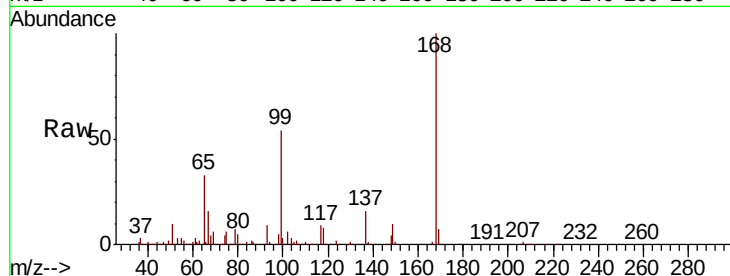
72-11995RE

Tot Ion:168 Resp: 310352

Ion Ratio Lower Upper

168 100

99 54.4 45.9 68.9



Abundance Ion 167.90 (167.60 to 168.60): VF0

Ion 98.90 (98.60 to 99.60): VF0

5.05

120000

100000

80000

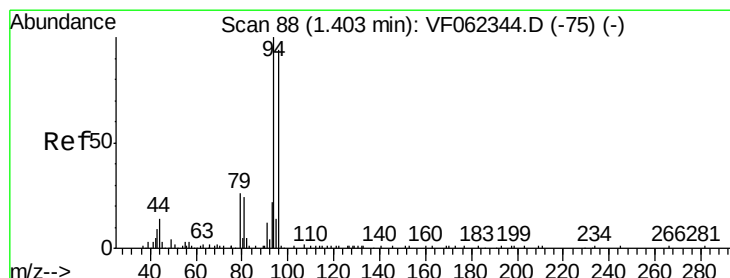
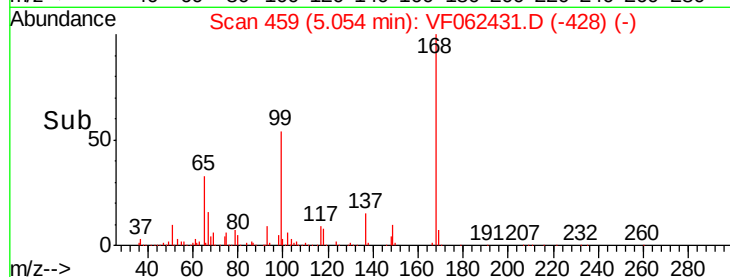
60000

40000

20000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 1.36 min Scan# 84

Delta R.T. -0.05 min

Lab File: VF062431.D

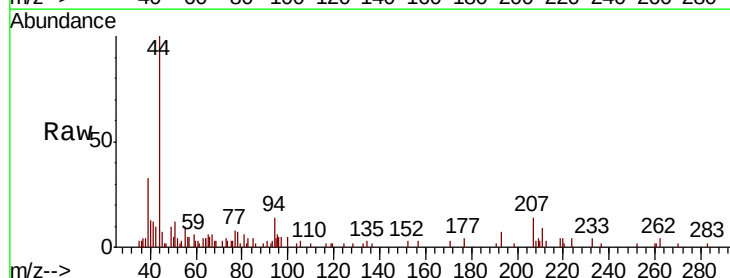
Acq: 10 May 2019 18:50

Tgt Ion: 94 Resp: 725

Ion Ratio Lower Upper

94 100

96 50.8 75.4 113.2#



Abundance Ion 93.90 (93.60 to 94.60): VF0

Ion 95.90 (95.60 to 96.60): VF0

1.36

800

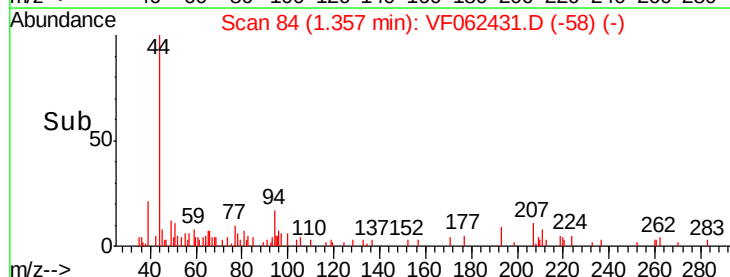
600

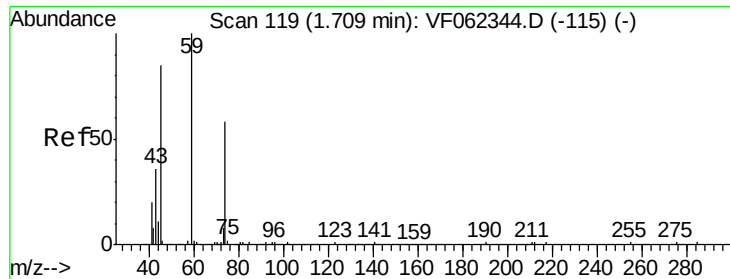
400

200

0

Time-->





#8

Diethyl Ether

Concen: 4.109 ug/l

RT: 1.71 min Scan# 120

Delta R.T. 0.00 min

Lab File: VF062431.D

Acq: 10 May 2019 18:50

Instrument :

MSVOA\_F

ClientSampleId :

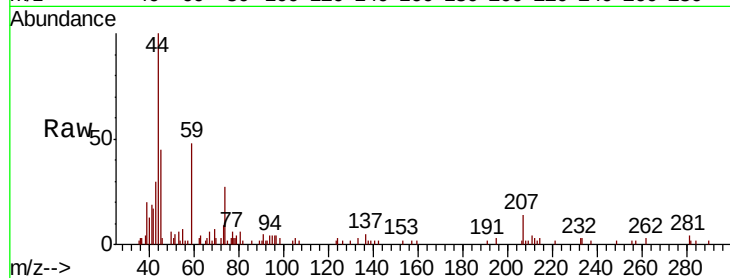
72-11995RE

Tot Ion: 74 Resp: 3048

Ion Ratio Lower Upper

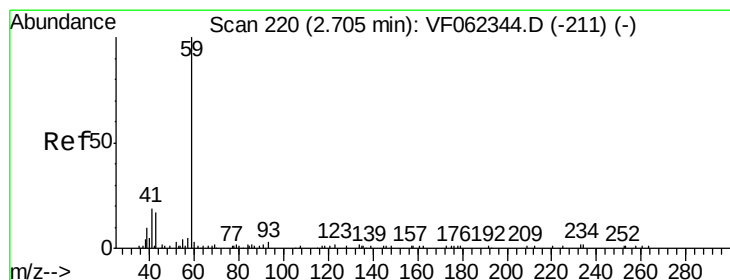
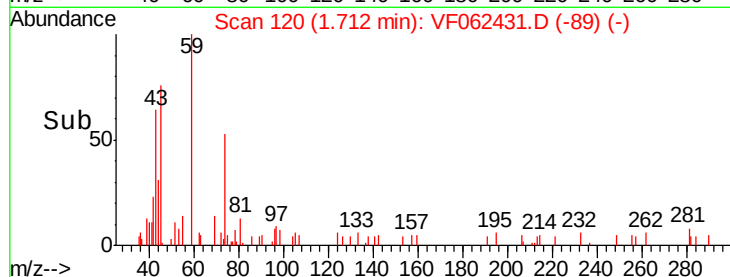
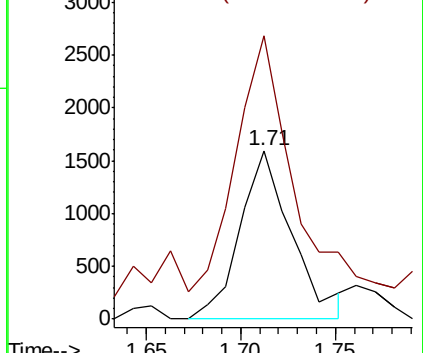
74 100

45 191.2 73.9 221.6



Abundance Ion 74.00 (73.70 to 74.70): VF0

Ion 45.00 (44.70 to 45.70): VF0



#11

Tert butyl alcohol

Concen: 3.819 ug/l

RT: 2.71 min Scan# 221

Delta R.T. 0.00 min

Lab File: VF062431.D

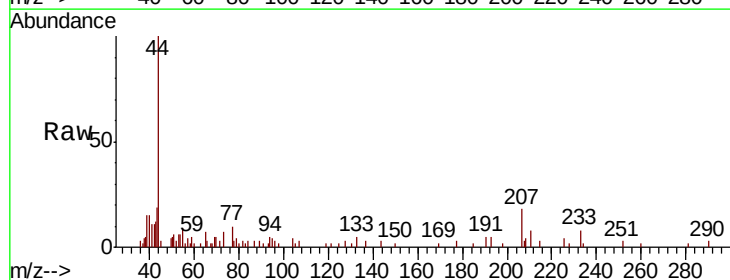
Acq: 10 May 2019 18:50

Tgt Ion: 59 Resp: 633

Ion Ratio Lower Upper

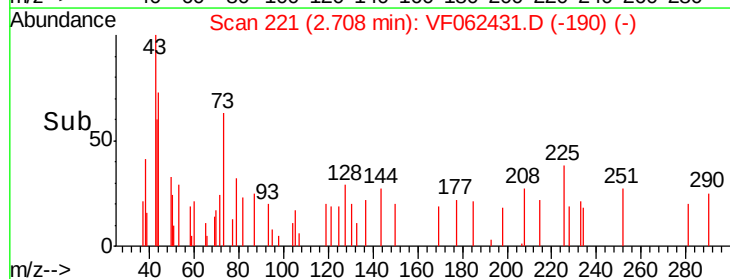
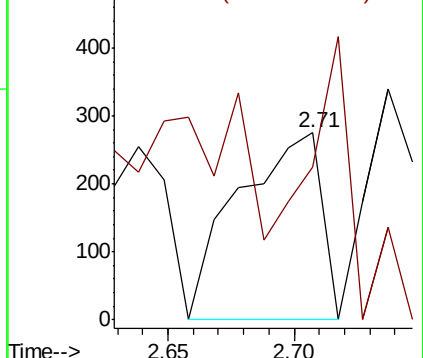
59 100

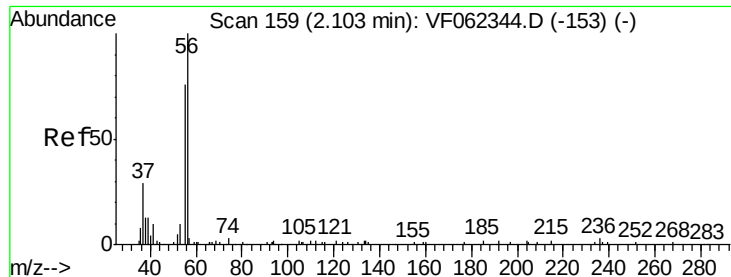
57 88.8 9.3 13.9#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

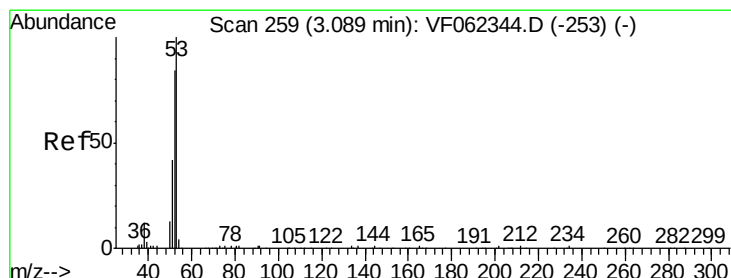
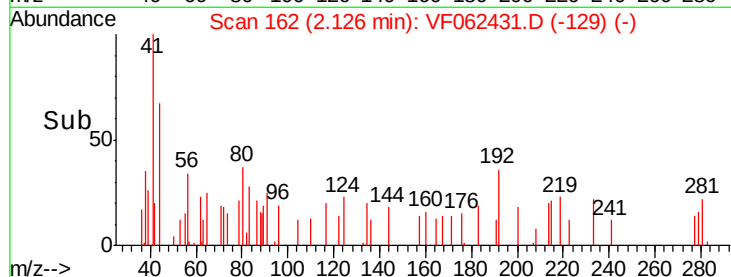
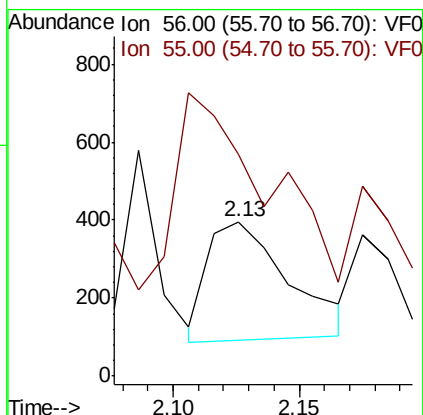
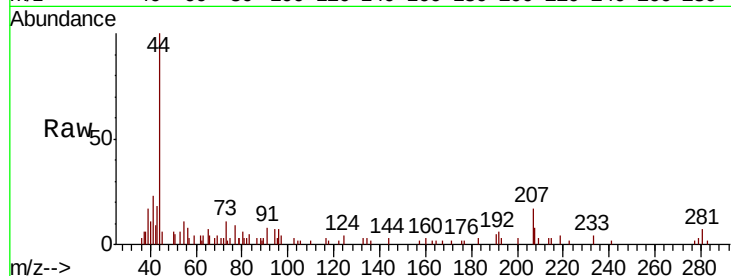




#13  
 Acrolein  
 Concen: Below Cal  
 RT: 2.13 min Scan# 162  
 Delta R.T. 0.02 min  
 Lab File: VF062431.D  
 Acq: 10 May 2019 18:50

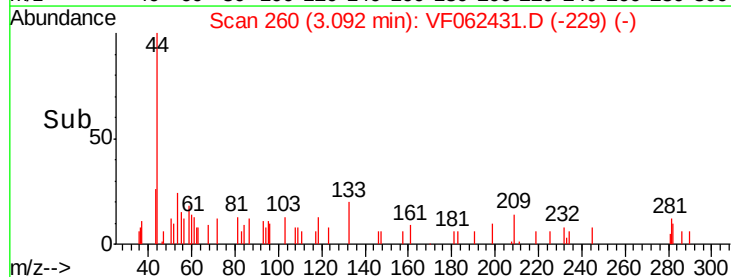
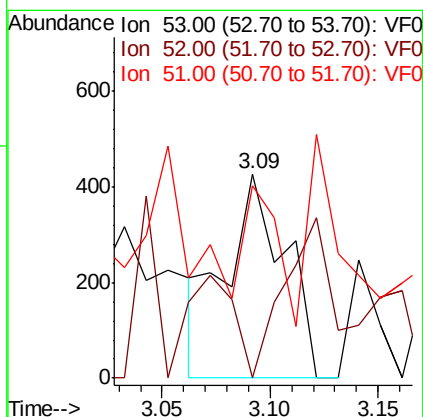
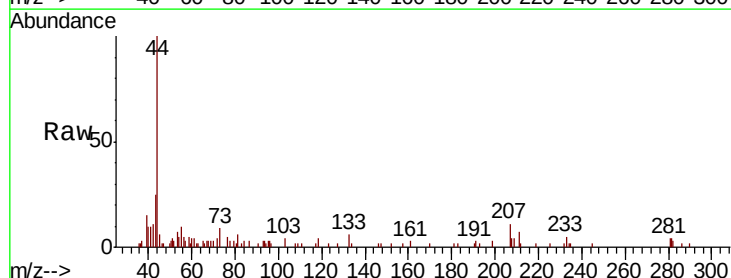
Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 72-11995RE

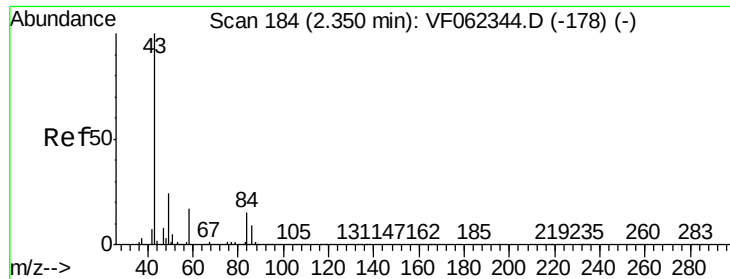
Tot Ion: 56 Resp: 680  
 Ion Ratio Lower Upper  
 56 100  
 55 185.3 58.4 87.6#



#15  
 Acrylonitrile  
 Concen: 2.576 ug/l  
 RT: 3.09 min Scan# 260  
 Delta R.T. 0.00 min  
 Lab File: VF062431.D  
 Acq: 10 May 2019 18:50

Tgt Ion: 53 Resp: 809  
 Ion Ratio Lower Upper  
 53 100  
 52 27.8 77.2 115.8#  
 51 46.2 40.6 61.0





#16

Acetone

Concen: 2.302 ug/l

RT: 2.28 min Scan# 178

Delta R.T. -0.07 min

Lab File: VF062431.D

Acq: 10 May 2019 18:50

Instrument :

MSVOA\_F

ClientSampleId :

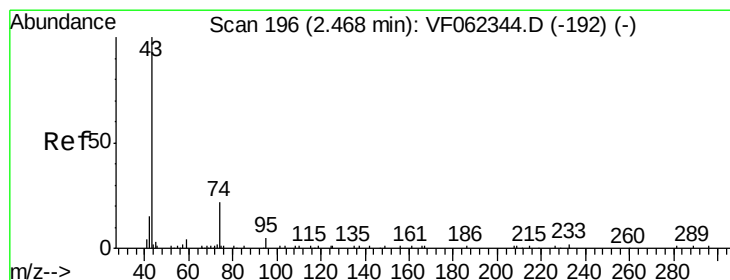
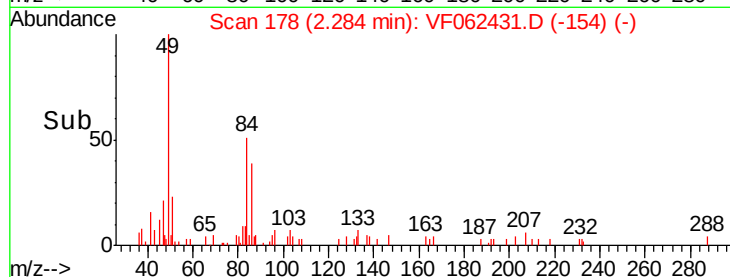
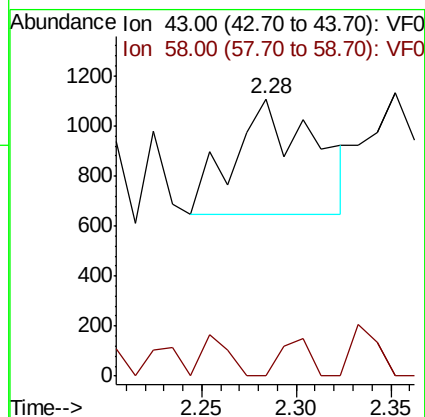
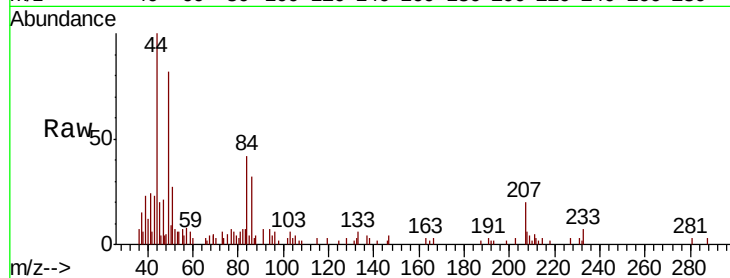
72-11995RE

Tot Ion: 43 Resp: 1366

Ion Ratio Lower Upper

43 100

58 0.0 13.1 19.7#



#18

Methyl Acetate

Concen: 12.390 ug/l

RT: 2.49 min Scan# 199

Delta R.T. 0.02 min

Lab File: VF062431.D

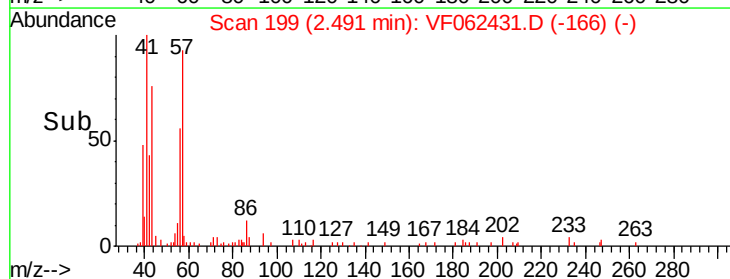
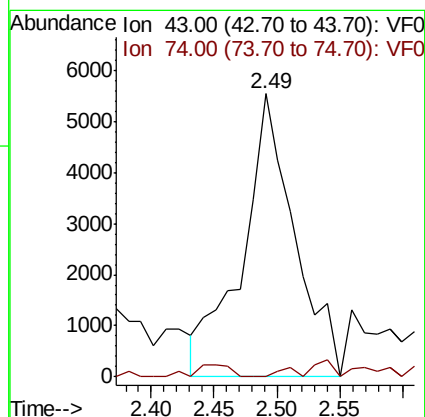
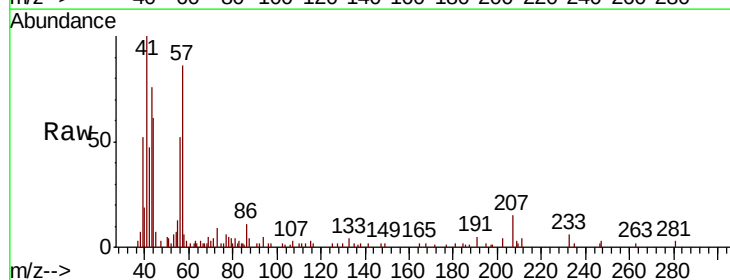
Acq: 10 May 2019 18:50

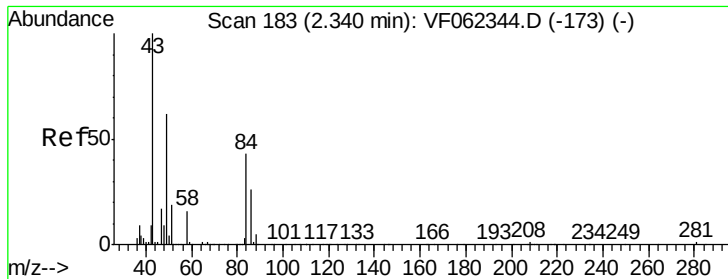
Tgt Ion: 43 Resp: 15955

Ion Ratio Lower Upper

43 100

74 0.0 15.0 22.4#

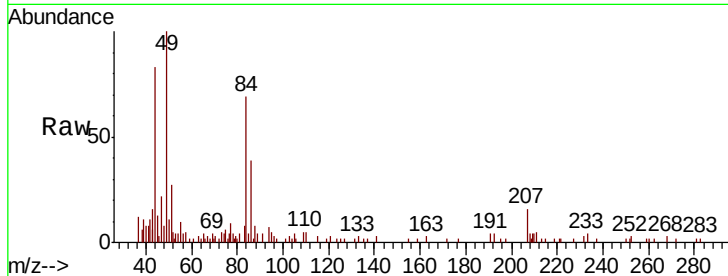




#20  
Methylene Chloride  
Concen: 7.613 ug/l  
RT: 2.32 min Scan# 182  
Delta R.T. -0.02 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

Instrument :  
MSVOA\_F  
ClientSampleId :  
72-11995RE

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 16343 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 145.4 | 117.5 | 176.3 |
| 51       | 33.6  | 37.0  | 55.4# |
| 86       | 57.2  | 49.3  | 73.9  |



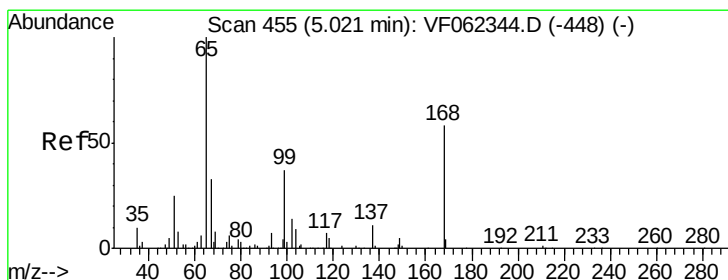
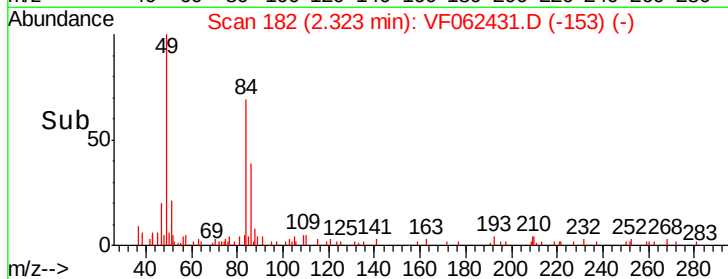
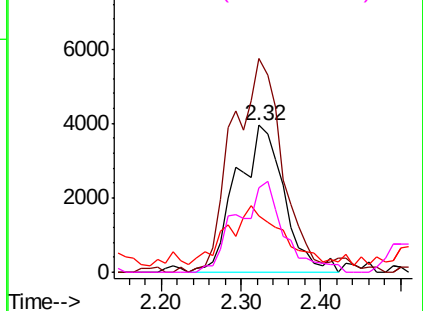
Abundance

Ion 83.90 (83.60 to 84.60): VF0

Ion 48.90 (48.60 to 49.60): VF0

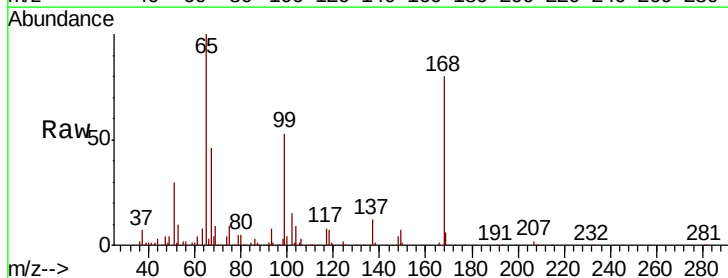
Ion 50.90 (50.60 to 51.60): VF0

Ion 85.90 (85.60 to 86.60): VF0



#33  
1,2-Dichloroethane-d4  
Concen: 54.999 ug/l  
RT: 5.03 min Scan# 457  
Delta R.T. 0.01 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

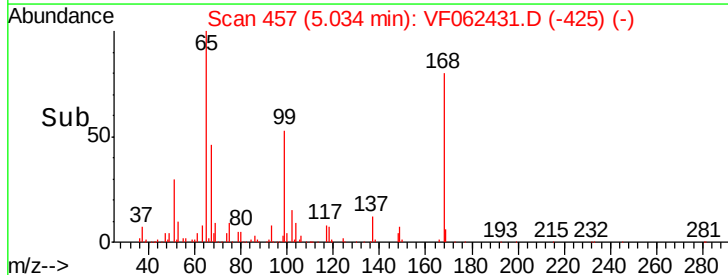
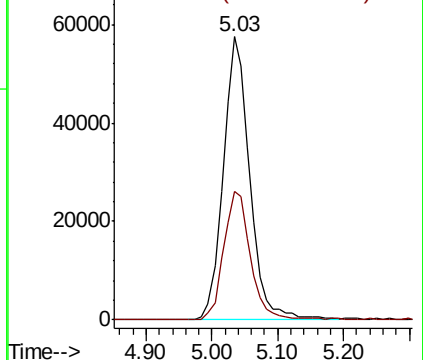
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 65    | Resp: | 161310 |
| Ion      | Ratio | Lower | Upper  |
| 65       | 100   |       |        |
| 67       | 46.5  | 0.0   | 85.8   |

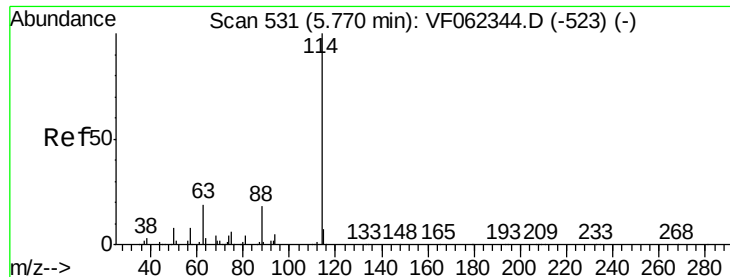


Abundance

Ion 64.90 (64.60 to 65.60): VF0

Ion 66.90 (66.60 to 67.60): VF0

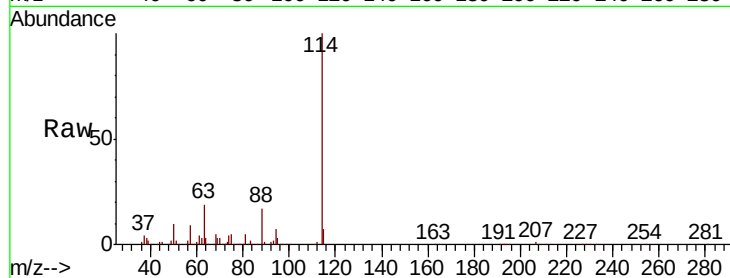




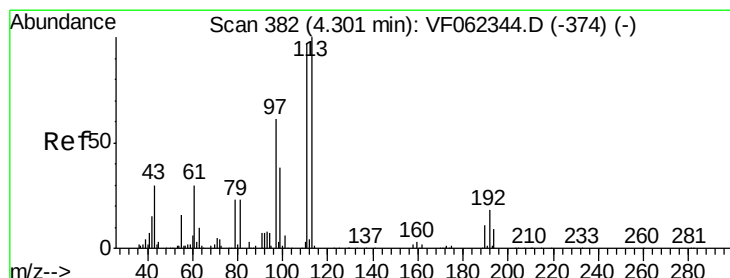
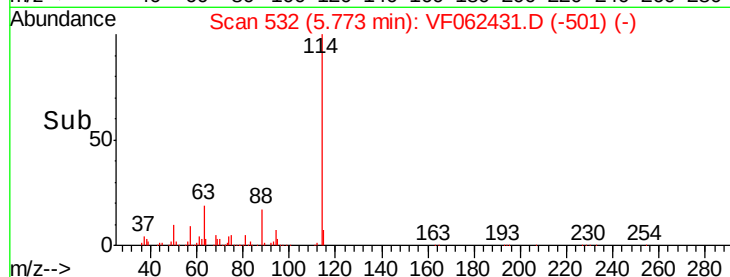
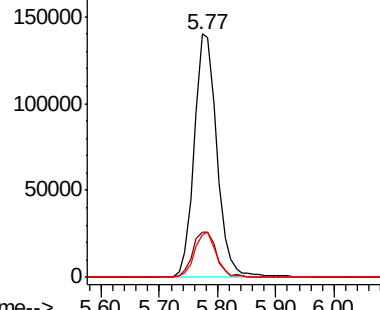
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.77 min Scan# 532  
 Delta R.T. 0.00 min  
 Lab File: VF062431.D  
 Acq: 10 May 2019 18:50

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 72-11995RE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 18.5  | 0.0   | 37.4  |
| 88      | 17.3  | 0.0   | 36.4  |

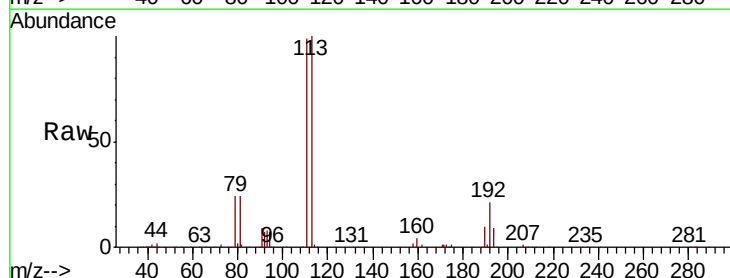


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VF0  
 Ion 87.90 (87.60 to 88.60): VF0

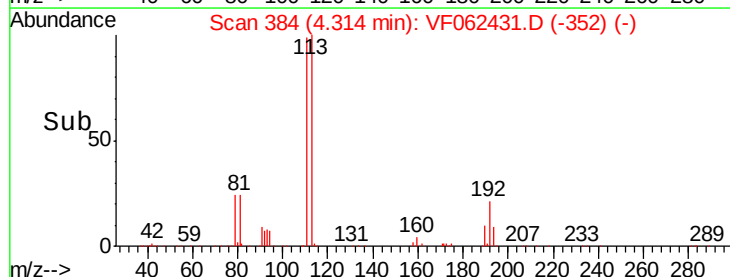
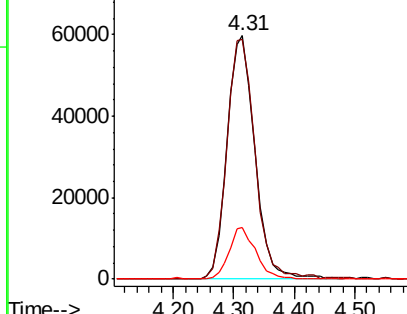


#35  
 Dibromofluoromethane  
 Concen: 62.765 ug/l  
 RT: 4.31 min Scan# 384  
 Delta R.T. 0.01 min  
 Lab File: VF062431.D  
 Acq: 10 May 2019 18:50

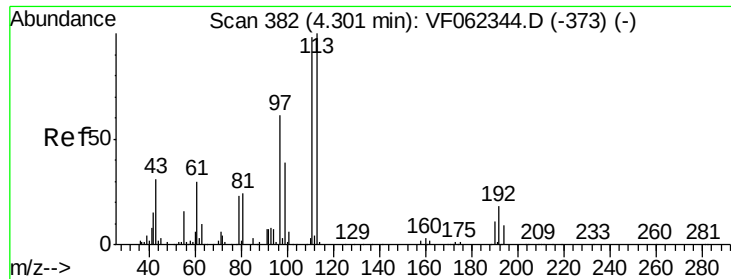
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 100.7 | 79.4  | 119.0 |
| 192     | 20.3  | 16.0  | 24.0  |



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V



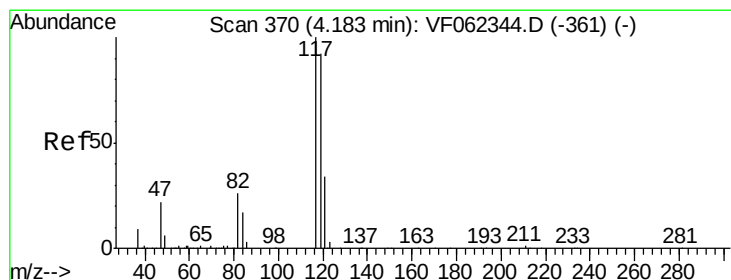
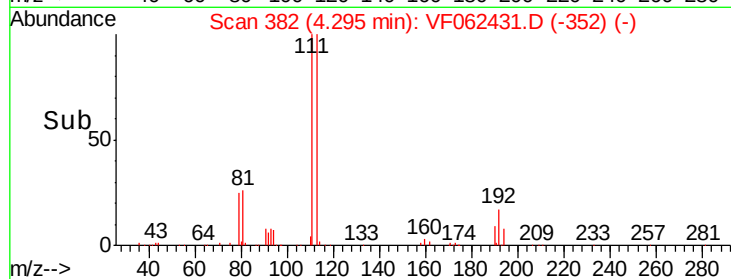
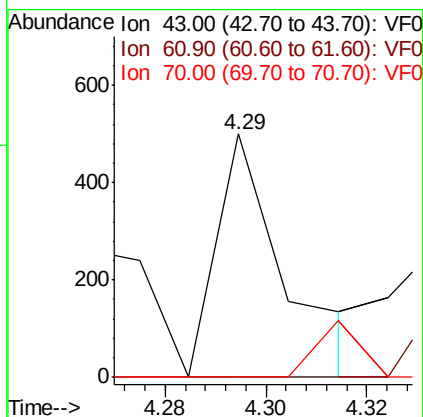
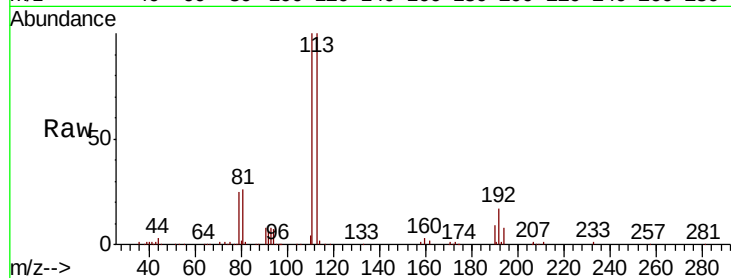




#37  
Ethyl Acetate  
Concen: Below Cal  
RT: 4.29 min Scan# 382  
Delta R.T. -0.01 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

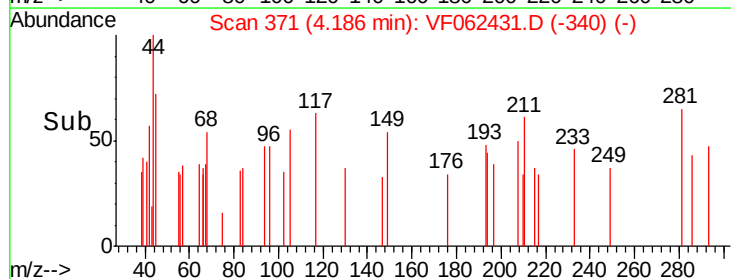
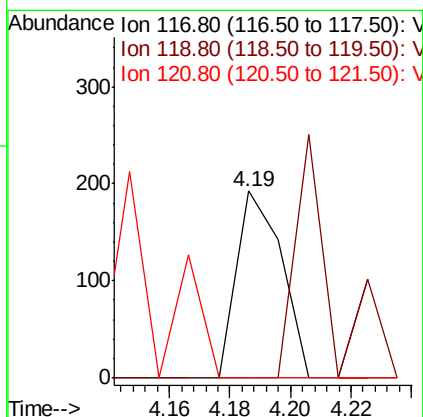
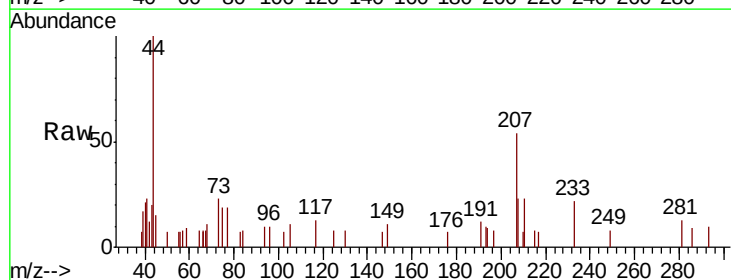
Instrument :  
MSVOA\_F  
ClientSampleId :  
72-11995RE

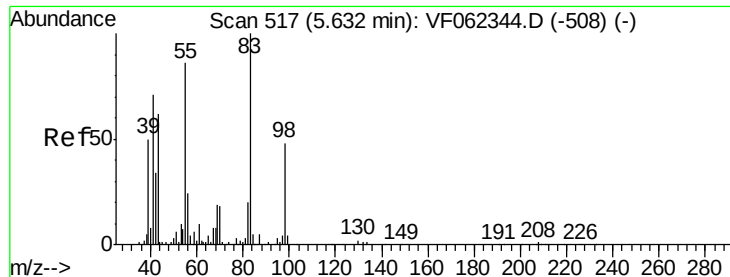
Tot Ion: 43 Resp: 467  
Ion Ratio Lower Upper  
43 100  
61 0.0 0.0 0.0  
70 0.0 8.2 12.2#



#38  
Carbon Tetrachloride  
Concen: Below Cal  
RT: 4.19 min Scan# 371  
Delta R.T. 0.00 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

Tgt Ion: 117 Resp: 198  
Ion Ratio Lower Upper  
117 100  
119 0.0 73.4 110.2#  
121 0.0 27.4 41.0#

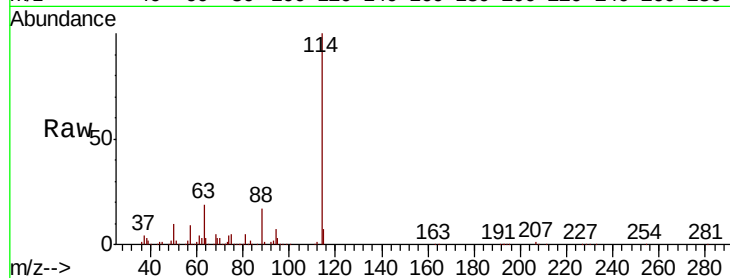




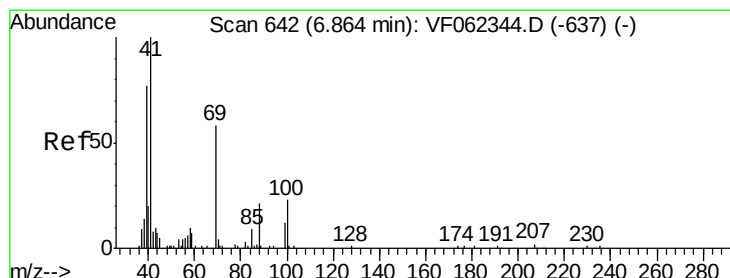
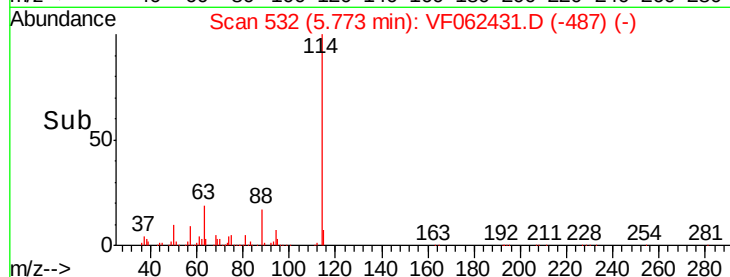
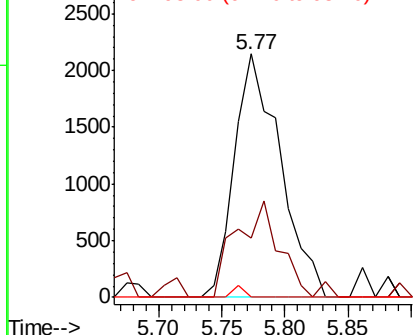
#39  
Methylcyclohexane  
Concen: 1.654 ug/l  
RT: 5.77 min Scan# 532  
Delta R.T. 0.14 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

Instrument :  
MSVOA\_F  
ClientSampleId :  
72-11995RE

Tot Ion: 83 Resp: 5413  
Ion Ratio Lower Upper  
83 100  
55 24.6 69.0 103.6#  
98 0.0 38.6 58.0#

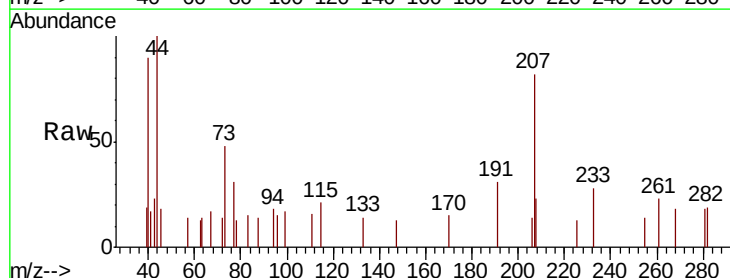


Abundance Ion 83.00 (82.70 to 83.70): VF0  
Ion 55.00 (54.70 to 55.70): VF0  
Ion 98.00 (97.70 to 98.70): VF0

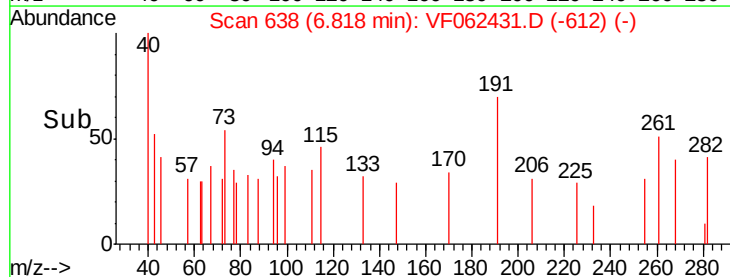
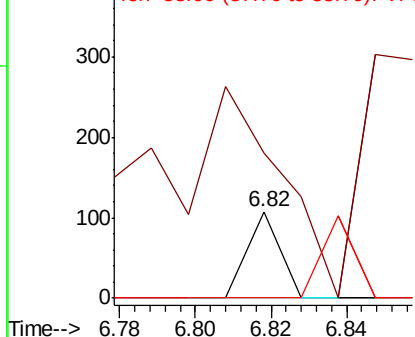


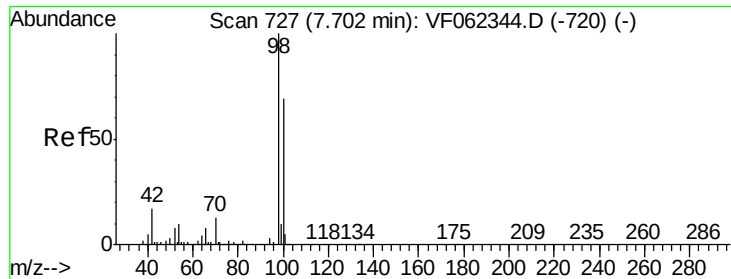
#49  
1,4-Dioxane  
Concen: Below Cal  
RT: 6.82 min Scan# 638  
Delta R.T. -0.05 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

Tgt Ion: 88 Resp: 64  
Ion Ratio Lower Upper  
88 100  
43 526.6 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

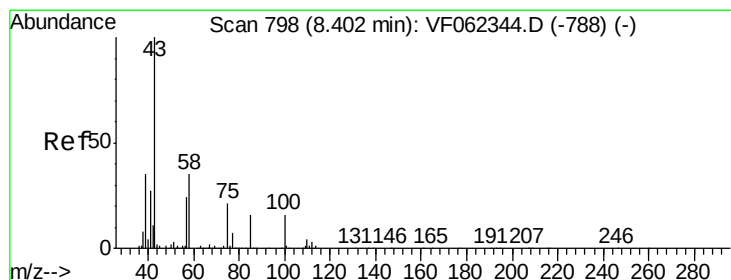
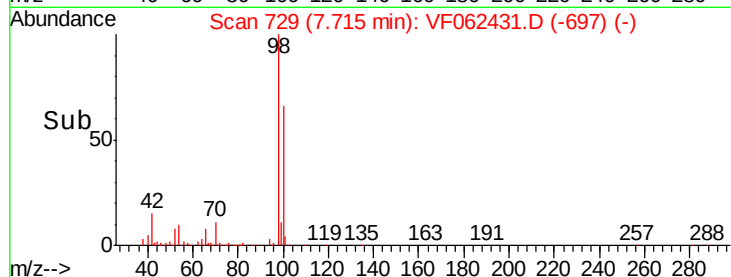
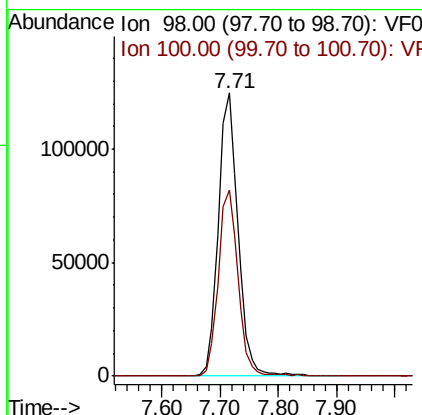
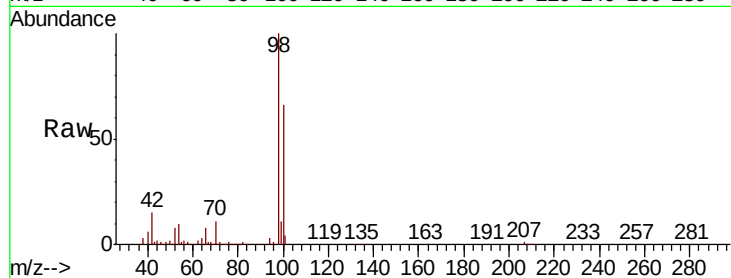




#50  
Toluene-d8  
Concen: 40.125 ug/l  
RT: 7.71 min Scan# 729  
Delta R.T. 0.01 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

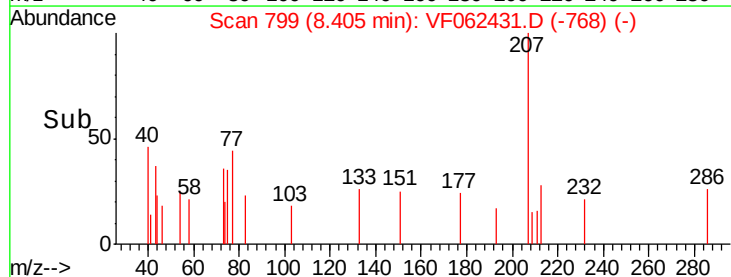
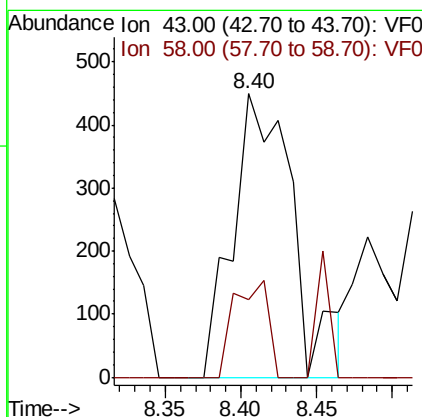
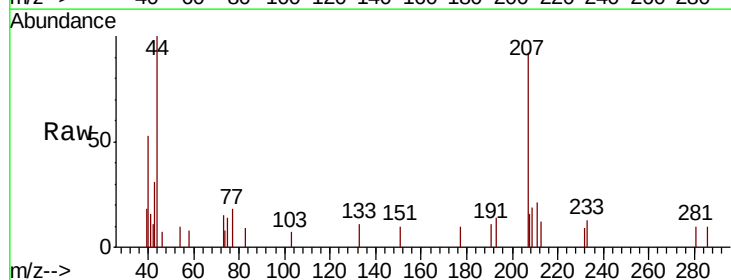
Instrument :  
MSVOA\_F  
ClientSampleId :  
72-11995RE

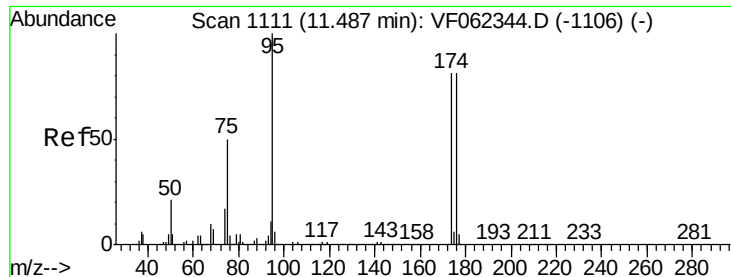
Tot Ion: 98 Resp: 293968  
Ion Ratio Lower Upper  
98 100  
100 65.6 53.3 79.9



#51  
4-Methyl-2-Pentanone  
Concen: 1.115 ug/l  
RT: 8.40 min Scan# 799  
Delta R.T. 0.00 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

Tgt Ion: 43 Resp: 1254  
Ion Ratio Lower Upper  
43 100  
58 19.3 27.8 41.6#

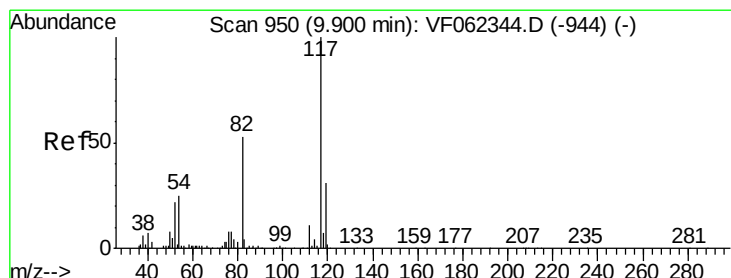
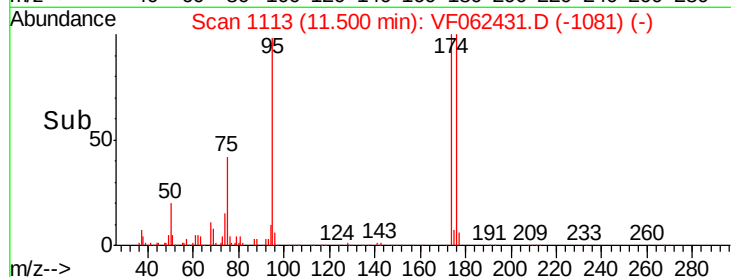
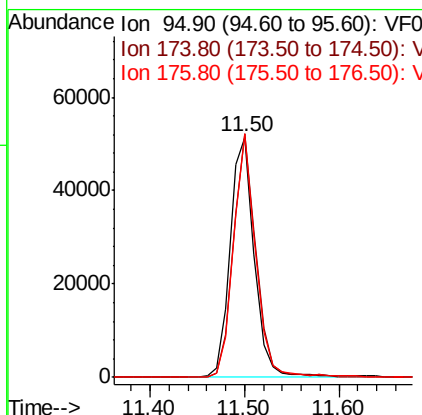
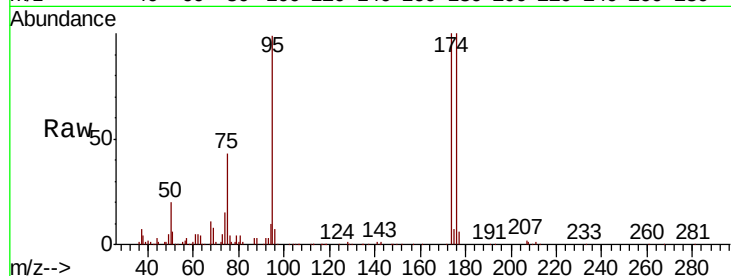




#62  
4-Bromofluorobenzene  
Concen: 27.490 ug/l  
RT: 11.50 min Scan# 1113  
Delta R.T. 0.01 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

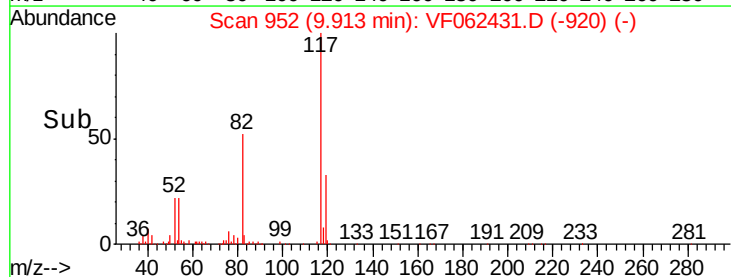
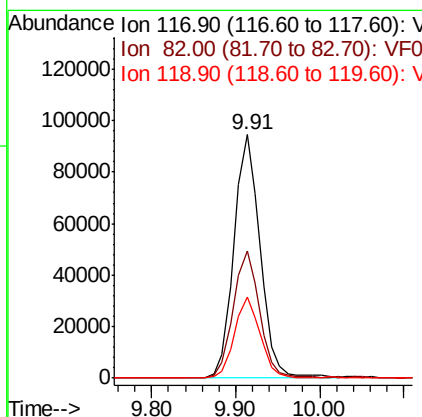
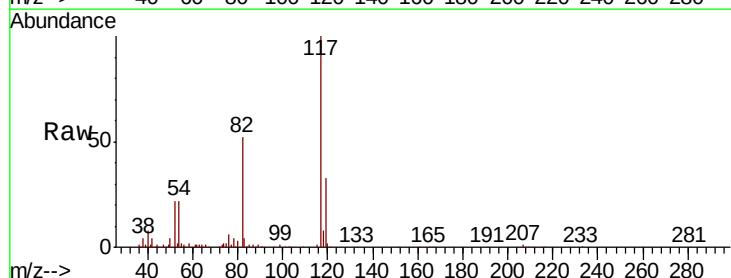
Instrument :  
MSVOA\_F  
ClientSampleId :  
72-11995RE

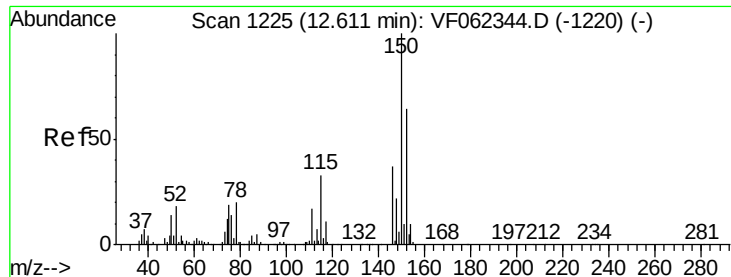
| Tot Ion   | 95    | Resp  | 90865 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 95        | 100   |       |       |
| 174       | 95.6  | 0.0   | 191.8 |
| 176       | 94.4  | 0.0   | 193.2 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.91 min Scan# 952  
Delta R.T. 0.01 min  
Lab File: VF062431.D  
Acq: 10 May 2019 18:50

| Tgt Ion   | 117   | Resp  | 205566 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 52.2  | 42.2  | 63.2   |
| 119       | 33.5  | 25.0  | 37.4   |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.61 min Scan# 1226

Delta R.T. 0.00 min

Lab File: VF062431.D

Acq: 10 May 2019 18:50

Instrument :

MSVOA\_F

ClientSampleId :

72-11995RE

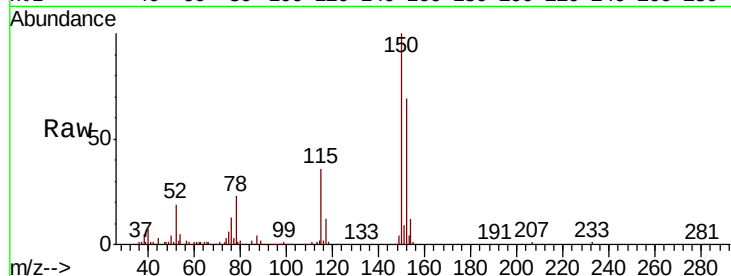
Tot Ion:152 Resp: 72627

Ion Ratio Lower Upper

152 100

115 55.0 26.4 79.2

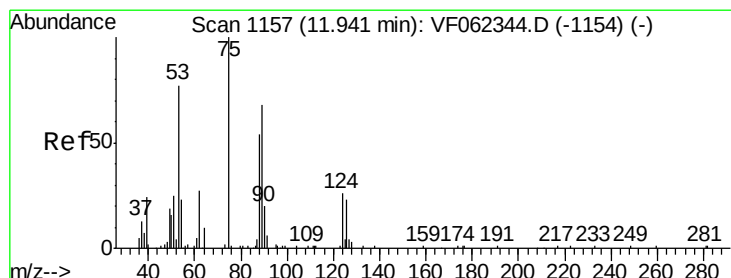
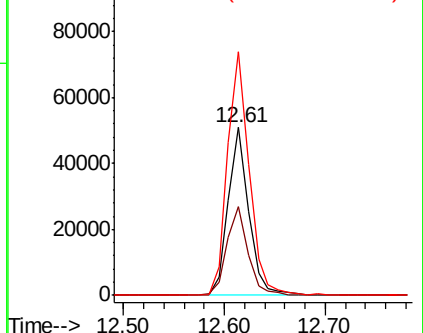
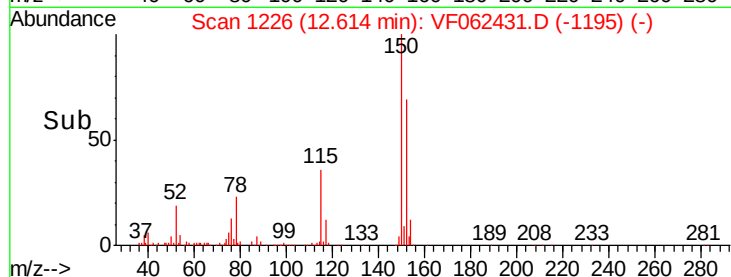
150 153.2 0.0 335.0



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: 2.731 ug/l

RT: 11.96 min Scan# 1160

Delta R.T. 0.02 min

Lab File: VF062431.D

Acq: 10 May 2019 18:50

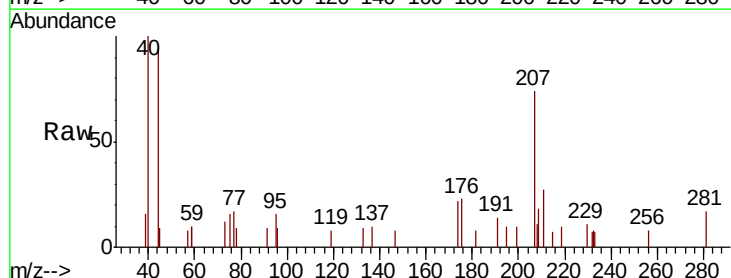
Tgt Ion: 75 Resp: 528

Ion Ratio Lower Upper

75 100

53 0.0 71.9 107.9#

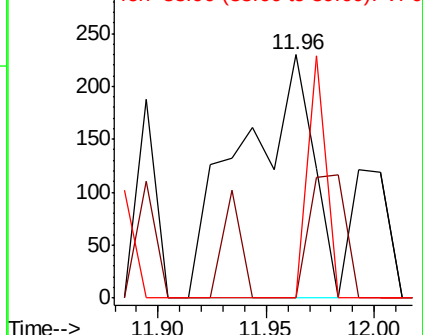
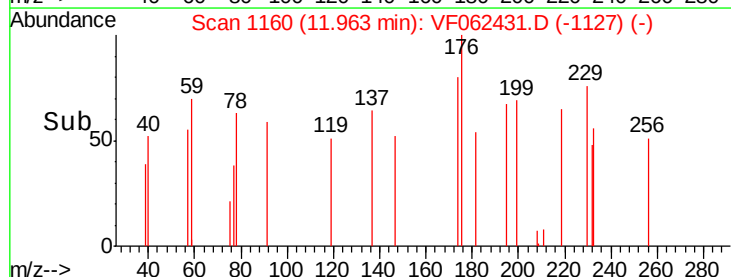
89 25.6 0.0 0.0#

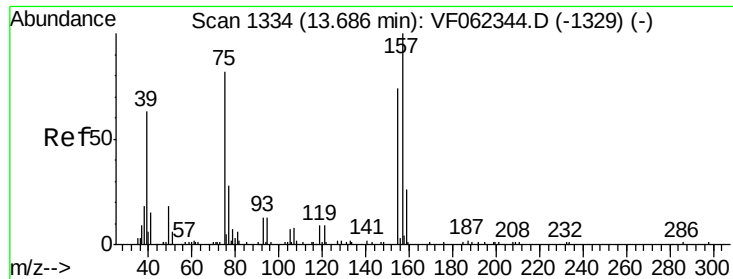


Abundance Ion 74.90 (74.60 to 75.60): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 88.90 (88.60 to 89.60): VF0





#92

1,2-Dibromo-3-Chloropropane

Concen: 1.152 ug/l

RT: 13.71 min Scan# 1337

Delta R.T. 0.02 min

Lab File: VF062431.D

Acq: 10 May 2019 18:50

Instrument :

MSVOA\_F

ClientSampleId :

72-11995RE

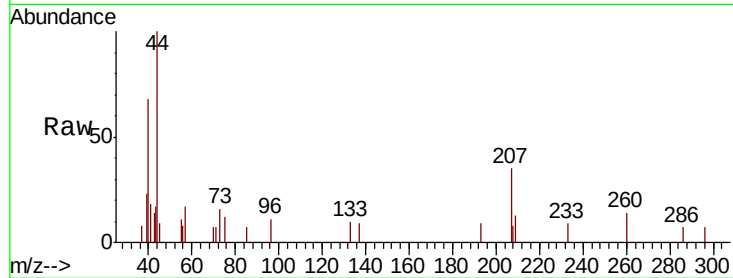
Tot Ion: 75 Resp: 174

Ion Ratio Lower Upper

75 100

155 0.0 51.8 155.4#

157 0.0 67.3 201.8#



Abundance Ion 74.90 (74.60 to 75.60): VF0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

