

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF100818\  
 Data File : VF060486.D  
 Acq On : 8 Oct 2018 16:03  
 Operator : VA/AP  
 Sample : J5084-18RE  
 Misc : 6.09/5mL/MSVOA F/SOIL  
 ALS Vial : 39 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :

Quant Time: Oct 09 01:30:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F100118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 02 11:42:56 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.00  | 168  | 308529   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.73  | 114  | 537612   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.89  | 117  | 359648   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.61 | 152  | 195989   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 4.98  | 65   | 169280   | 35.06 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 70.12% |          |
| 35) Dibromofluoromethane    | 4.25  | 113  | 159092   | 31.50 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 63.00% |          |
| 50) Toluene-d8              | 7.67  | 98   | 354954   | 28.54 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 57.08% |          |
| 62) 4-Bromofluorobenzene    | 11.49 | 95   | 247556   | 43.59 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.18% |          |

| Target Compounds              | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.98  | 85   | 75       | Below Cal | #      | 1      |
| 3) Chloromethane              | 1.12  | 50   | 23921    | 5.710     | ug/l # | 64     |
| 11) Tert butyl alcohol        | 2.68  | 59   | 1985     | 6.798     | ug/l # | 1      |
| 13) Acrolein                  | 2.07  | 56   | 275269   | 1172.138  | ug/l # | 1      |
| 14) Allyl chloride            | 2.07  | 41   | 2168101  | 361.554   | ug/l # | 45     |
| 15) Acrylonitrile             | 3.04  | 53   | 125815   | 251.443   | ug/l # | 60     |
| 16) Acetone                   | 2.28  | 43   | 616238   | 658.419   | ug/l   | 98     |
| 17) Carbon Disulfide          | 1.89  | 76   | 36653    | 3.234     | ug/l   | 99     |
| 18) Methyl Acetate            | 2.46  | 43   | 367237   | 208.016   | ug/l # | 57     |
| 20) Methylene Chloride        | 2.26  | 84   | 7708     | Below Cal | #      | 1      |
| 23) Vinyl Acetate             | 3.28  | 43   | 37776    | 8.737     | ug/l # | 88     |
| 25) 2-Butanone                | 4.49  | 43   | 400036   | 320.012   | ug/l # | 66     |
| 28) Bromochloromethane        | 3.89  | 49   | 2784     | 1.026     | ug/l # | 10     |
| 29) Tetrahydrofuran           | 4.14  | 42   | 443574   | 954.892   | ug/l # | 1      |
| 31) Cyclohexane               | 3.89  | 56   | 731992   | 138.492   | ug/l # | 54     |
| 37) Ethyl Acetate             | 4.15  | 43   | 2282926  | 899.408   | ug/l # | 1      |
| 39) Methylcyclohexane         | 5.59  | 83   | 1181231  | 181.782   | ug/l   | 95     |
| 43) Isopropyl Acetate         | 6.95  | 43   | 3041666  | 991.604   | ug/l # | 44     |
| 45) 1,2-Dichloropropane       | 6.42  | 63   | 27706    | 7.906     | ug/l # | 1      |
| 47) Bromodichloromethane      | 6.45  | 83   | 141075   | 20.218    | ug/l # | 26     |
| 48) Methyl methacrylate       | 6.73  | 41   | 494825   | 224.727   | ug/l # | 46     |
| 49) 1,4-Dioxane               | 6.84  | 88   | 77       | 4.056     | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone      | 8.40  | 43   | 704353   | 322.576   | ug/l # | 46     |
| 55) 1,1,2-Trichloroethane     | 8.68  | 97   | 10280    | 3.629     | ug/l # | 41     |
| 56) Ethyl methacrylate        | 8.75  | 69   | 783105   | 243.264   | ug/l   | 96     |
| 58) 2-Chloroethyl Vinyl ether | 7.76  | 63   | 6240     | 18.977    | ug/l   | 100    |
| 59) 2-Hexanone                | 9.63  | 43   | 230538   | 143.944   | ug/l # | 50     |
| 67) Ethyl Benzene             | 10.01 | 91   | 707065   | 50.335    | ug/l   | 99     |
| 68) m/p-Xylenes               | 10.24 | 106  | 83207    | 17.231    | ug/l   | 88     |
| 69) o-Xylene                  | 10.81 | 106  | 27376    | 5.201     | ug/l   | 90     |
| 73) Isopropylbenzene          | 11.20 | 105  | 603745   | 39.124    | ug/l   | 96     |
| 74) N-amyl acetate            | 11.47 | 43   | 252842   | 71.391    | ug/l # | 54     |
| 75) 1,1,2,2-Tetrachloroethane | 11.74 | 83   | 34956    | 12.425    | ug/l # | 93     |
| 78) n-propylbenzene           | 11.67 | 91   | 2484629  | 132.813   | ug/l   | 94     |

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 QLast Update : Tue Oct 02 11:42:56 2018  
 Response via : Initial Calibration

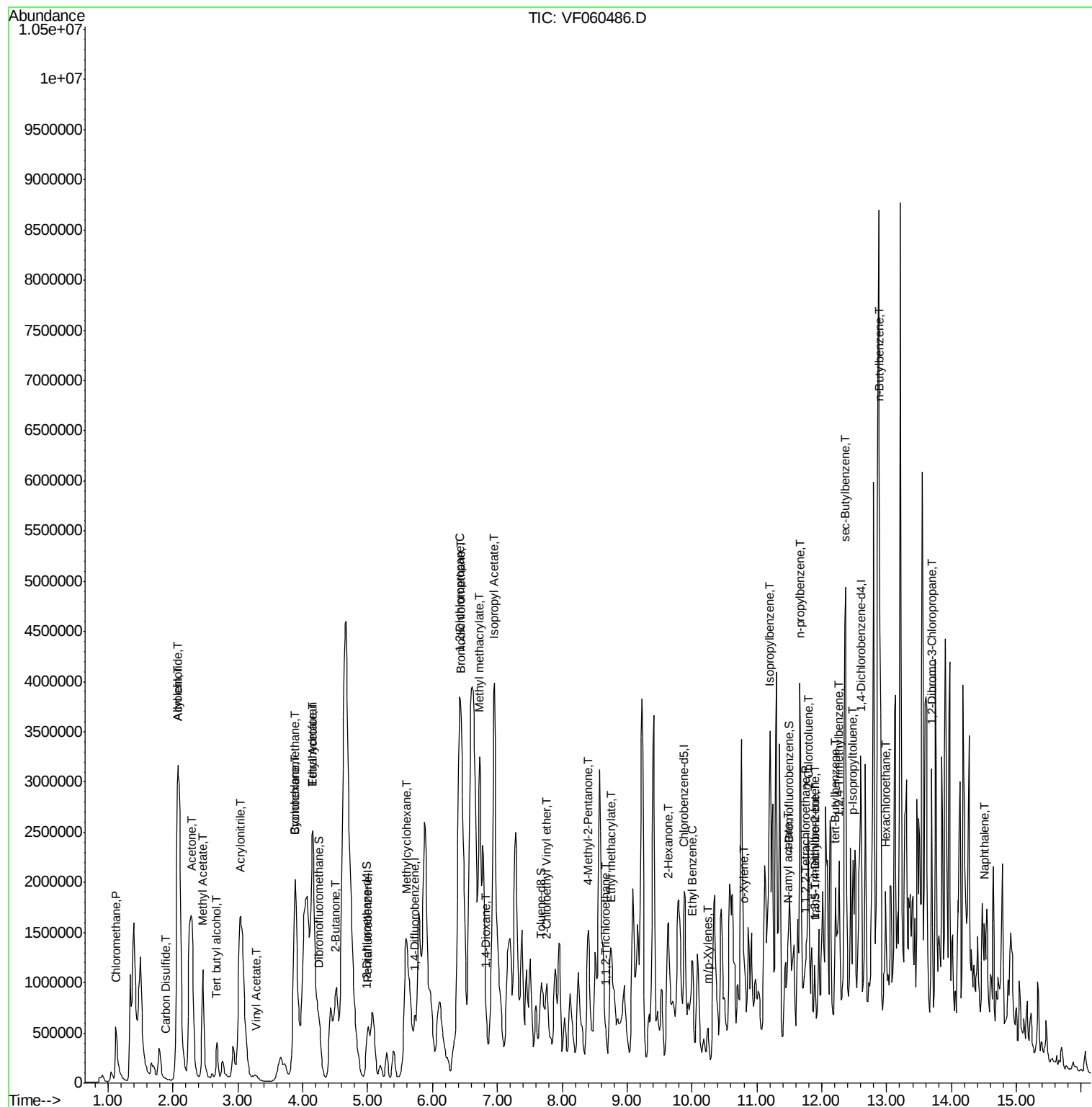
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 79) 2-Chlorotoluene            | 11.79 | 91   | 104478   | 9.547   | ug/l # | 48       |
| 80) 1,3,5-Trimethylbenzene     | 11.89 | 105  | 97682    | 7.450   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.89 | 75   | 1558     | 1.697   | ug/l # | 1        |
| 83) tert-Butylbenzene          | 12.20 | 119  | 24129    | 1.866   | ug/l # | 51       |
| 84) 1,2,4-Trimethylbenzene     | 12.27 | 105  | 85588    | 6.582   | ug/l   | 89       |
| 85) sec-Butylbenzene           | 12.38 | 105  | 1174117  | 65.778  | ug/l # | 71       |
| 86) p-Isopropyltoluene         | 12.49 | 119  | 178231   | 12.222  | ug/l   | 89       |
| 89) n-Butylbenzene             | 12.90 | 91   | 2303348  | 149.267 | ug/l   | 95       |
| 90) Hexachloroethane           | 12.99 | 117  | 59498    | 15.786  | ug/l # | 27       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.70 | 75   | 11841    | 21.710  | ug/l # | 27       |
| 95) Naphthalene                | 14.50 | 128  | 153993   | 18.528  | ug/l # | 63       |

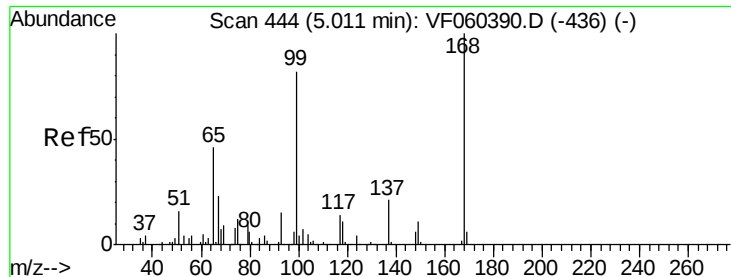
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Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF100818\  
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.00 min Scan# 443

Delta R.T. -0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

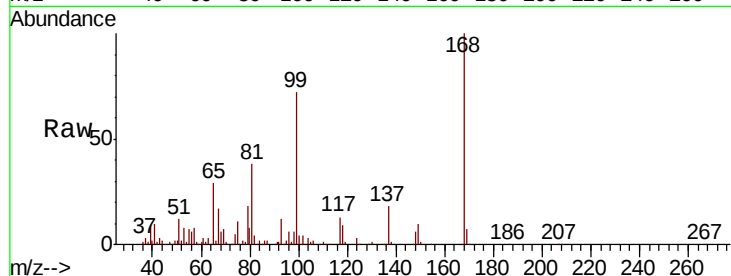
ClientSampled :

Tot Ion:168 Resp: 308529

Ion Ratio Lower Upper

168 100

99 71.9 65.3 97.9



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.00

120000

100000

80000

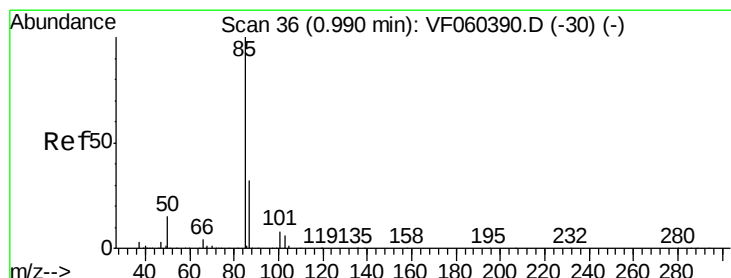
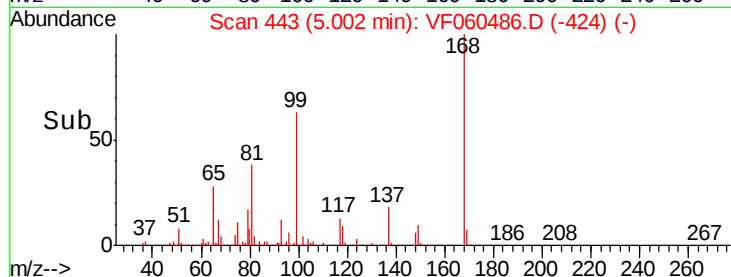
60000

40000

20000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 0.98 min Scan# 35

Delta R.T. -0.01 min

Lab File: VF060486.D

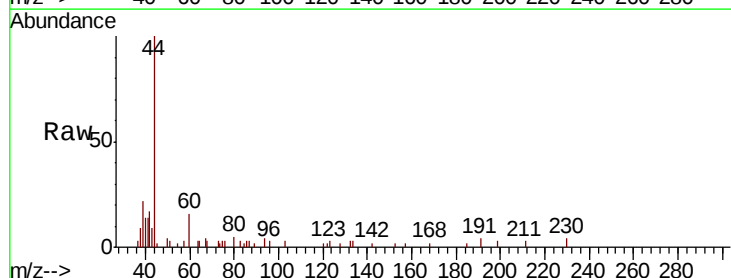
Acq: 8 Oct 2018 16:03

Tgt Ion: 85 Resp: 75

Ion Ratio Lower Upper

85 100

87 115.7 15.9 47.6#



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.98

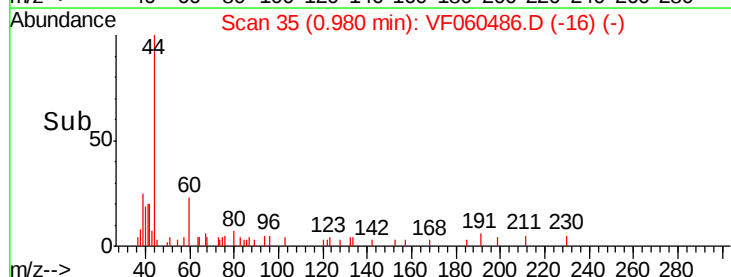
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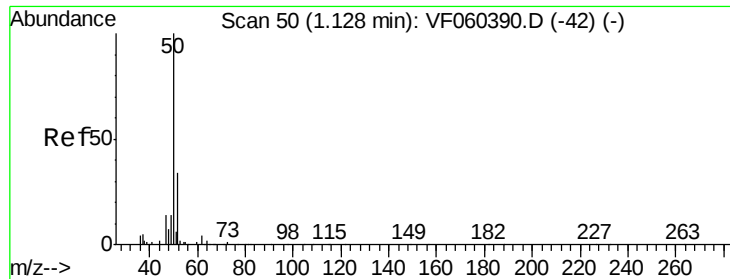
100

50

0

Time-->





#3

Chloromethane

Concen: 5.710 ug/l

RT: 1.12 min Scan# 49

Delta R.T. -0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

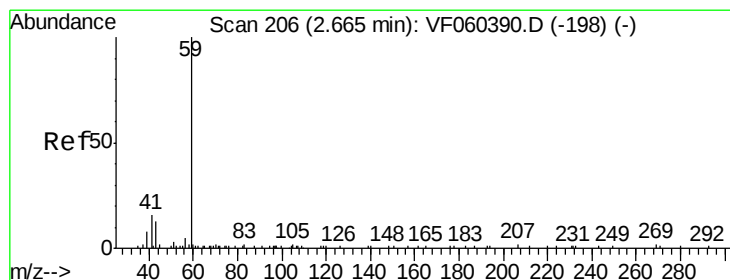
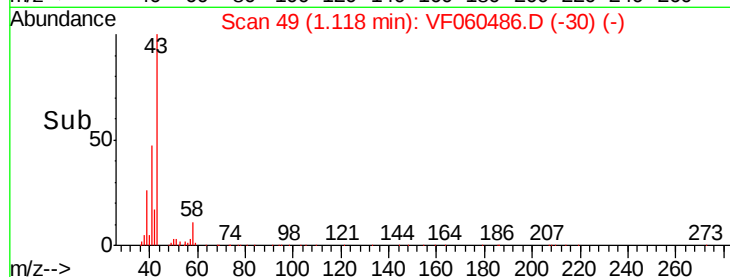
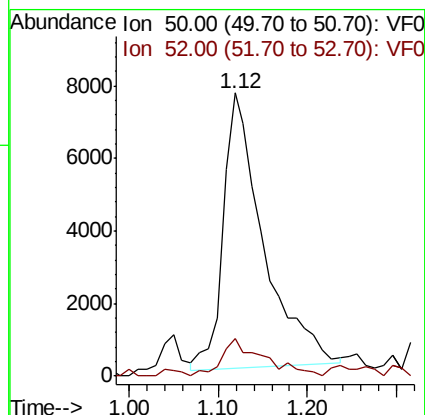
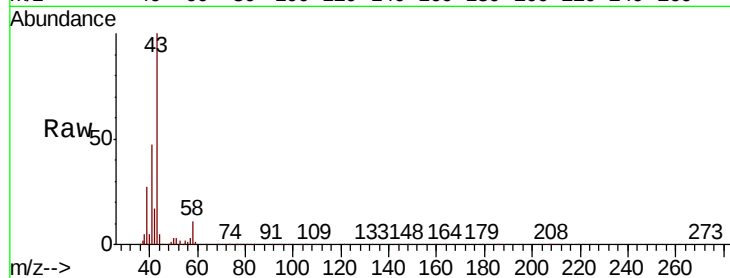
ClientSampleId :

Tot Ion: 50 Resp: 23921

Ion Ratio Lower Upper

50 100

52 13.2 26.9 40.3#



#11

Tert butyl alcohol

Concen: 6.798 ug/l

RT: 2.68 min Scan# 207

Delta R.T. 0.01 min

Lab File: VF060486.D

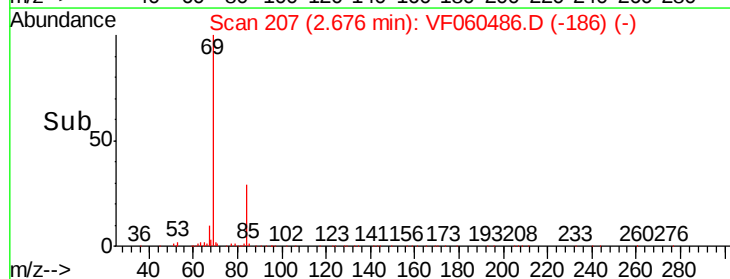
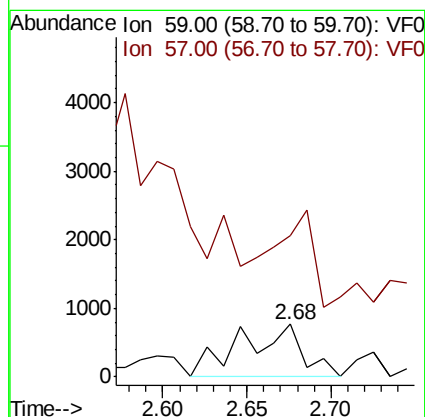
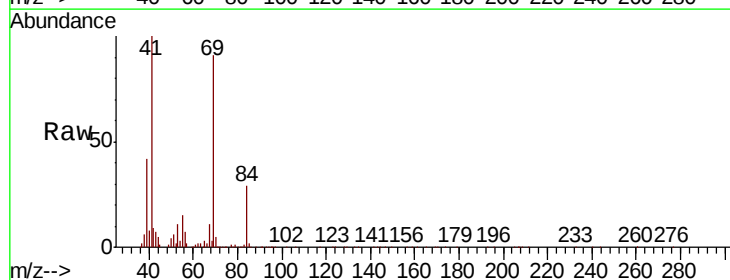
Acq: 8 Oct 2018 16:03

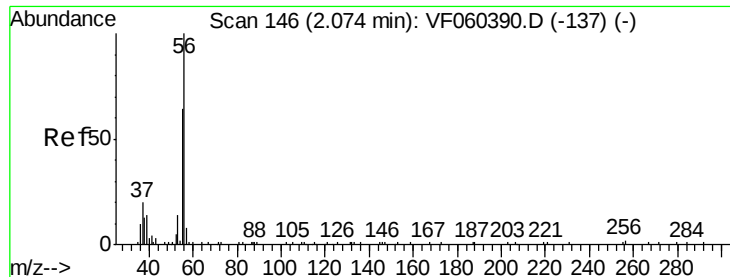
Tgt Ion: 59 Resp: 1985

Ion Ratio Lower Upper

59 100

57 268.6 6.5 9.7#

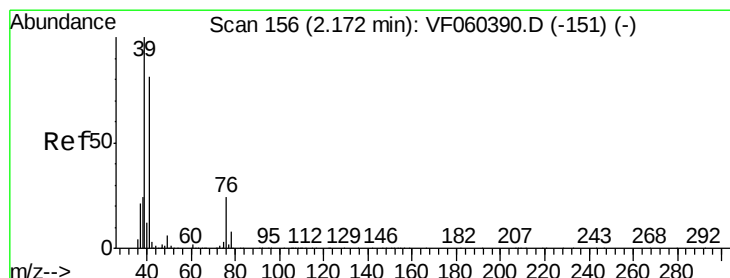
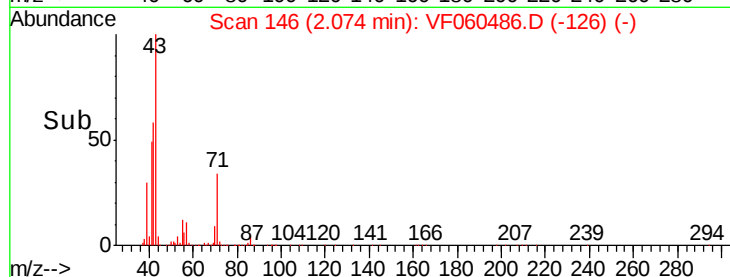
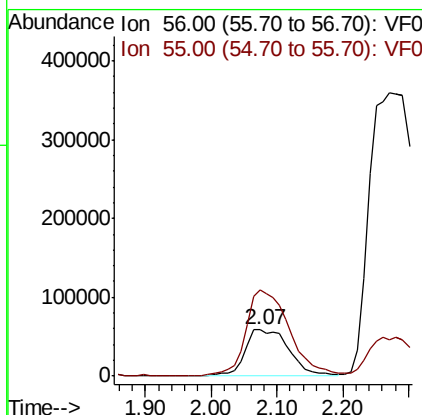
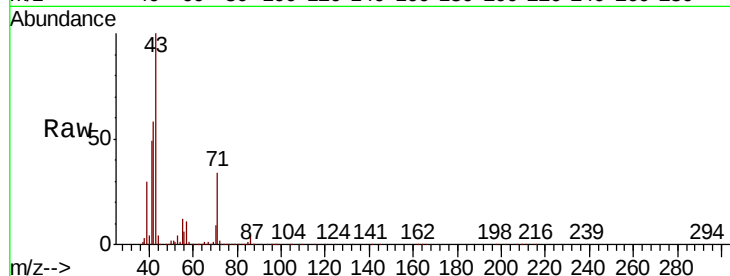




#13  
Acrolein  
Concen: 1172.138 ug/l  
RT: 2.07 min Scan# 146  
Delta R.T. 0.00 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

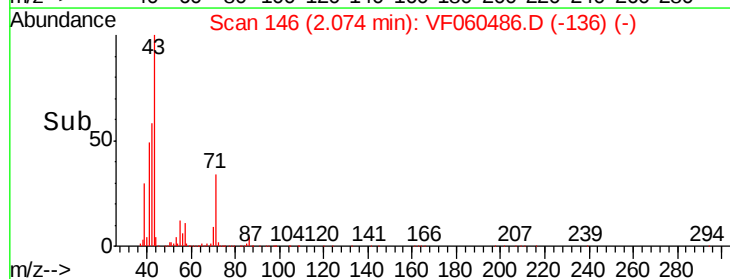
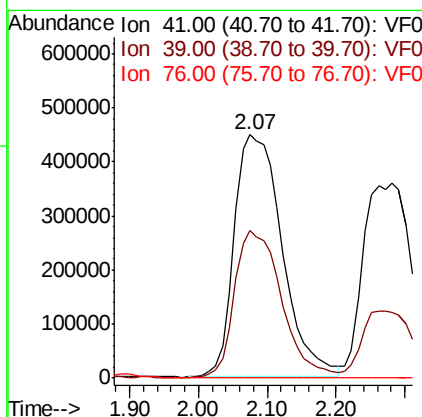
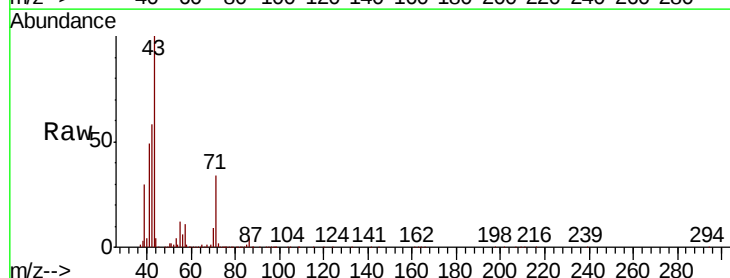
Instrument :  
MSVOA\_F  
ClientSampleId :

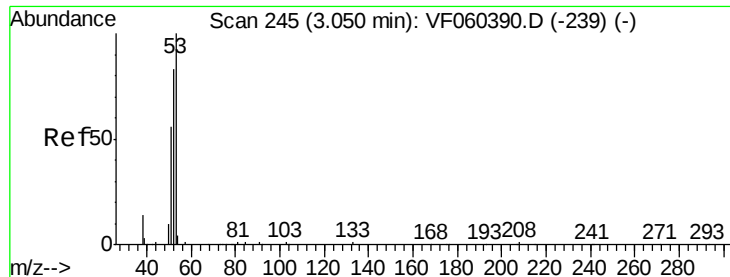
Tot Ion: 56 Resp: 275269  
Ion Ratio Lower Upper  
56 100  
55 186.1 53.9 80.9#



#14  
Allyl chloride  
Concen: 361.554 ug/l  
RT: 2.07 min Scan# 146  
Delta R.T. -0.10 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion: 41 Resp: 2168101  
Ion Ratio Lower Upper  
41 100  
39 60.5 98.3 147.5#  
76 0.0 23.9 35.9#





#15

Acrylonitrile

Concen: 251.443 ug/l

RT: 3.04 min Scan# 244

Delta R.T. -0.01 min

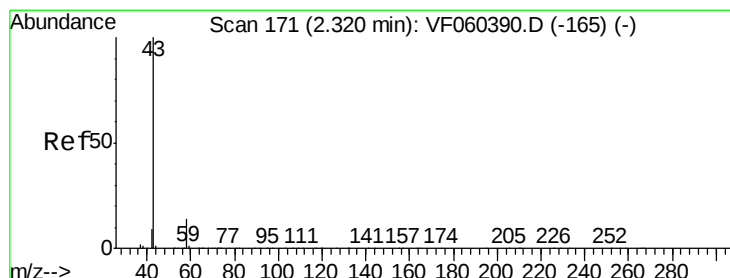
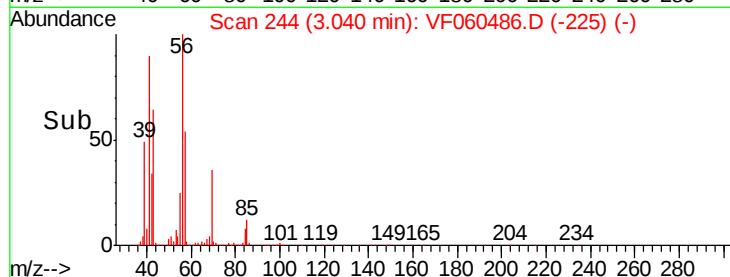
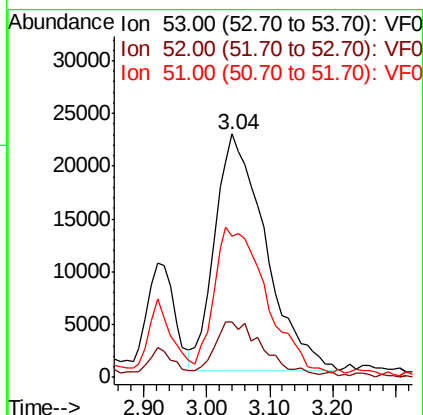
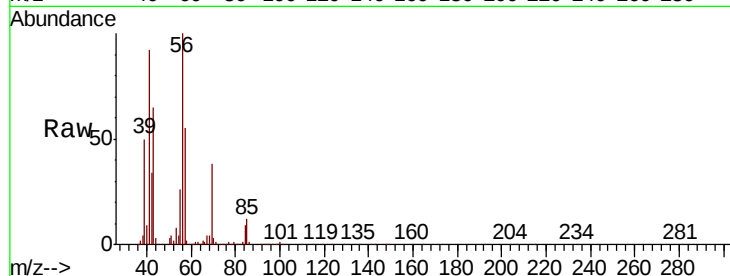
Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion: 53 Resp: 125815

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 53  | 100   |       |       |
| 52  | 22.9  | 66.0  | 99.0# |
| 51  | 58.2  | 45.6  | 68.4  |



#16

Acetone

Concen: 658.419 ug/l

RT: 2.28 min Scan# 167

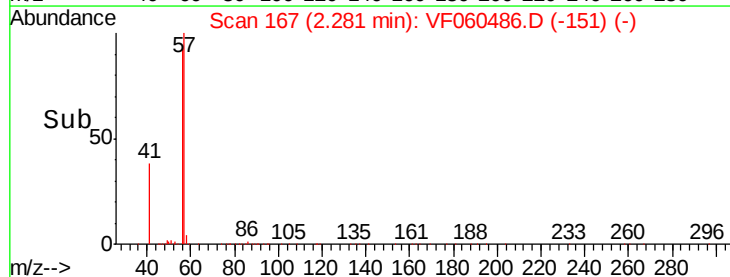
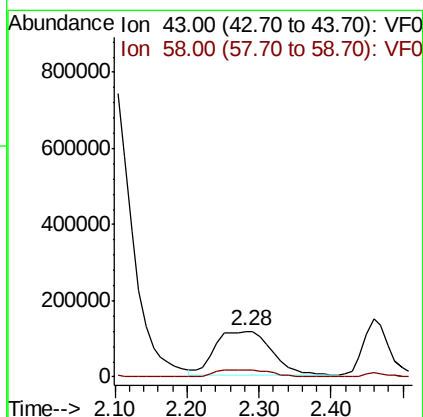
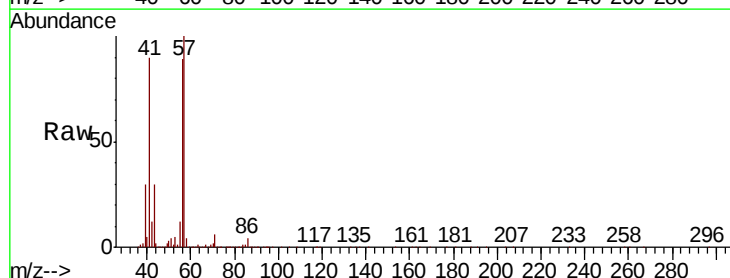
Delta R.T. -0.04 min

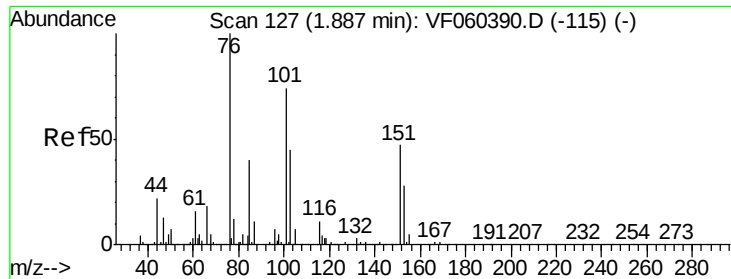
Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Tgt Ion: 43 Resp: 616238

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 14.8  | 11.2  | 16.8  |

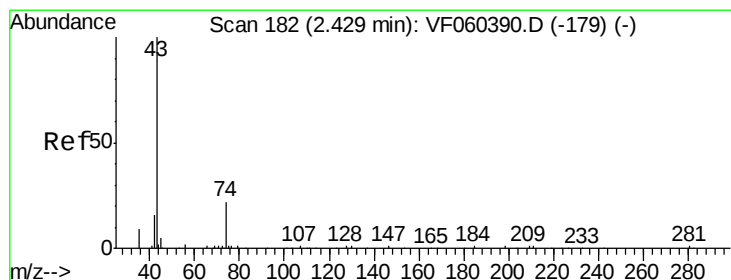
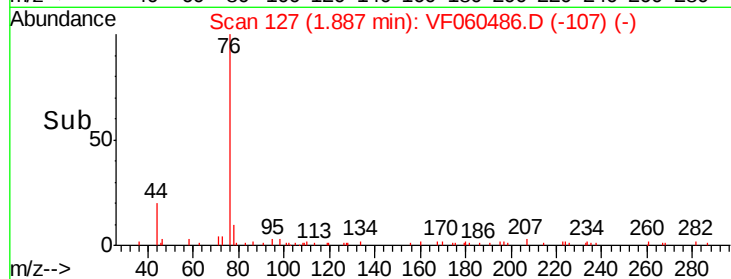
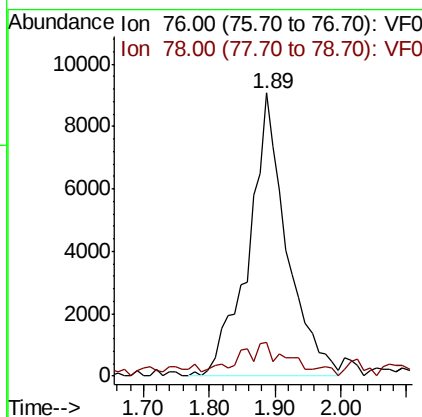
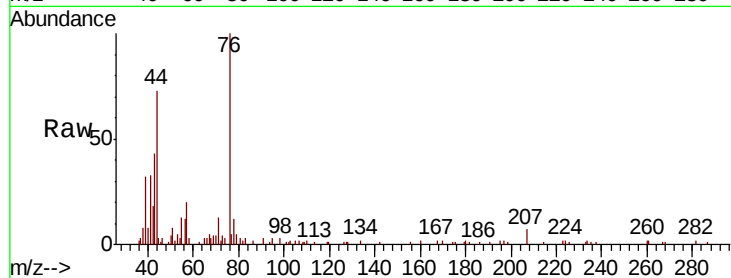




#17  
Carbon Disulfide  
Concen: 3.234 ug/l  
RT: 1.89 min Scan# 127  
Delta R.T. 0.00 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

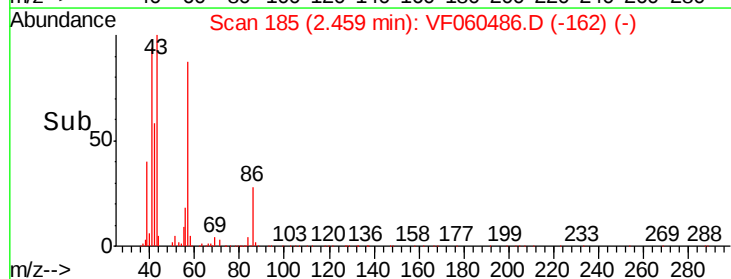
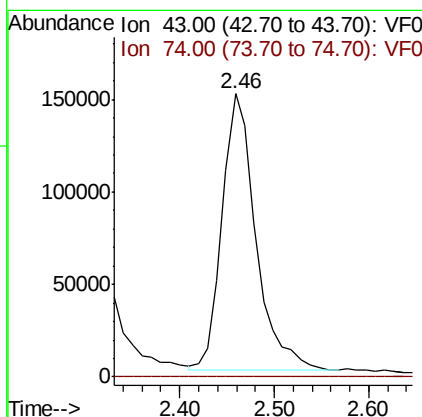
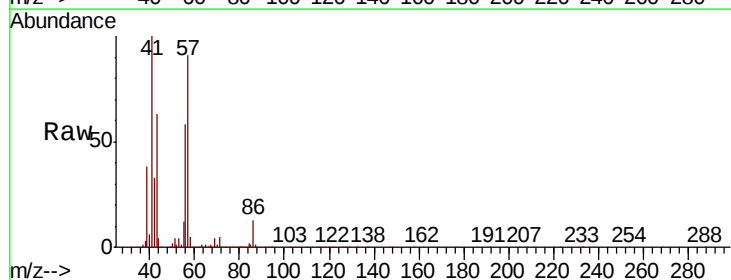
Instrument :  
MSVOA\_F  
ClientSampleId :

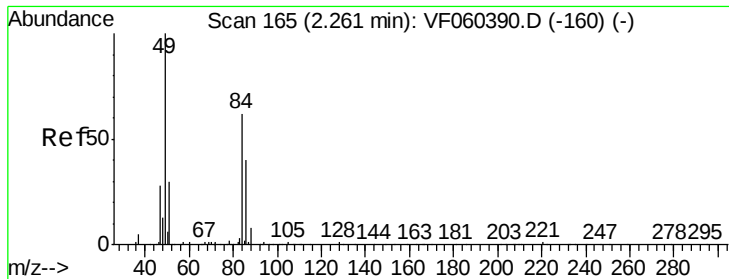
Tot Ion: 76 Resp: 36653  
Ion Ratio Lower Upper  
76 100  
78 12.1 10.1 15.1



#18  
Methyl Acetate  
Concen: 208.016 ug/l  
RT: 2.46 min Scan# 185  
Delta R.T. 0.03 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion: 43 Resp: 367237  
Ion Ratio Lower Upper  
43 100  
74 0.2 15.8 23.8#





#20

Methylene Chloride

Concen: Below Cal

RT: 2.26 min Scan# 165

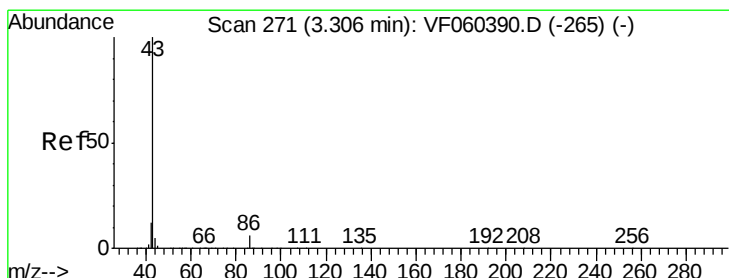
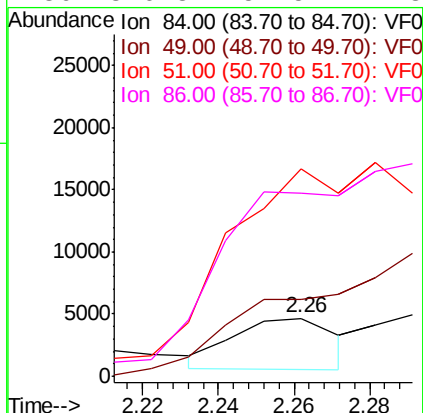
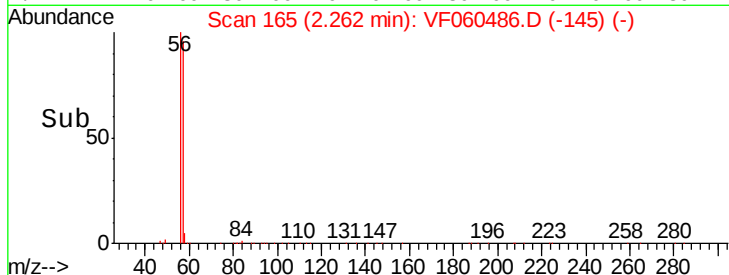
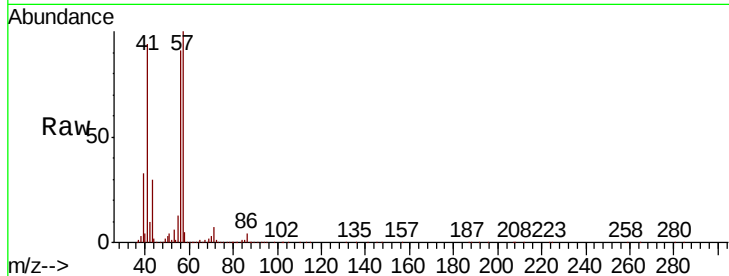
Delta R.T. 0.00 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :  
MSVOA\_F  
ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 7708  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 133.5 | 130.2 | 195.2 |
| 51       | 359.8 | 41.0  | 61.6# |
| 86       | 316.8 | 51.5  | 77.3# |



#23

Vinyl Acetate

Concen: 8.737 ug/l

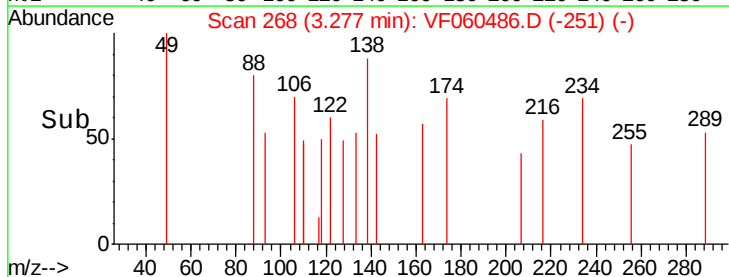
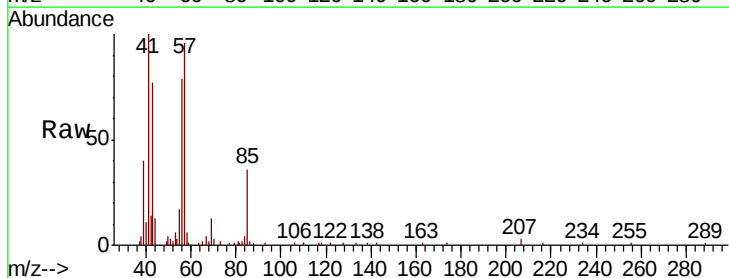
RT: 3.28 min Scan# 268

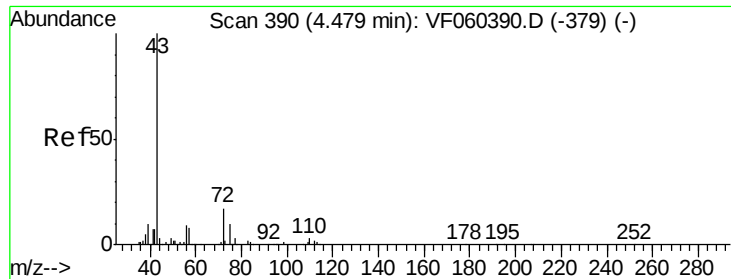
Delta R.T. -0.03 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 37776 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 86       | 2.4   | 5.1   | 7.7#  |





#25

2-Butanone

Concen: 320.012 ug/l

RT: 4.49 min Scan# 391

Delta R.T. 0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

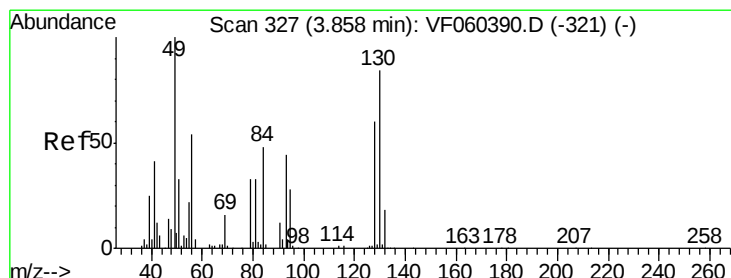
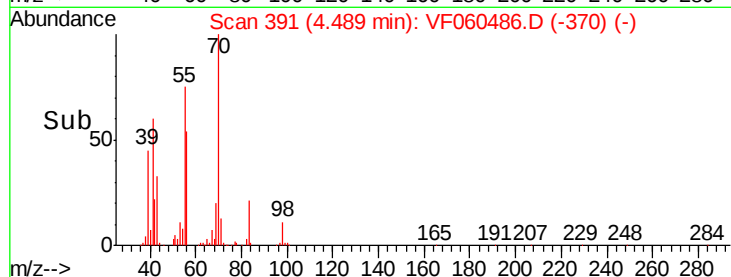
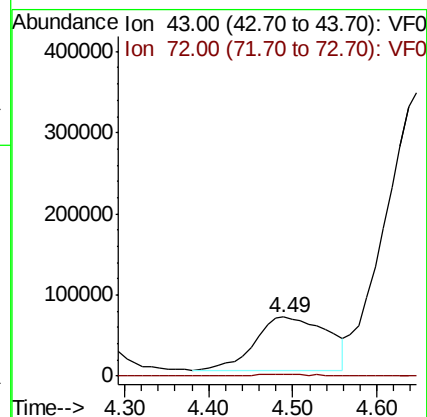
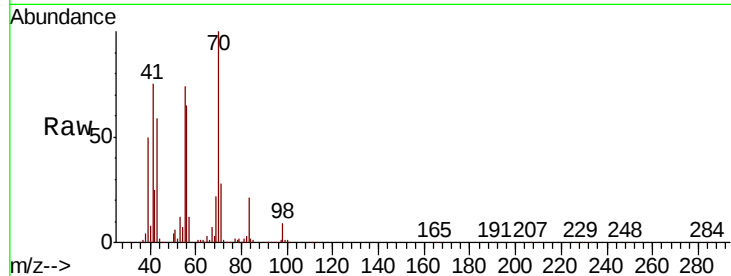
Instrument :  
MSVOA\_F  
ClientSampleId :

Tot Ion: 43 Resp: 400036

Ion Ratio Lower Upper

43 100

72 2.5 14.1 21.1#



#28

Bromochloromethane

Concen: 1.026 ug/l

RT: 3.89 min Scan# 330

Delta R.T. 0.03 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

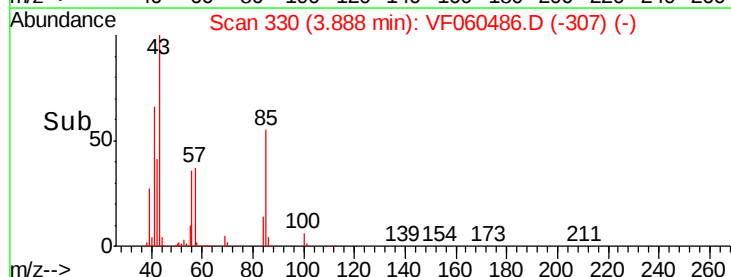
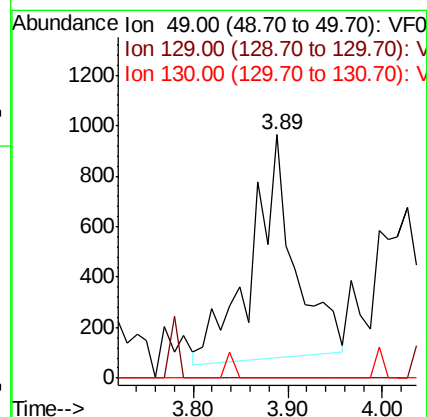
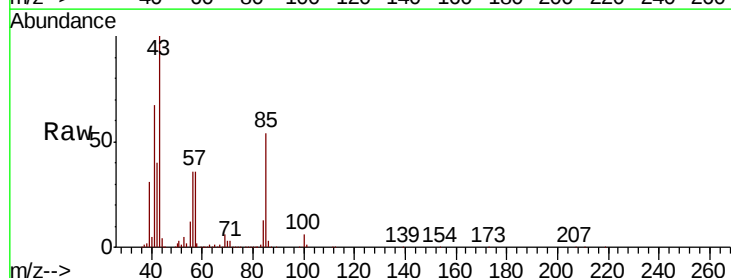
Tgt Ion: 49 Resp: 2784

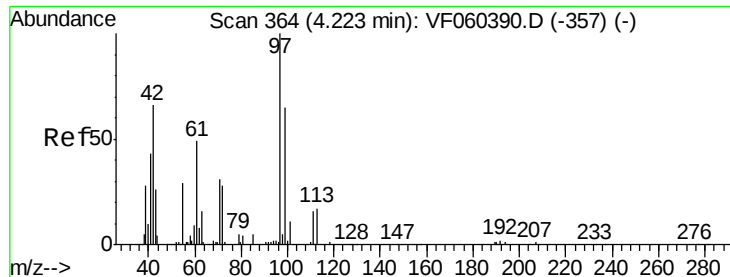
Ion Ratio Lower Upper

49 100

129 0.0 0.0 4.6

130 0.0 67.3 100.9#





#29

Tetrahydrofuran

Concen: 954.892 ug/l

RT: 4.14 min Scan# 356

Delta R.T. -0.08 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

ClientSampleId :

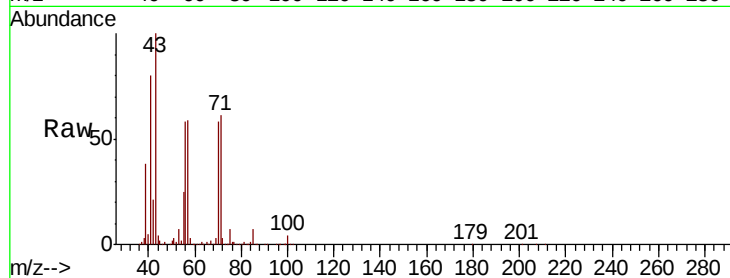
Tot Ion: 42 Resp: 443574

Ion Ratio Lower Upper

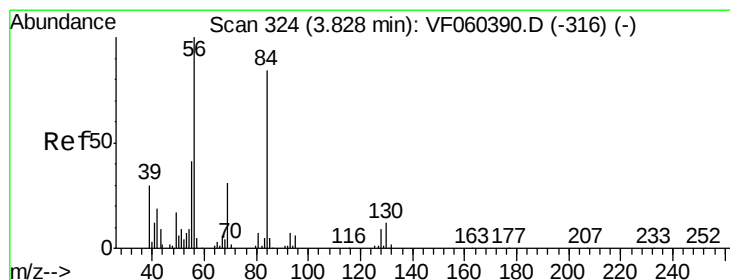
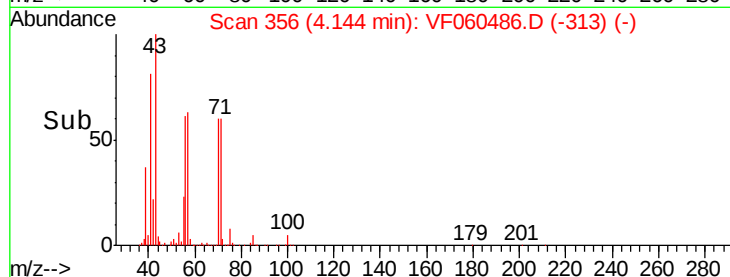
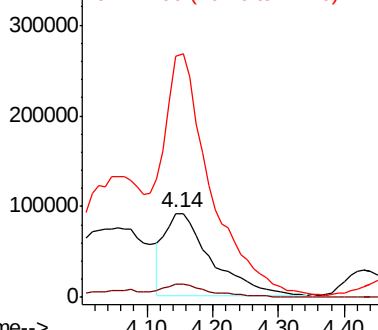
42 100

72 17.1 33.6 50.4#

71 298.5 32.7 49.1#



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



#31

Cyclohexane

Concen: 138.492 ug/l

RT: 3.89 min Scan# 330

Delta R.T. 0.06 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

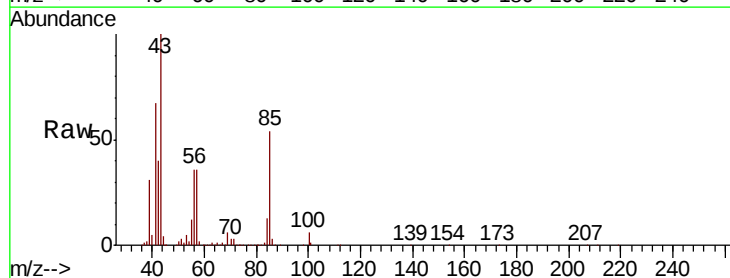
Tgt Ion: 56 Resp: 731992

Ion Ratio Lower Upper

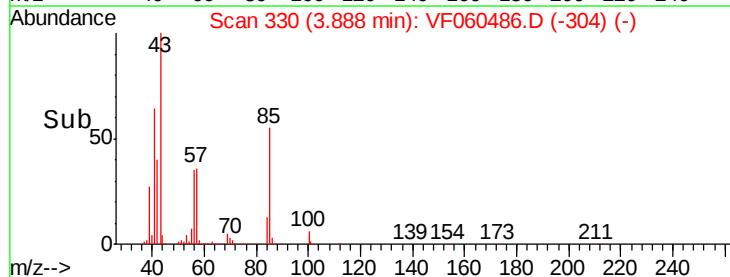
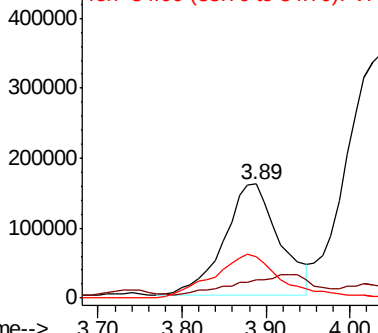
56 100

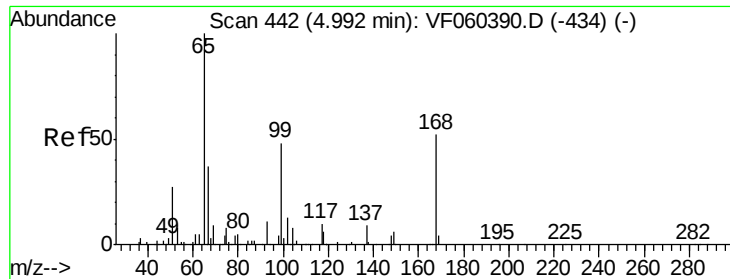
69 16.2 25.5 38.3#

84 36.6 67.4 101.0#



Abundance Ion 56.00 (55.70 to 56.70): VF0  
Ion 69.00 (68.70 to 69.70): VF0  
Ion 84.00 (83.70 to 84.70): VF0

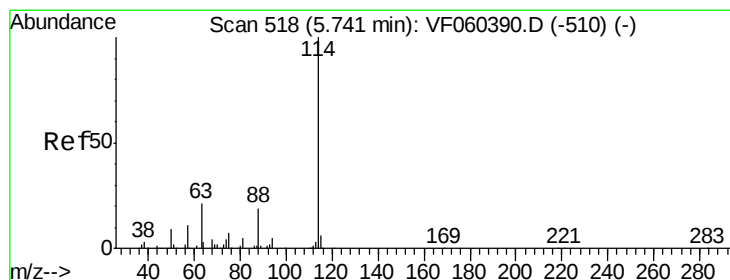
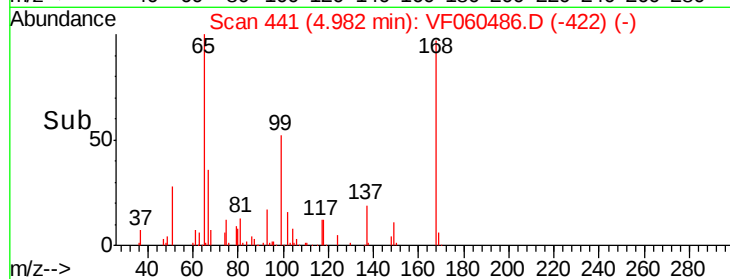
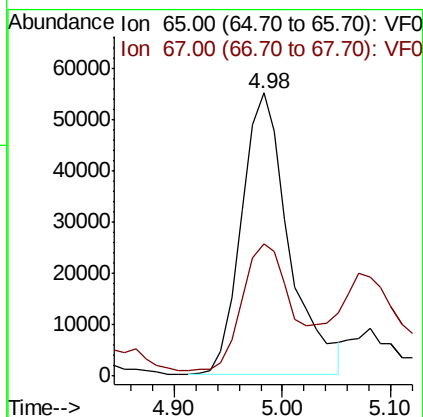
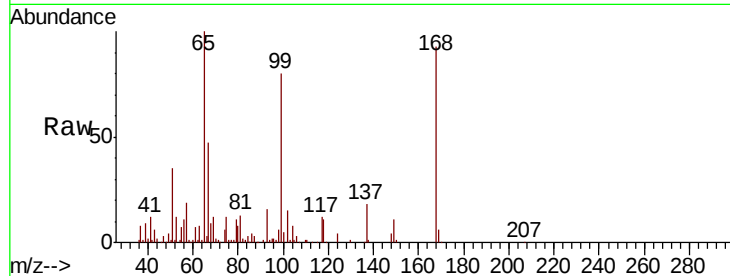




#33  
 1,2-Dichloroethane-d4  
 Concen: 35.064 ug/l  
 RT: 4.98 min Scan# 441  
 Delta R.T. -0.01 min  
 Lab File: VF060486.D  
 Acq: 8 Oct 2018 16:03

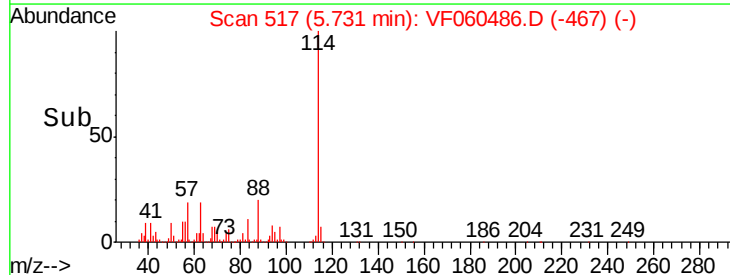
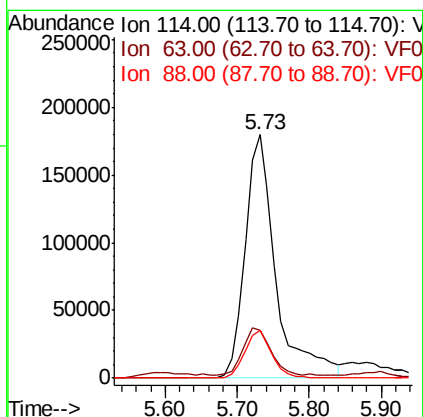
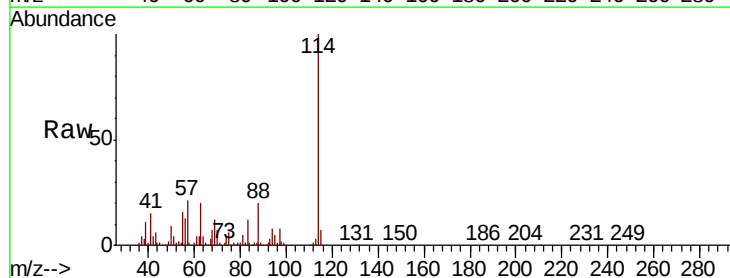
Instrument :  
 MSVOA\_F  
 ClientSampleId :

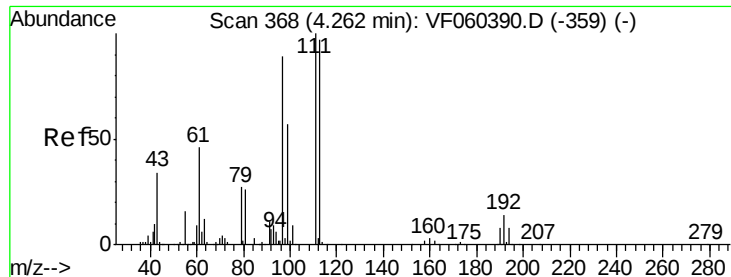
Tot Ion: 65 Resp: 169280  
 Ion Ratio Lower Upper  
 65 100  
 67 47.0 0.0 89.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.73 min Scan# 517  
 Delta R.T. -0.01 min  
 Lab File: VF060486.D  
 Acq: 8 Oct 2018 16:03

Tgt Ion: 114 Resp: 537612  
 Ion Ratio Lower Upper  
 114 100  
 63 19.6 0.0 42.2  
 88 19.8 0.0 38.8

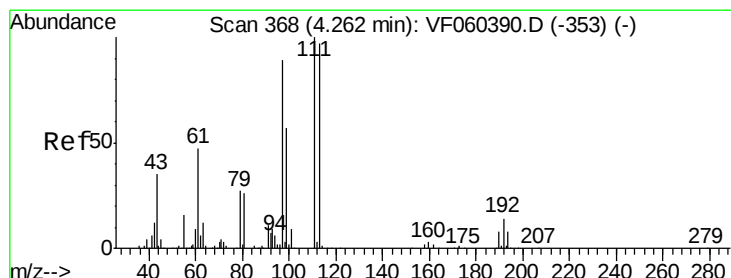
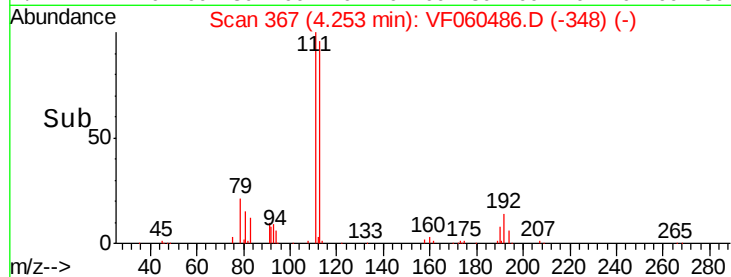
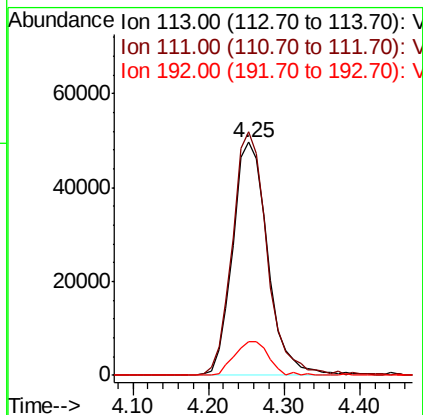
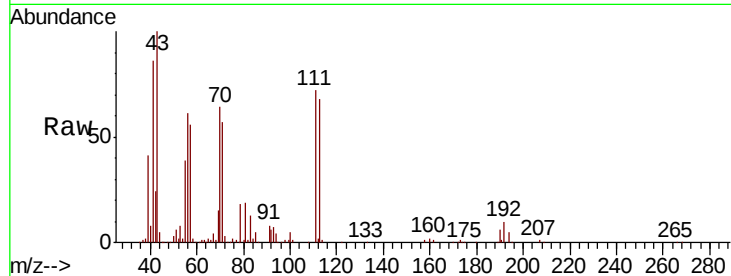




#35  
 Dibromofluoromethane  
 Concen: 31.500 ug/l  
 RT: 4.25 min Scan# 367  
 Delta R.T. -0.01 min  
 Lab File: VF060486.D  
 Acq: 8 Oct 2018 16:03

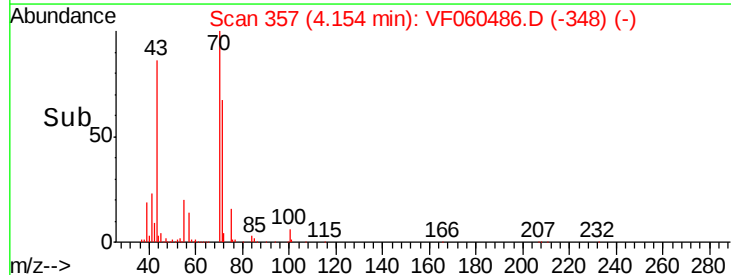
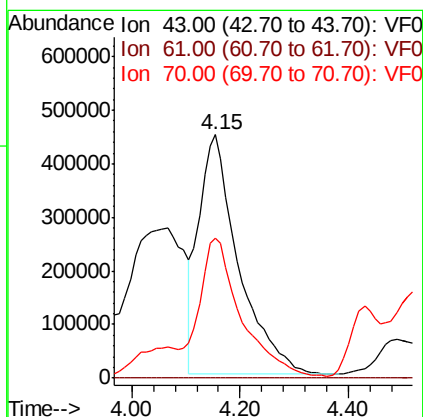
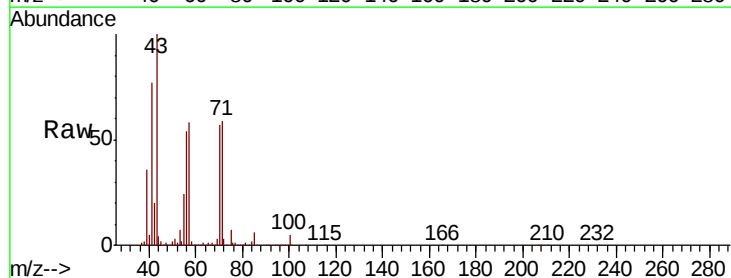
Instrument :  
 MSVOA\_F  
 ClientSampleId :

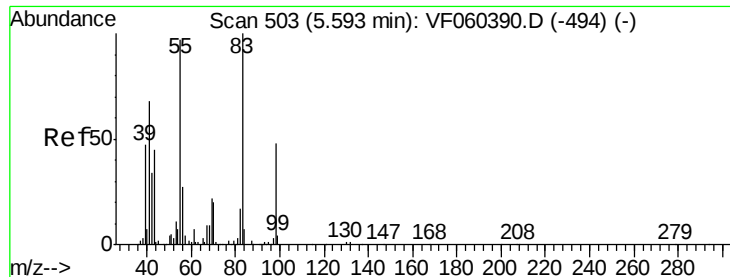
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 104.6 | 82.3  | 123.5 |
| 192     | 14.6  | 11.8  | 17.6  |



#37  
 Ethyl Acetate  
 Concen: 899.408 ug/l  
 RT: 4.15 min Scan# 357  
 Delta R.T. -0.11 min  
 Lab File: VF060486.D  
 Acq: 8 Oct 2018 16:03

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 43      | 100   |       |        |
| 61      | 0.3   | 105.1 | 157.7# |
| 70      | 57.4  | 8.0   | 12.0#  |

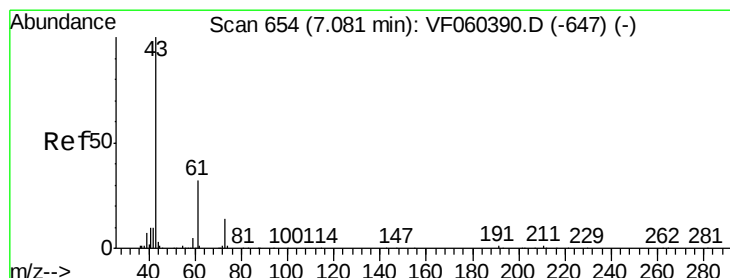
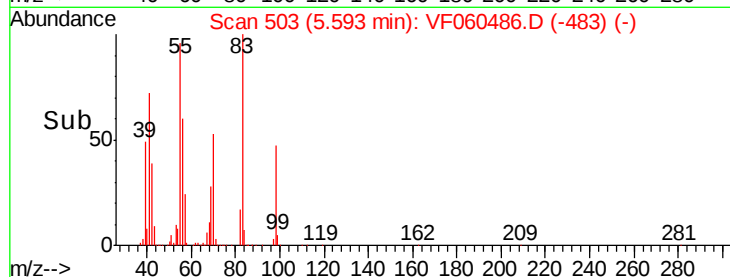
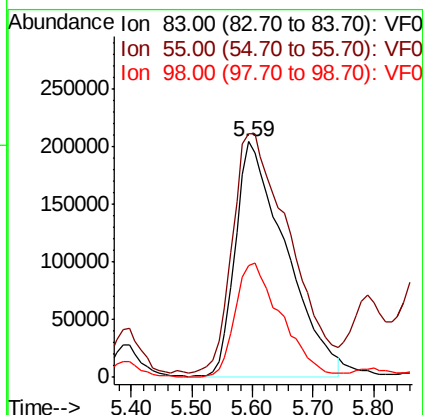
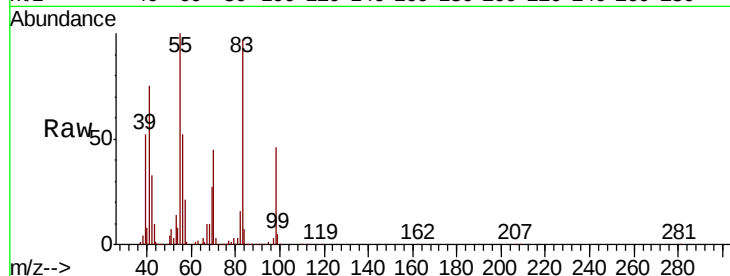




#39  
Methylcyclohexane  
Concen: 181.782 ug/l  
RT: 5.59 min Scan# 503  
Delta R.T. 0.00 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

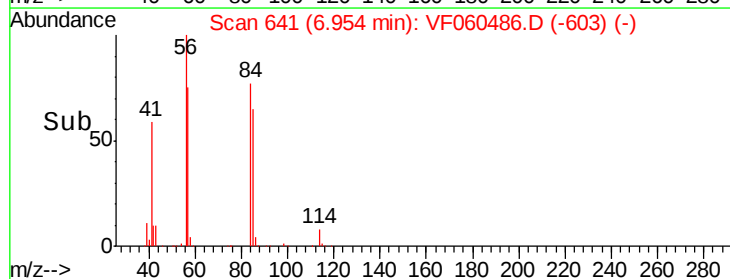
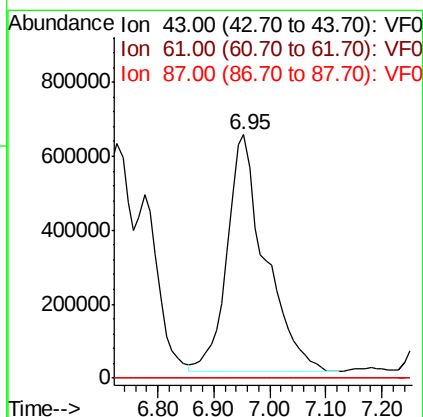
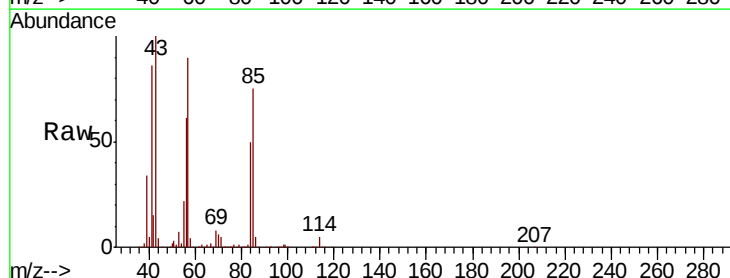
Instrument :  
MSVOA\_F  
ClientSampleId :

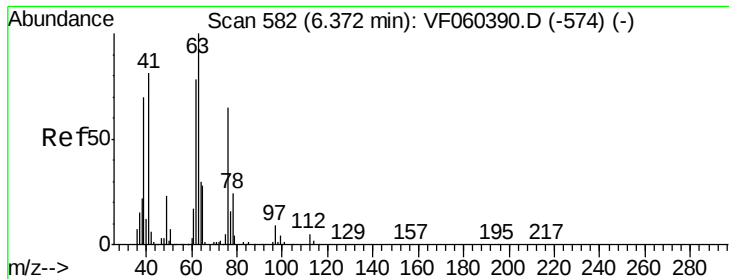
Tot Ion: 83 Resp: 1181231  
Ion Ratio Lower Upper  
83 100  
55 103.5 77.5 116.3  
98 47.6 38.7 58.1



#43  
Isopropyl Acetate  
Concen: 991.604 ug/l  
RT: 6.95 min Scan# 641  
Delta R.T. -0.13 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion: 43 Resp: 3041666  
Ion Ratio Lower Upper  
43 100  
61 0.1 25.4 38.2#  
87 0.2 0.3 0.5#





#45

1,2-Dichloropropane

Concen: 7.906 ug/l

RT: 6.42 min Scan# 587

Delta R.T. 0.05 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

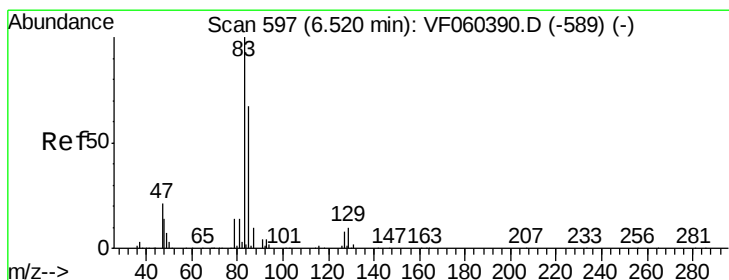
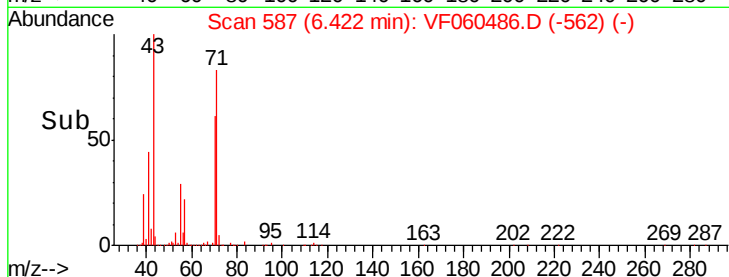
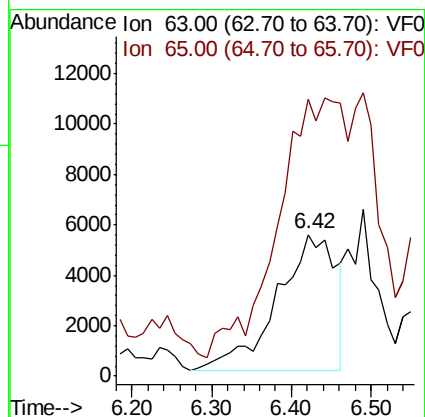
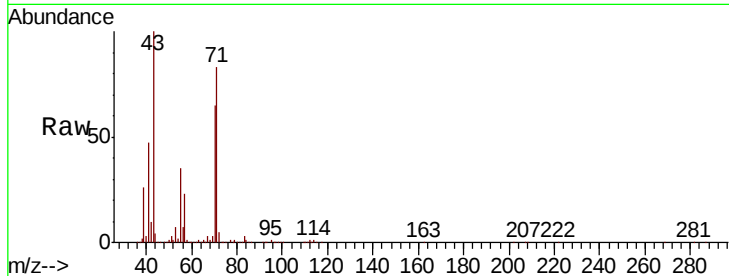
ClientSampled :

Tot Ion: 63 Resp: 27706

Ion Ratio Lower Upper

63 100

65 195.5 22.7 34.1#



#47

Bromodichloromethane

Concen: 20.218 ug/l

RT: 6.45 min Scan# 590

Delta R.T. -0.07 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

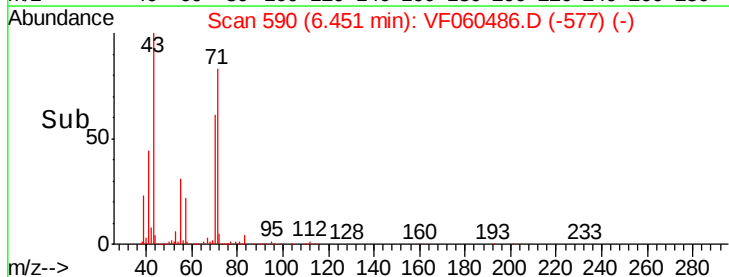
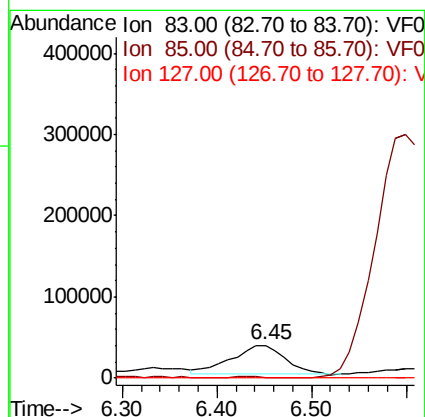
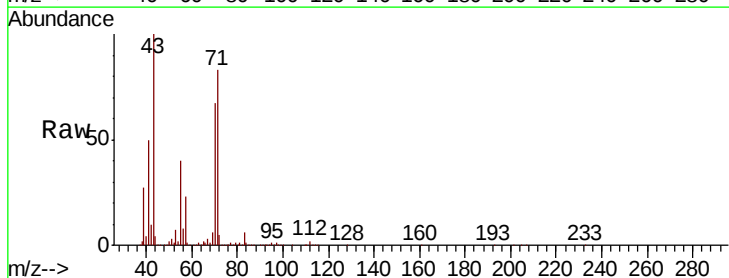
Tgt Ion: 83 Resp: 141075

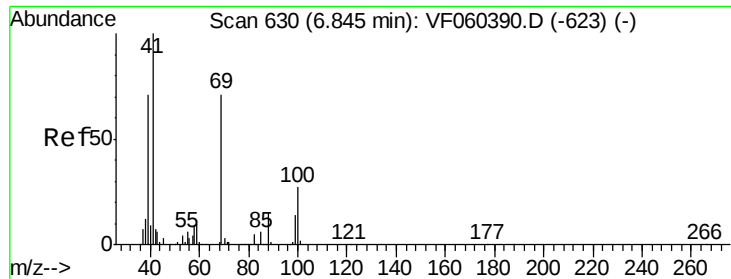
Ion Ratio Lower Upper

83 100

85 2.6 53.2 79.8#

127 0.0 6.6 9.8#

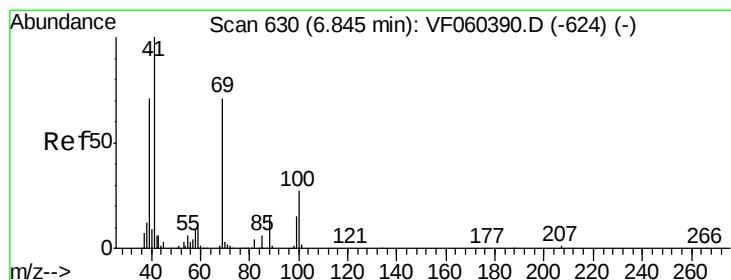
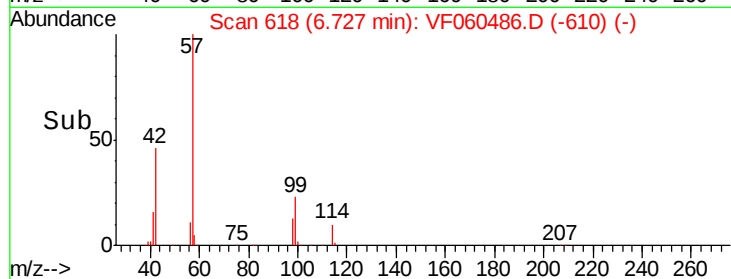
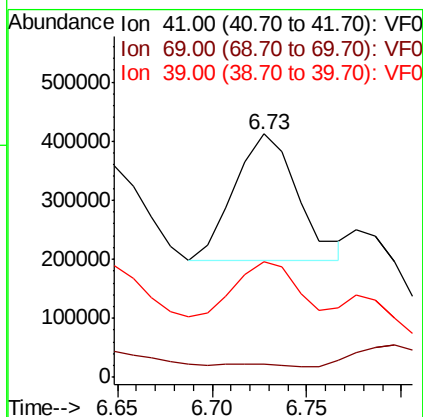
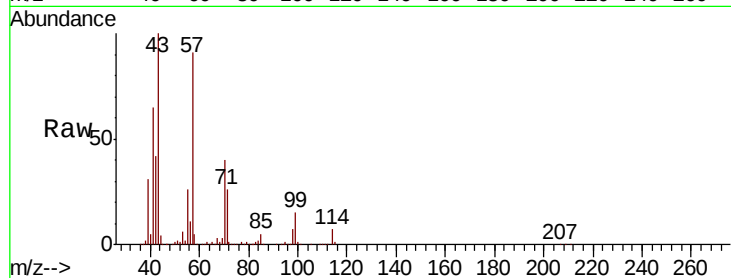




#48  
Methvl methacrylate  
Concen: 224.727 ug/l  
RT: 6.73 min Scan# 618  
Delta R.T. -0.12 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

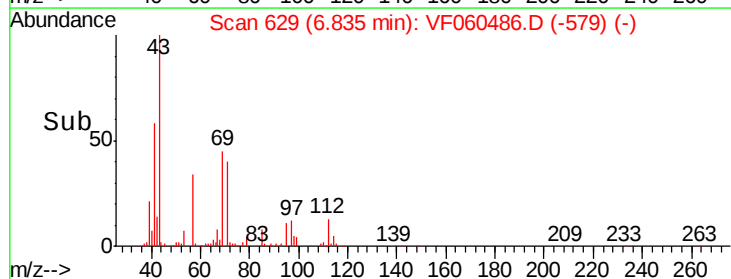
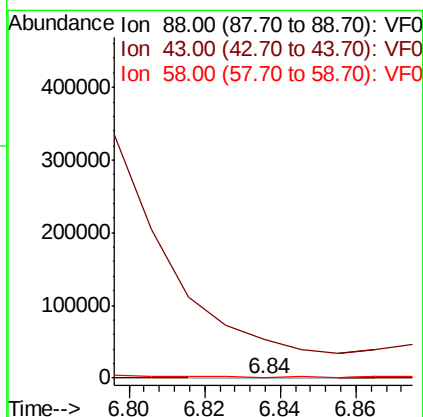
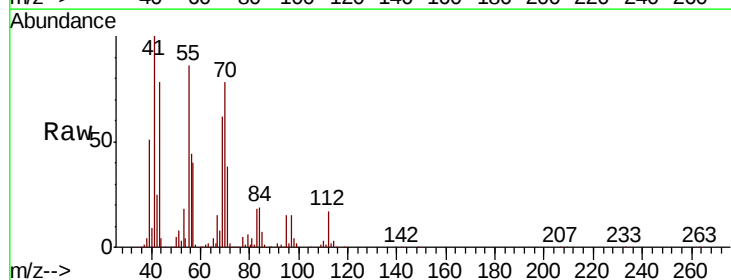
Instrument :  
MSVOA\_F  
ClientSampled :

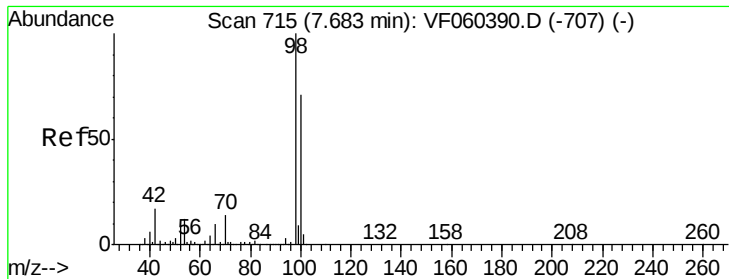
Tot Ion: 41 Resp: 494825  
Ion Ratio Lower Upper  
41 100  
69 5.2 56.3 84.5#  
39 47.3 56.9 85.3#



#49  
1,4-Dioxane  
Concen: 4.056 ug/l  
RT: 6.84 min Scan# 629  
Delta R.T. -0.01 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion: 88 Resp: 77  
Ion Ratio Lower Upper  
88 100  
43 40983.2 38.3 57.5#  
58 789.3 47.4 71.2#





#50

Toluene-d8

Concen: 28.537 ug/l

RT: 7.67 min Scan# 714

Delta R.T. -0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

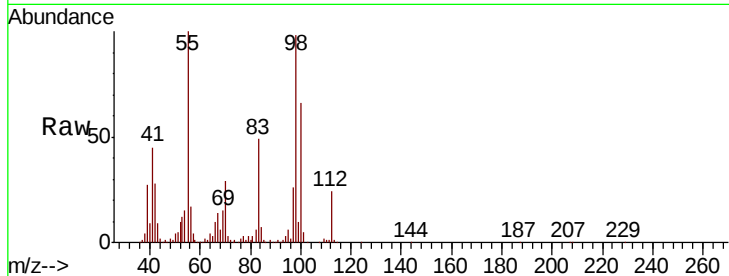
Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion: 98 Resp: 354954

Ion Ratio Lower Upper

98 100

100 66.6 56.5 84.7



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0

7.67

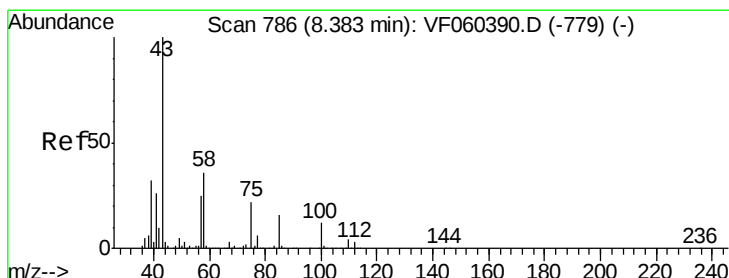
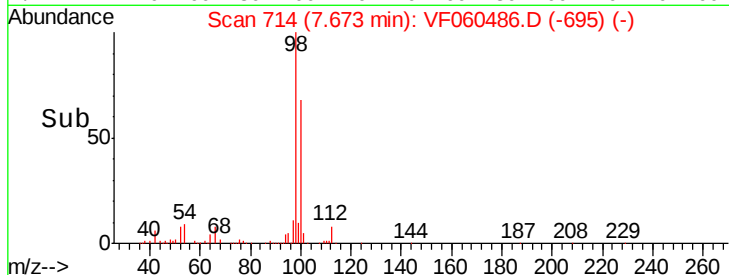
150000

100000

50000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 322.576 ug/l

RT: 8.40 min Scan# 788

Delta R.T. 0.02 min

Lab File: VF060486.D

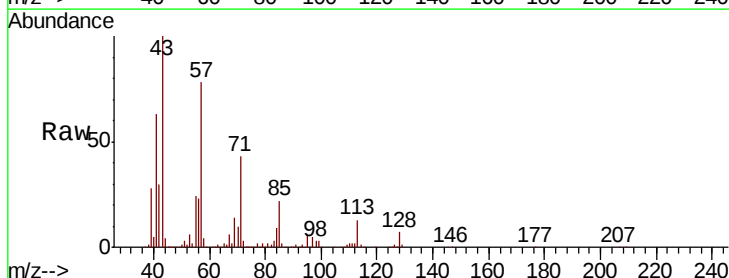
Acq: 8 Oct 2018 16:03

Tgt Ion: 43 Resp: 704353

Ion Ratio Lower Upper

43 100

58 3.8 28.5 42.7#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

8.40

300000

250000

200000

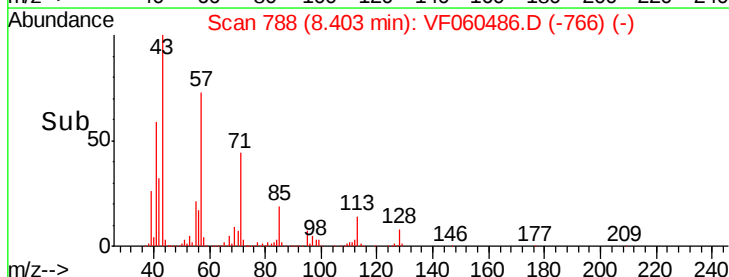
150000

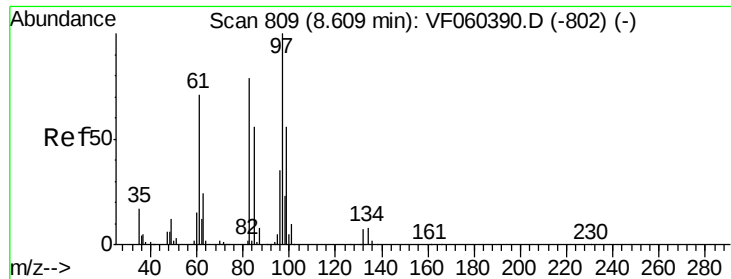
100000

50000

0

Time-->





#55

1,1,2-Trichloroethane

Concen: 3.629 ug/l

RT: 8.68 min Scan# 816

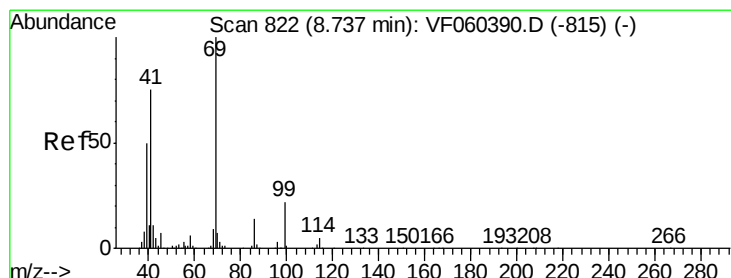
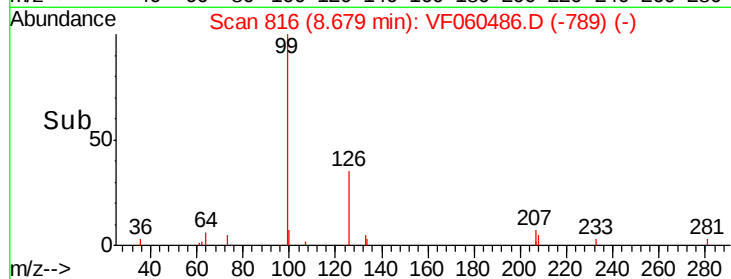
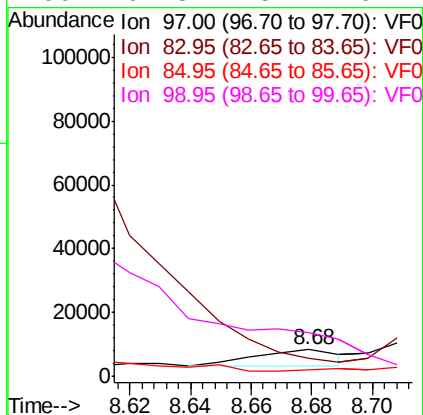
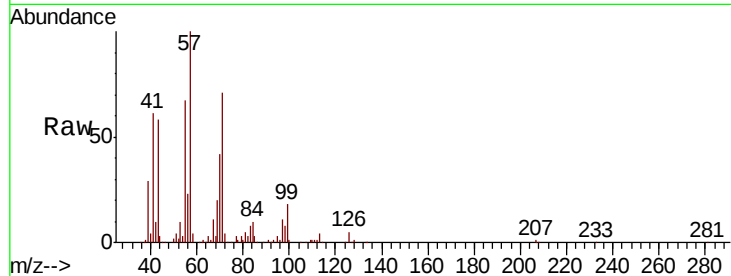
Delta R.T. 0.07 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :  
MSVOA\_F  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 10280 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 69.7  | 63.4  | 95.0  |
| 85       | 25.5  | 44.5  | 66.7# |
| 99       | 162.8 | 45.1  | 67.7# |



#56

Ethyl methacrylate

Concen: 243.264 ug/l

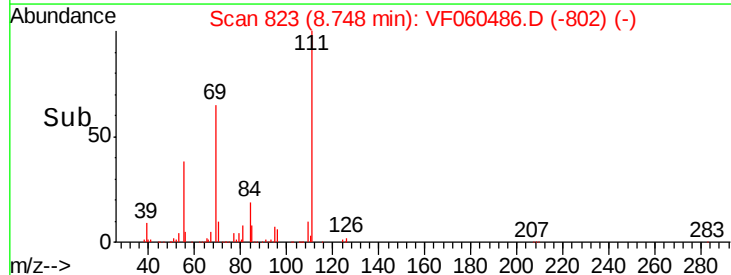
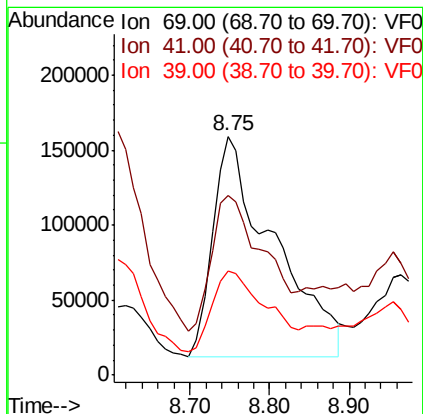
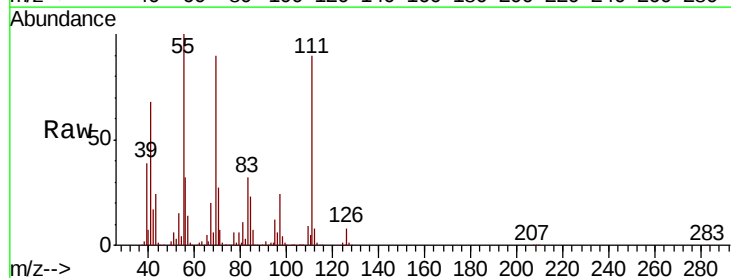
RT: 8.75 min Scan# 823

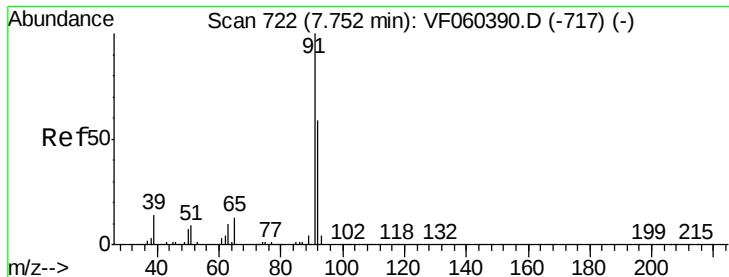
Delta R.T. 0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 69    | Resp: | 783105 |
| Ion      | Ratio | Lower | Upper  |
| 69       | 100   |       |        |
| 41       | 75.1  | 60.2  | 90.4   |
| 39       | 43.8  | 40.2  | 60.2   |





#58

2-Chloroethyl Vinyl ether

Concen: 18.977 ug/l

RT: 7.76 min Scan# 723

Delta R.T. 0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

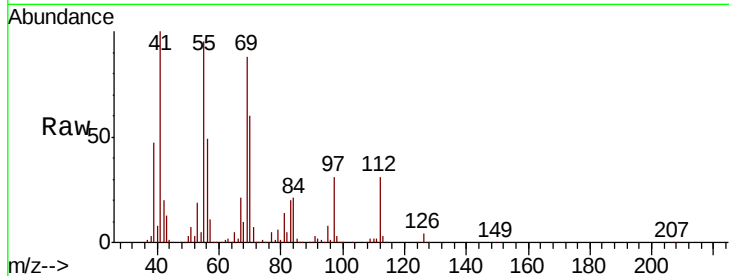
ClientSampleId :

Tot Ion: 63 Resp: 6240

Ion Ratio Lower Upper

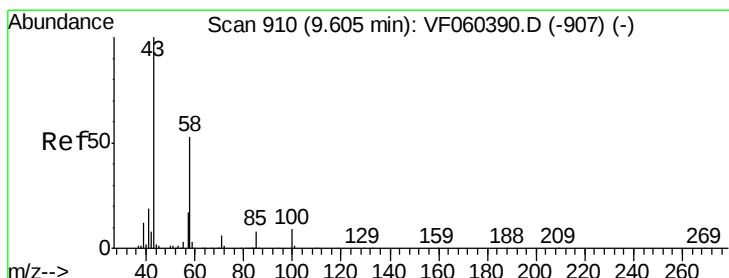
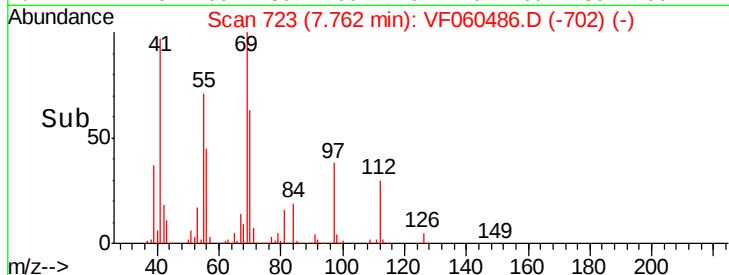
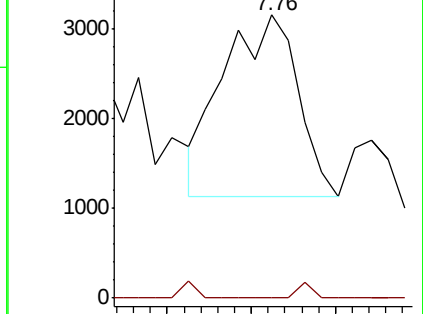
63 100

106 0.0 0.0 0.0



Abundance Ion 63.00 (62.70 to 63.70): VF0

Ion 106.00 (105.70 to 106.70): VF0



#59

2-Hexanone

Concen: 143.944 ug/l

RT: 9.63 min Scan# 912

Delta R.T. 0.02 min

Lab File: VF060486.D

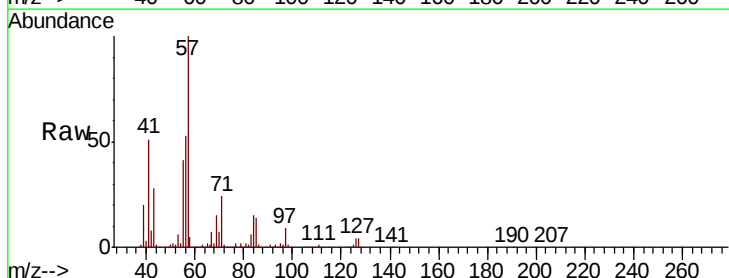
Acq: 8 Oct 2018 16:03

Tgt Ion: 43 Resp: 230538

Ion Ratio Lower Upper

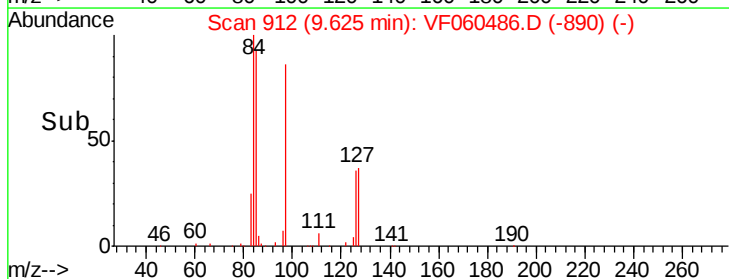
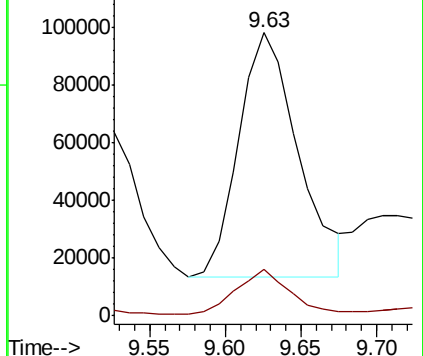
43 100

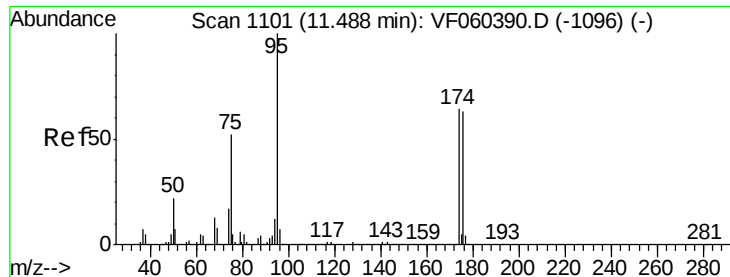
58 16.4 25.6 76.6#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#62

4-Bromofluorobenzene

Concen: 43.589 ug/l

RT: 11.49 min Scan# 1101

Delta R.T. 0.00 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

ClientSampleId :

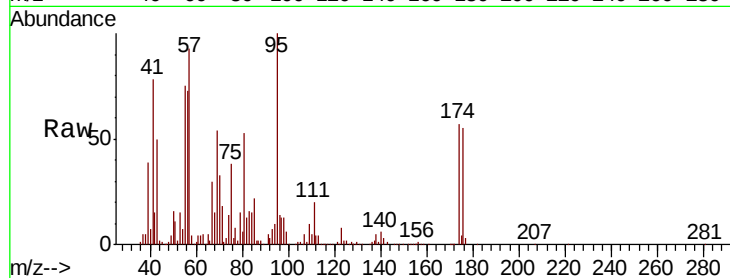
Tot Ion: 95 Resp: 247556

Ion Ratio Lower Upper

95 100

174 56.6 0.0 129.0

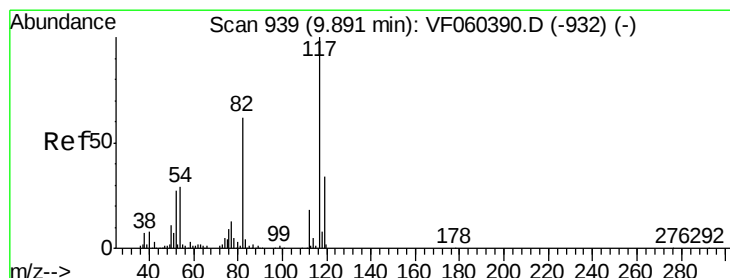
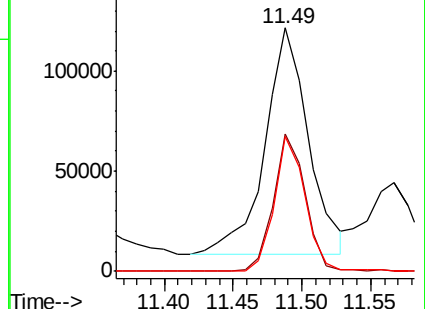
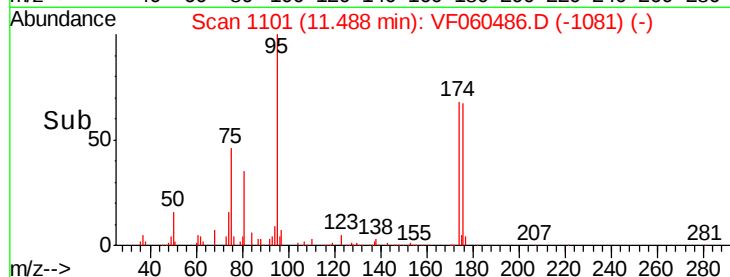
176 55.5 0.0 125.6



Abundance Ion 95.00 (94.70 to 95.70): VF060486.D (-1081) (-)

Ion 174.00 (173.70 to 174.70): VF060486.D (-1081) (-)

Ion 176.00 (175.70 to 176.70): VF060486.D (-1081) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.89 min Scan# 939

Delta R.T. 0.00 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

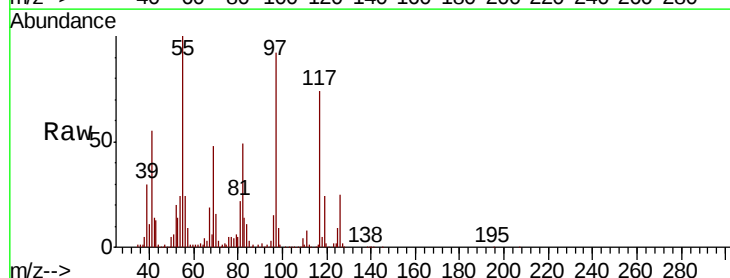
Tgt Ion: 117 Resp: 359648

Ion Ratio Lower Upper

117 100

82 65.7 49.5 74.3

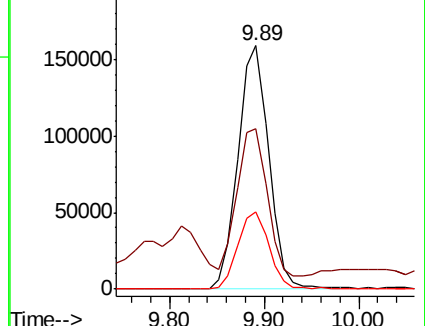
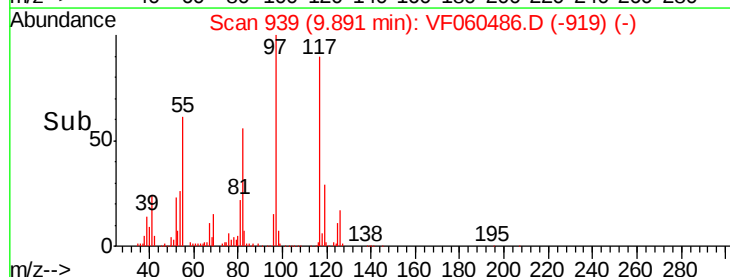
119 31.8 27.0 40.6

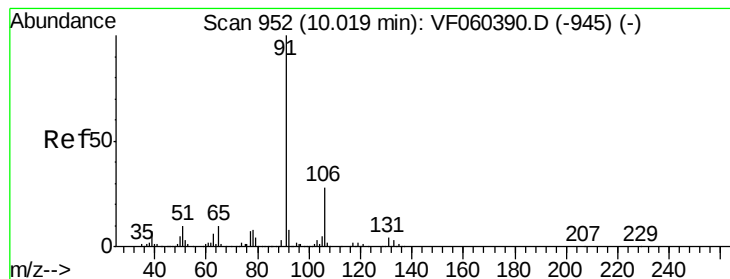


Abundance Ion 117.00 (116.70 to 117.70): VF060486.D (-919) (-)

Ion 82.00 (81.70 to 82.70): VF060486.D (-919) (-)

Ion 119.00 (118.70 to 119.70): VF060486.D (-919) (-)





#67

Ethyl Benzene

Concen: 50.335 ug/l

RT: 10.01 min Scan# 951

Delta R.T. -0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

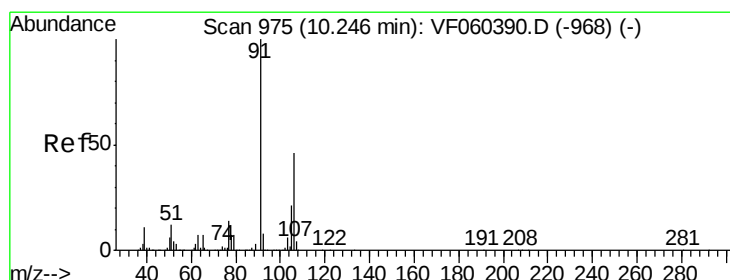
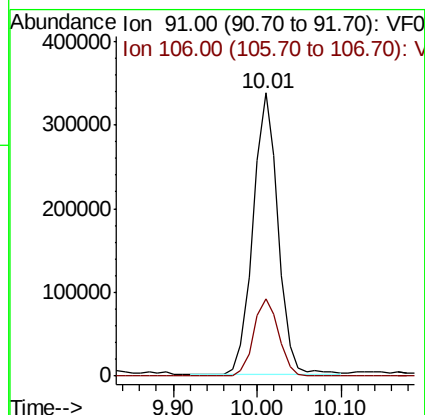
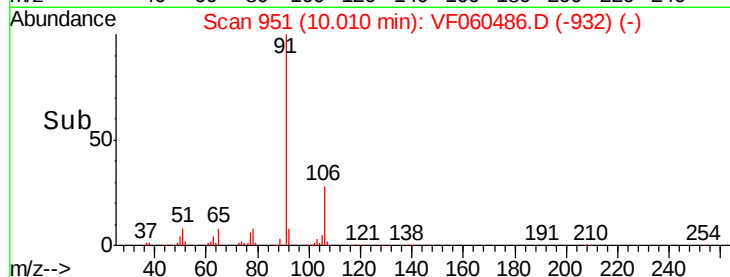
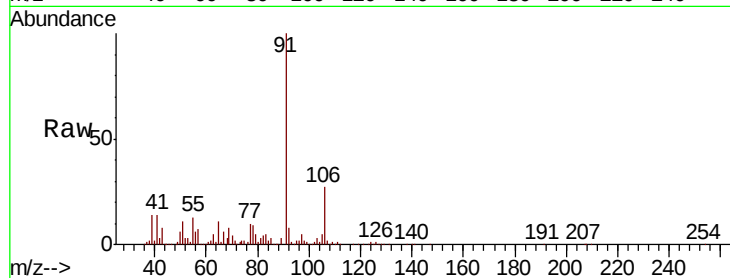
ClientSampled :

Tot Ion: 91 Resp: 707065

Ion Ratio Lower Upper

91 100

106 27.4 22.5 33.7



#68

m/p-Xylenes

Concen: 17.231 ug/l

RT: 10.24 min Scan# 974

Delta R.T. -0.01 min

Lab File: VF060486.D

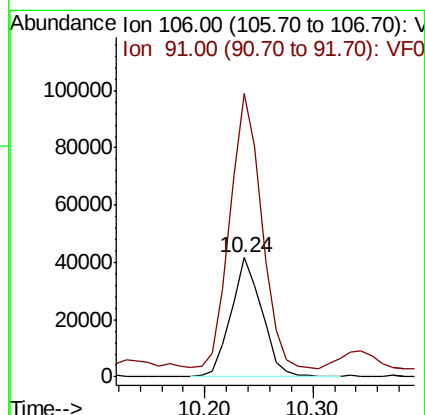
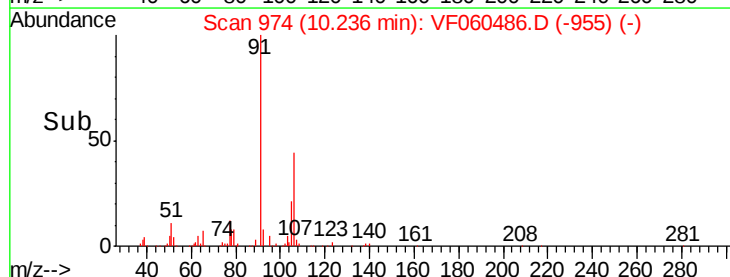
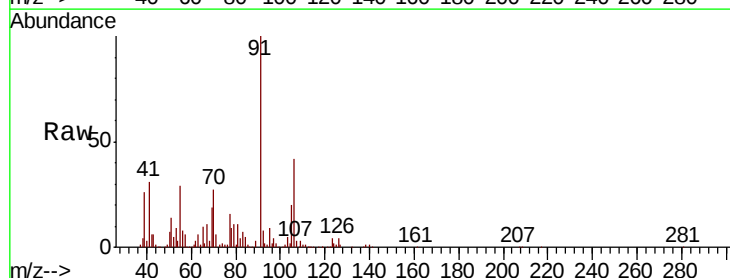
Acq: 8 Oct 2018 16:03

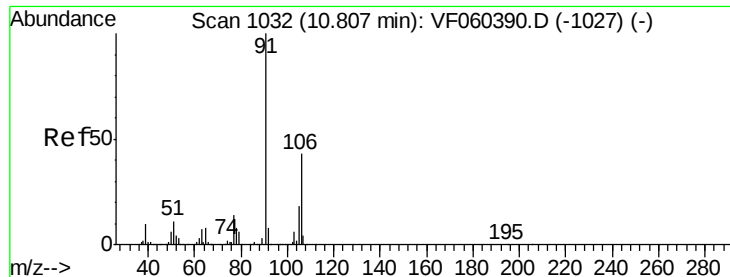
Tgt Ion: 106 Resp: 83207

Ion Ratio Lower Upper

106 100

91 238.0 175.0 262.6

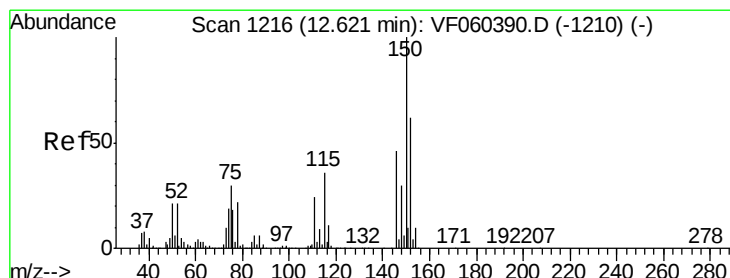
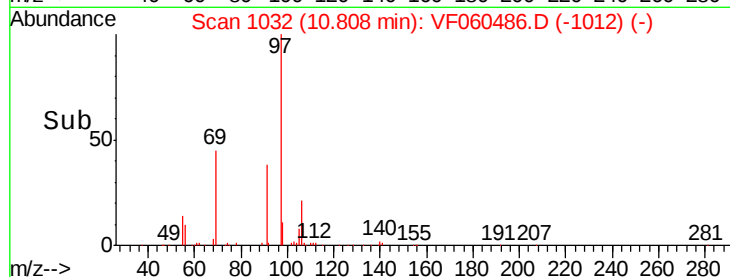
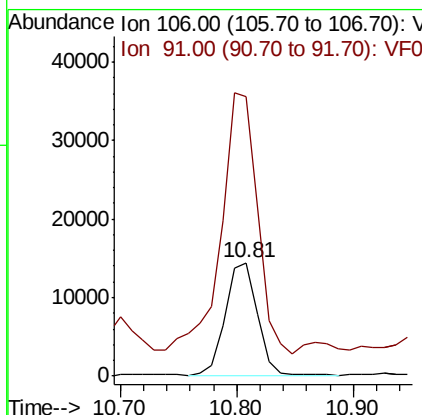
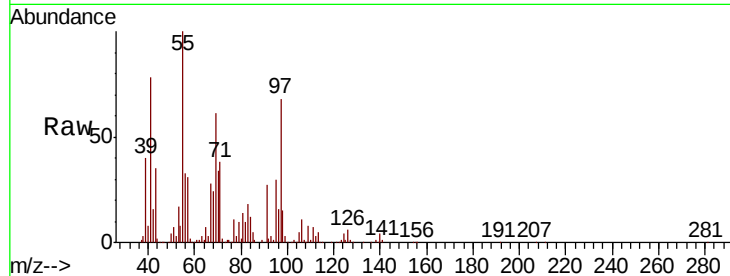




#69  
o-Xylene  
Concen: 5.201 ug/l  
RT: 10.81 min Scan# 1032  
Delta R.T. 0.00 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

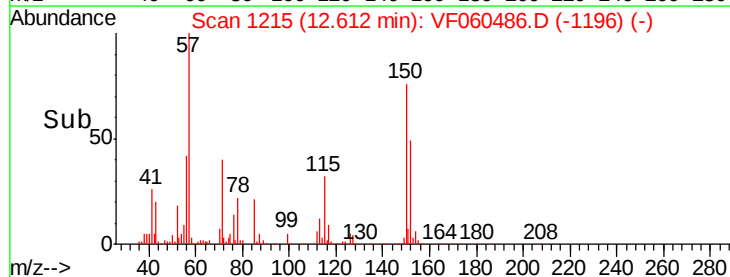
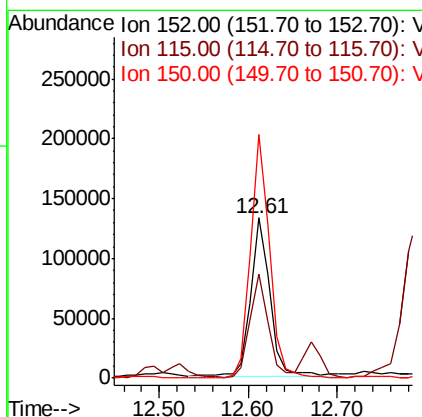
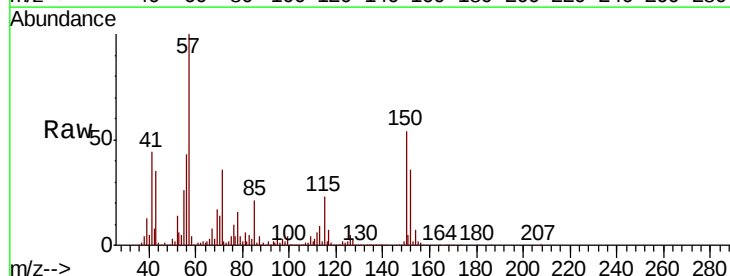
Instrument :  
MSVOA\_F  
ClientSampled :

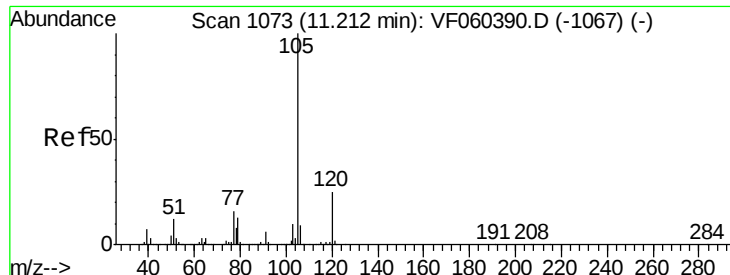
Tot Ion:106 Resp: 27376  
Ion Ratio Lower Upper  
106 100  
91 246.2 115.1 345.2



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.61 min Scan# 1215  
Delta R.T. -0.01 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion:152 Resp: 195989  
Ion Ratio Lower Upper  
152 100  
115 65.4 28.6 85.8  
150 152.2 0.0 324.6





#73

Isopropylbenzene

Concen: 39.124 ug/l

RT: 11.20 min Scan# 1072

Delta R.T. -0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

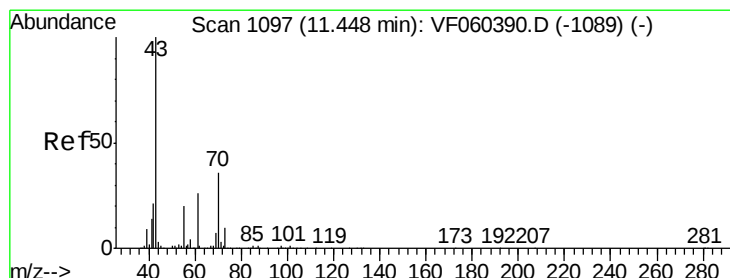
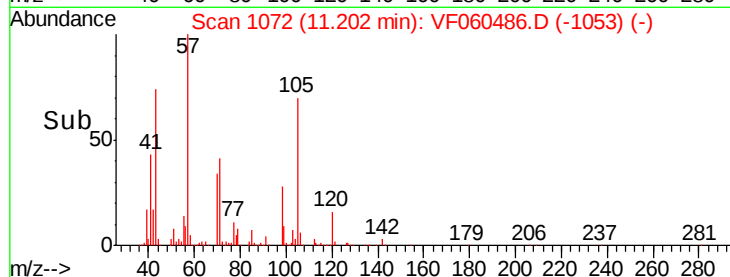
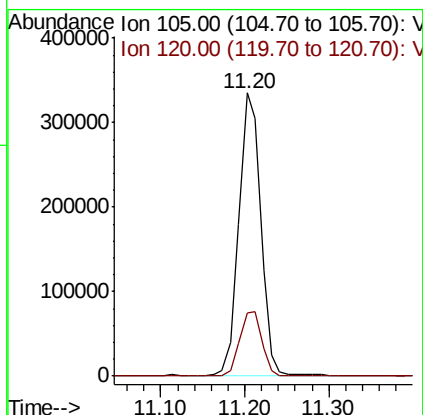
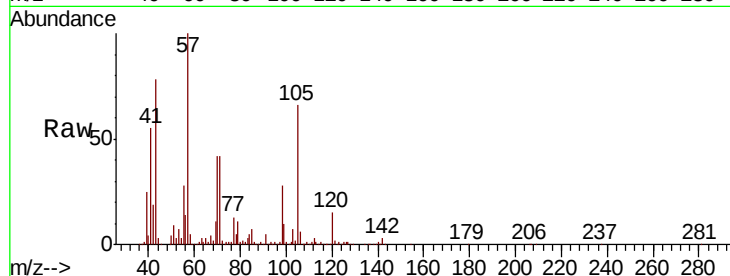
ClientSampleId :

Tot Ion:105 Resp: 603745

Ion Ratio Lower Upper

105 100

120 22.4 12.3 36.9



#74

N-ethyl acetate

Concen: 71.391 ug/l

RT: 11.47 min Scan# 1099

Delta R.T. 0.02 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Tgt Ion: 43 Resp: 252842

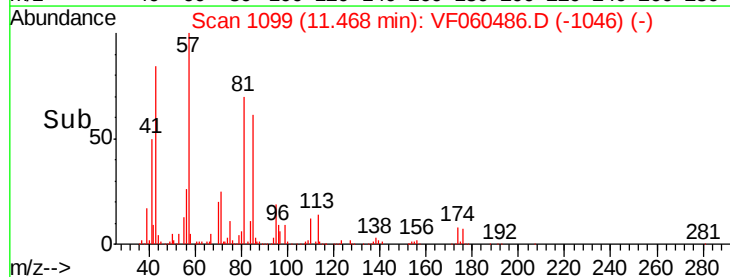
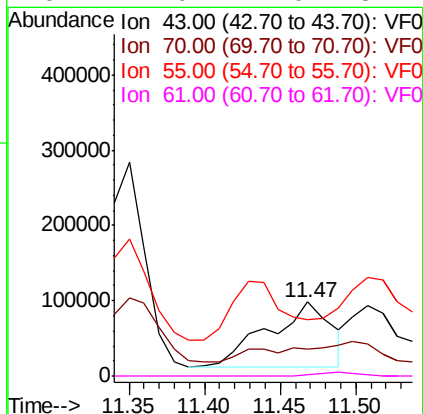
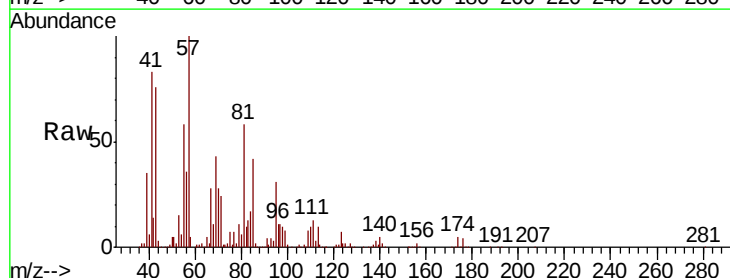
Ion Ratio Lower Upper

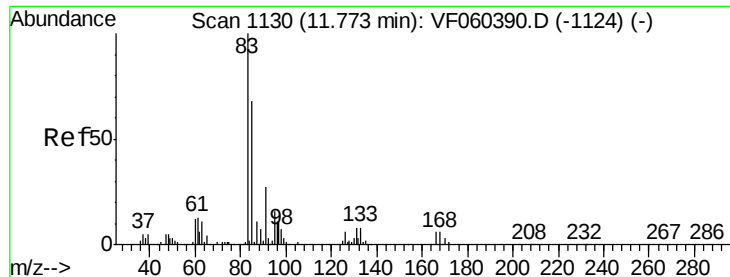
43 100

70 36.7 29.1 43.7

55 76.9 16.3 24.5#

61 1.0 21.0 31.4#





#75

1,1,2,2-Tetrachloroethane

Concen: 12.425 ug/l

RT: 11.74 min Scan# 1127

Delta R.T. -0.03 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

ClientSampled :

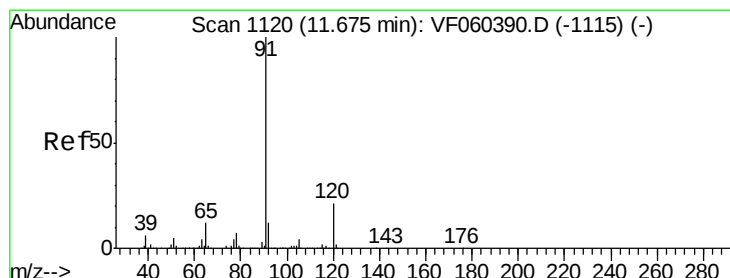
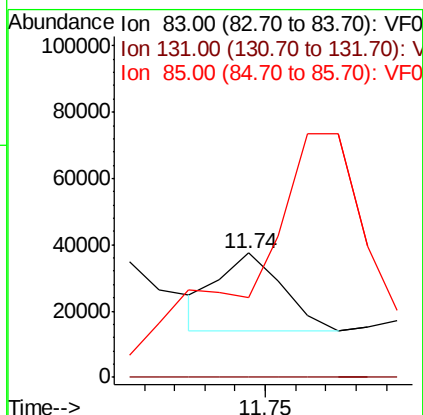
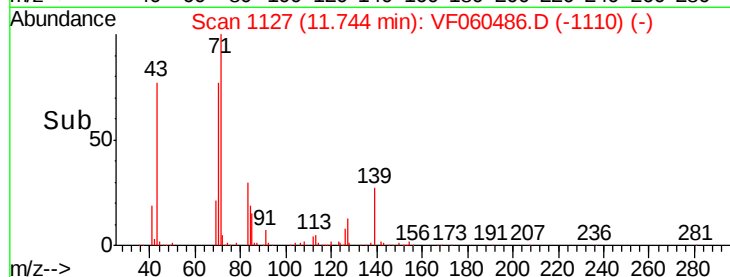
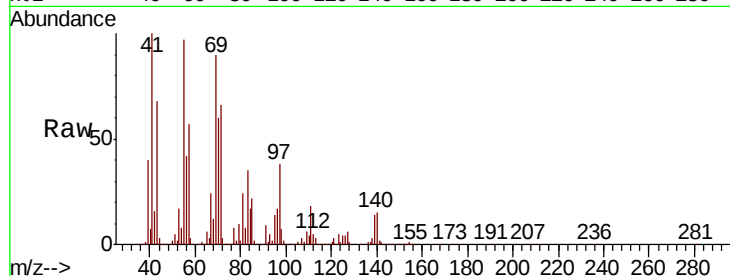
Tot Ion: 83 Resp: 34956

Ion Ratio Lower Upper

83 100

131 0.0 4.0 12.0#

85 64.3 34.0 102.0



#78

n-propylbenzene

Concen: 132.813 ug/l

RT: 11.67 min Scan# 1119

Delta R.T. -0.01 min

Lab File: VF060486.D

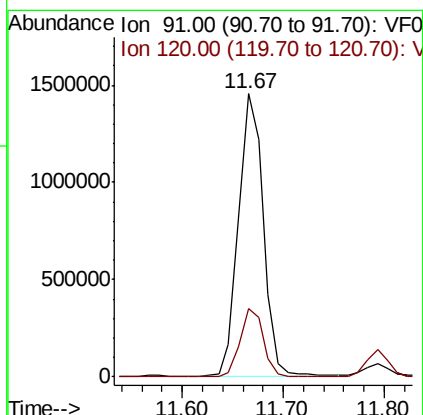
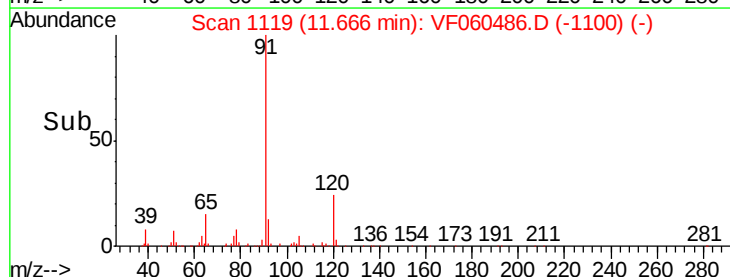
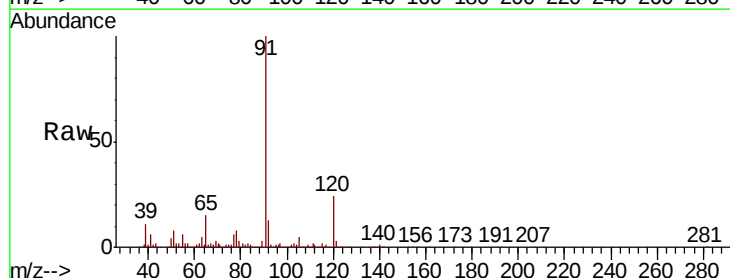
Acq: 8 Oct 2018 16:03

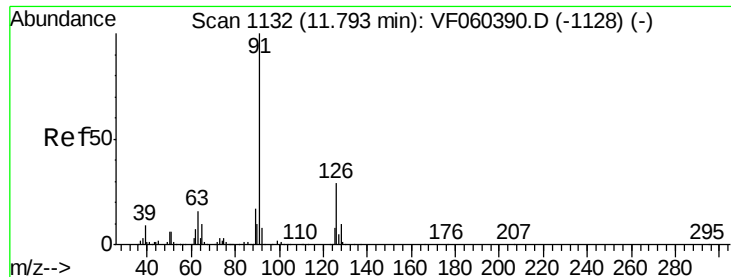
Tgt Ion: 91 Resp: 2484629

Ion Ratio Lower Upper

91 100

120 24.1 10.5 31.6





#79

2-Chlorotoluene

Concen: 9.547 ug/l

RT: 11.79 min Scan# 1132

Delta R.T. 0.00 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

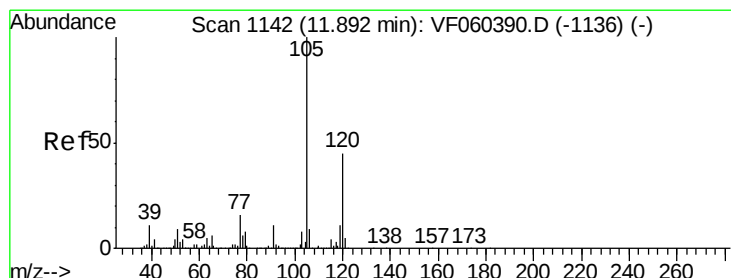
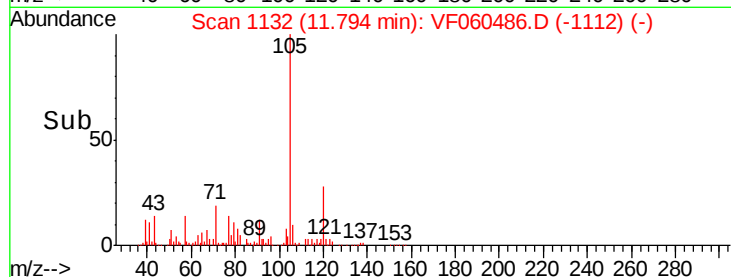
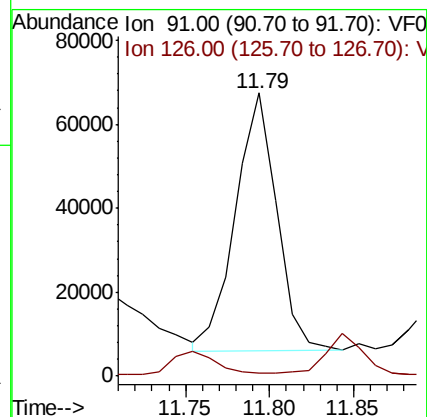
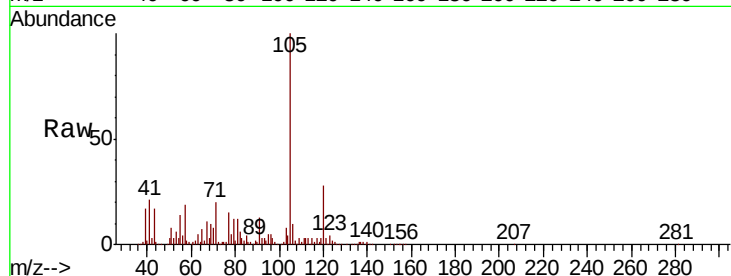
ClientSampleId :

Tot Ion: 91 Resp: 104478

Ion Ratio Lower Upper

91 100

126 1.3 14.4 43.4#



#80

1,3,5-Trimethylbenzene

Concen: 7.450 ug/l

RT: 11.89 min Scan# 1142

Delta R.T. 0.00 min

Lab File: VF060486.D

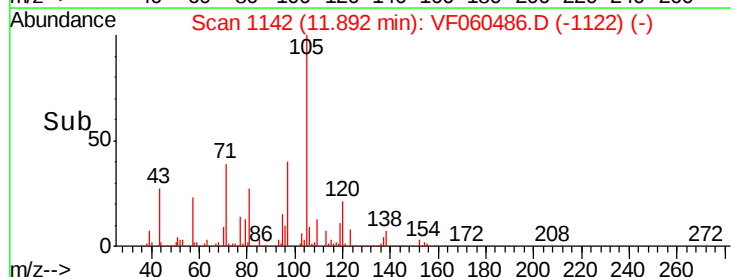
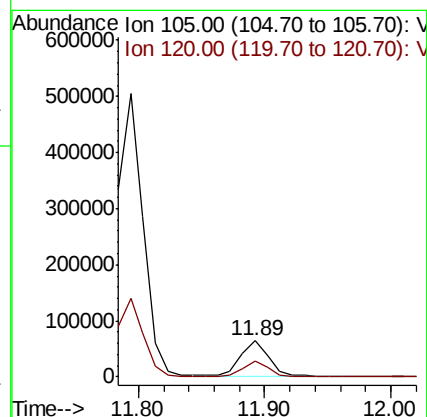
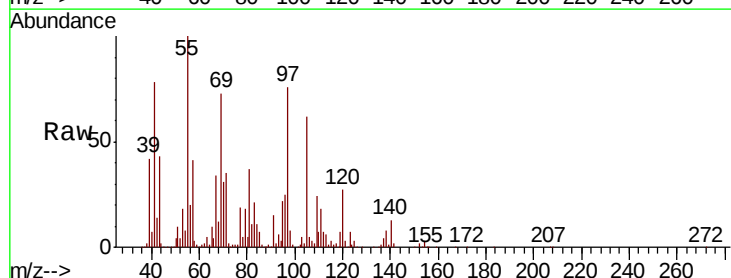
Acq: 8 Oct 2018 16:03

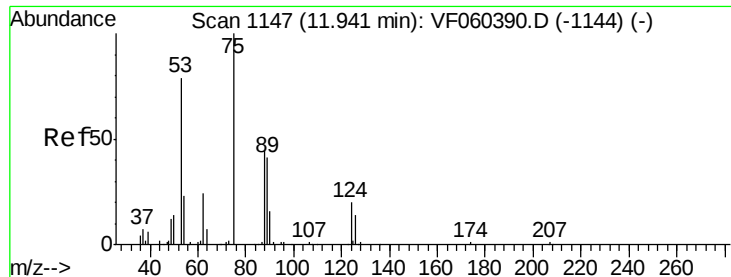
Tgt Ion: 105 Resp: 97682

Ion Ratio Lower Upper

105 100

120 43.6 22.3 66.9

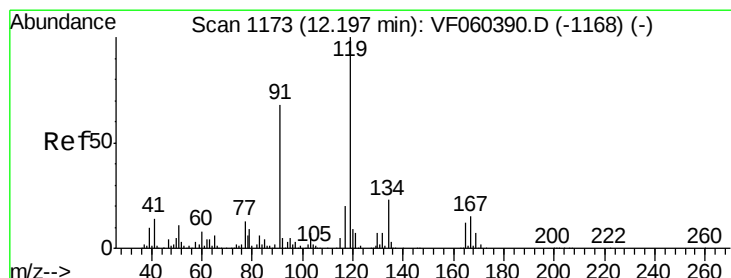
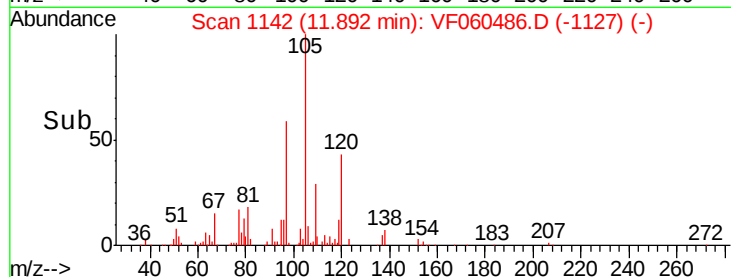
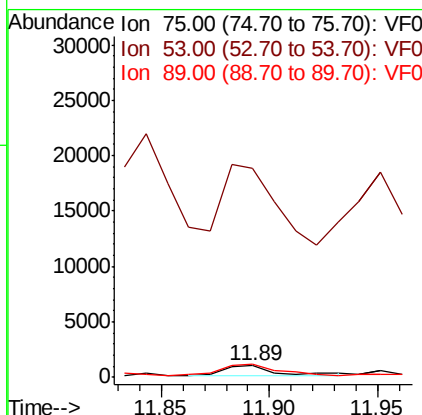
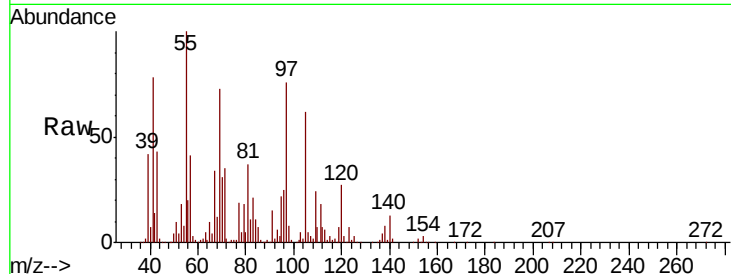




#81  
trans-1,4-Dichloro-2-butene  
Concen: 1.697 ug/l  
RT: 11.89 min Scan# 1142  
Delta R.T. -0.05 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

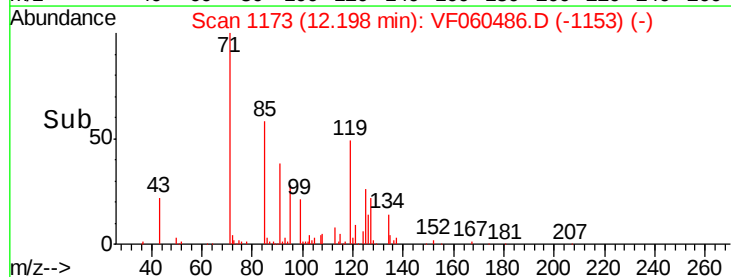
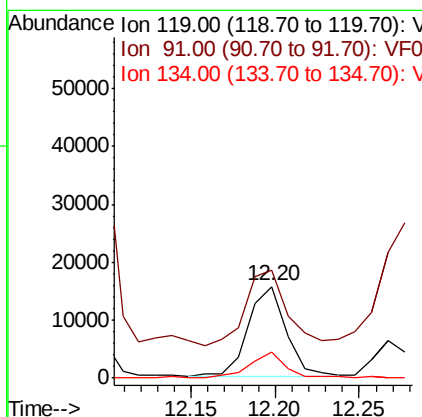
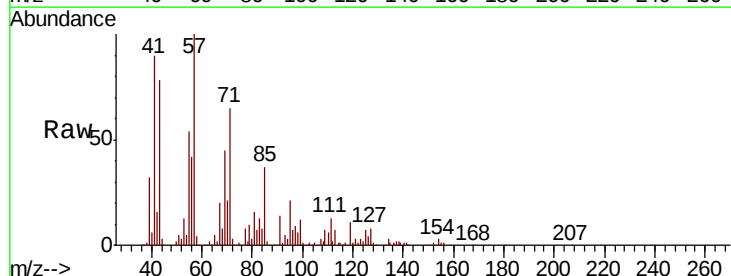
Instrument :  
MSVOA\_F  
ClientSampleId :

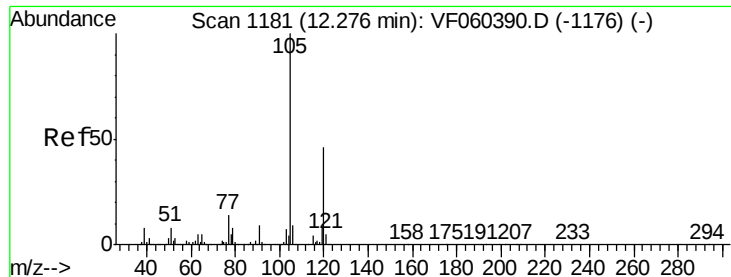
Tot Ion: 75 Resp: 1558  
Ion Ratio Lower Upper  
75 100  
53 1831.0 67.8 101.8#  
89 110.9 36.7 55.1#



#83  
tert-Butylbenzene  
Concen: 1.866 ug/l  
RT: 12.20 min Scan# 1173  
Delta R.T. 0.00 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion: 119 Resp: 24129  
Ion Ratio Lower Upper  
119 100  
91 118.3 34.0 102.0#  
134 27.9 11.7 35.0





#84

1,2,4-Trimethylbenzene

Concen: 6.582 ug/l

RT: 12.27 min Scan# 1180

Delta R.T. -0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

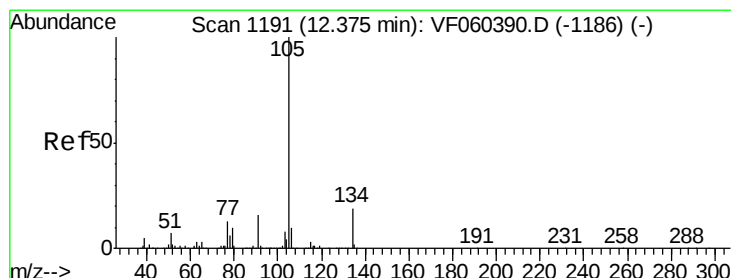
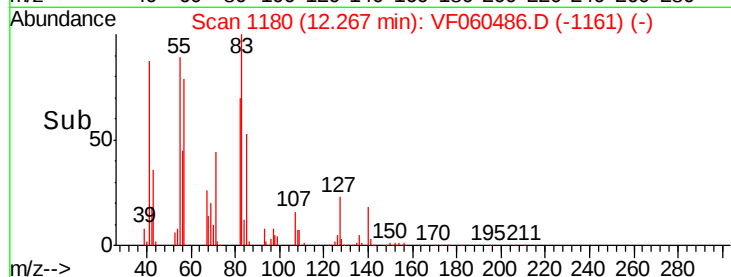
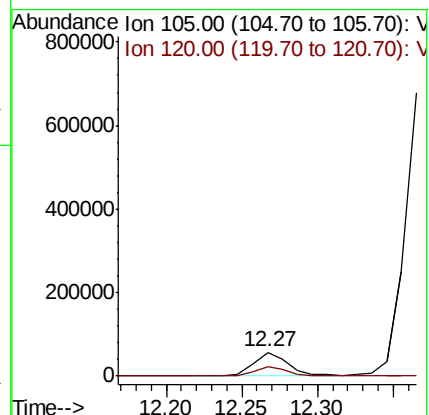
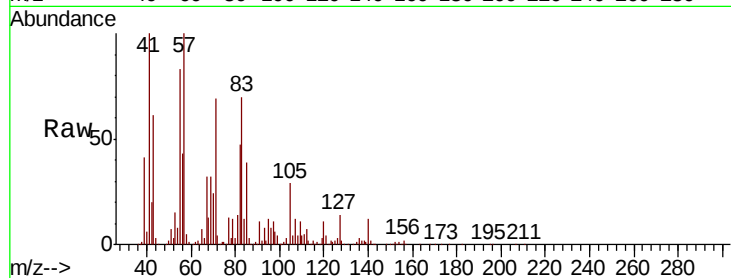
ClientSampleId :

Tot Ion:105 Resp: 85588

Ion Ratio Lower Upper

105 100

120 38.5 23.1 69.2



#85

sec-Butylbenzene

Concen: 65.778 ug/l

RT: 12.38 min Scan# 1191

Delta R.T. 0.00 min

Lab File: VF060486.D

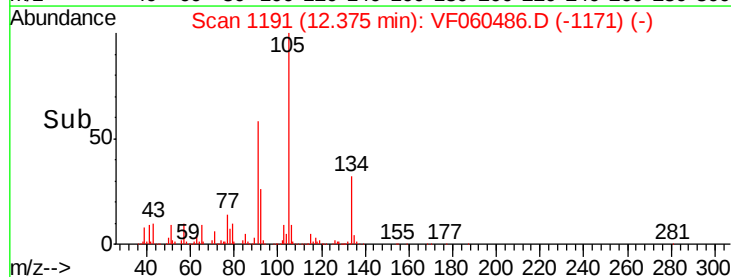
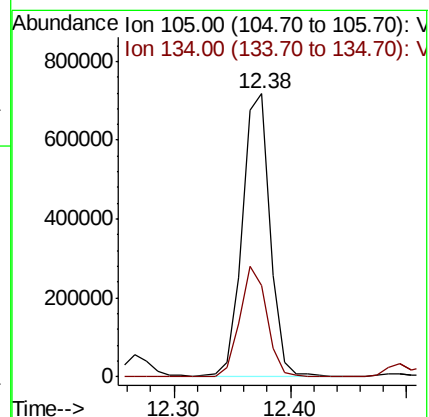
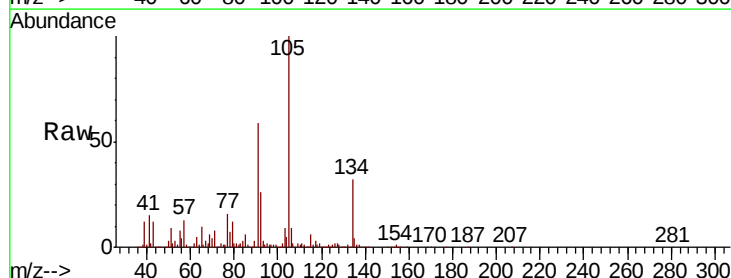
Acq: 8 Oct 2018 16:03

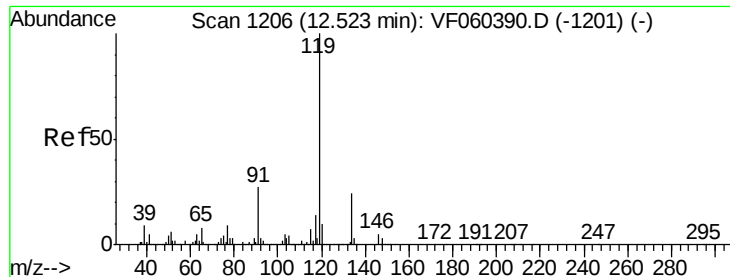
Tgt Ion:105 Resp: 1174117

Ion Ratio Lower Upper

105 100

134 32.1 9.4 28.3#

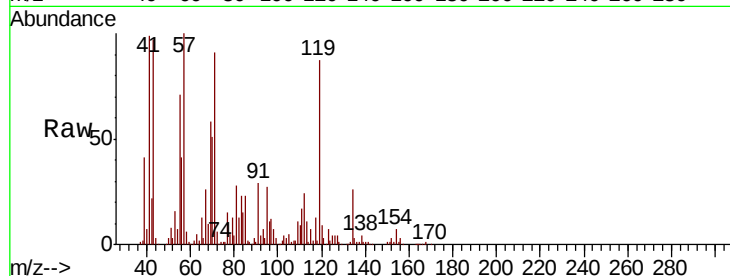




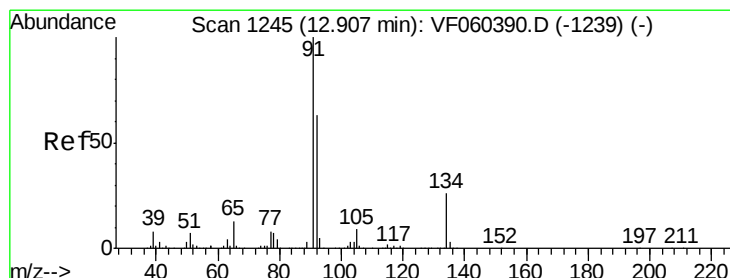
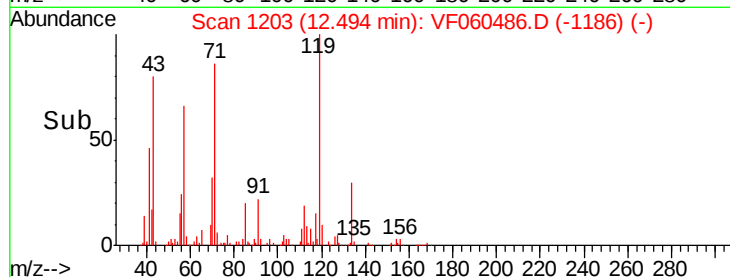
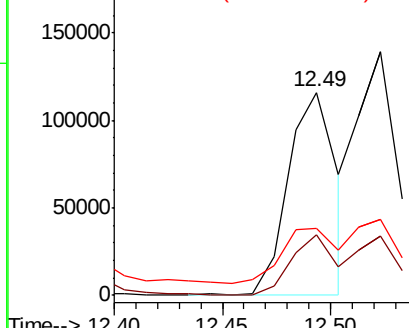
#86  
p-Isopropyltoluene  
Concen: 12.222 ug/l  
RT: 12.49 min Scan# 1203  
Delta R.T. -0.03 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Instrument :  
MSVOA\_F  
ClientSampled :

Tot Ion:119 Resp: 178231  
Ion Ratio Lower Upper  
119 100  
134 29.8 12.3 36.8  
91 33.2 13.5 40.4

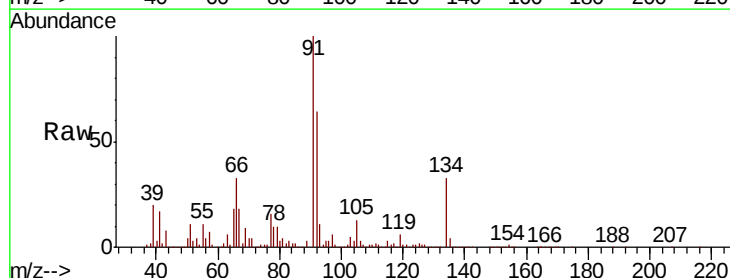


Abundance Ion 119.00 (118.70 to 119.70): V  
Ion 134.00 (133.70 to 134.70): V  
Ion 91.00 (90.70 to 91.70): VF0

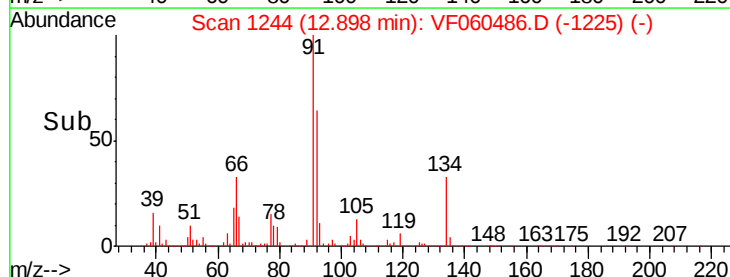
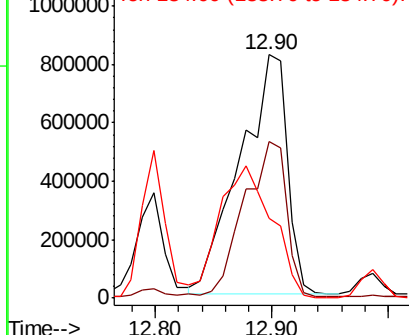


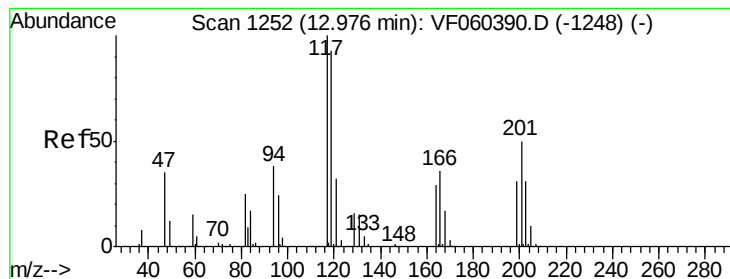
#89  
n-Butylbenzene  
Concen: 149.267 ug/l  
RT: 12.90 min Scan# 1244  
Delta R.T. -0.01 min  
Lab File: VF060486.D  
Acq: 8 Oct 2018 16:03

Tgt Ion: 91 Resp: 2303348  
Ion Ratio Lower Upper  
91 100  
92 64.1 31.3 93.9  
134 33.0 13.0 38.9



Abundance Ion 91.00 (90.70 to 91.70): VF0  
Ion 92.00 (91.70 to 92.70): VF0  
Ion 134.00 (133.70 to 134.70): V





#90

Hexachloroethane

Concen: 15.786 ug/l

RT: 12.99 min Scan# 1253

Delta R.T. 0.01 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

Instrument :

MSVOA\_F

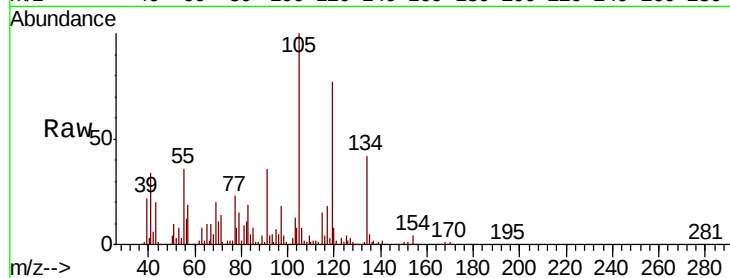
ClientSampleId :

Tot Ion:117 Resp: 59498

Ion Ratio Lower Upper

117 100

201 0.0 25.5 76.5#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 201.00 (200.70 to 201.70): V

12.99

40000

30000

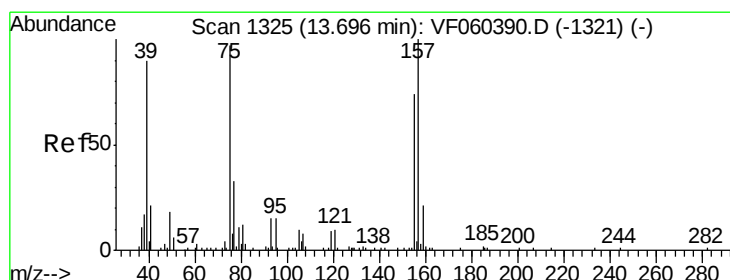
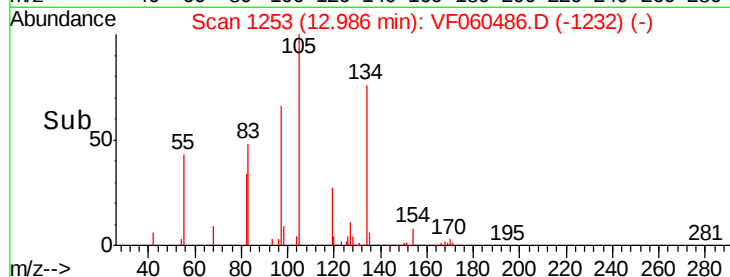
20000

10000

0

12.95 13.00 13.05

Time-->



#92

1,2-Dibromo-3-Chloropropane

Concen: 21.710 ug/l

RT: 13.70 min Scan# 1325

Delta R.T. 0.00 min

Lab File: VF060486.D

Acq: 8 Oct 2018 16:03

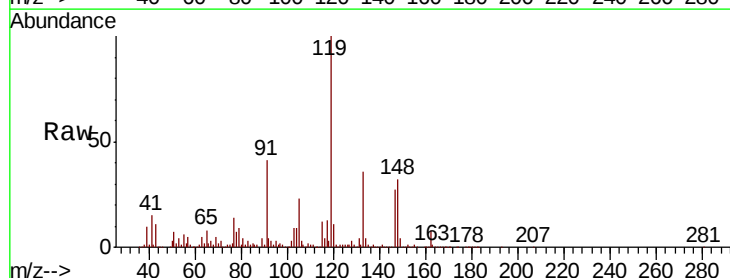
Tgt Ion: 75 Resp: 11841

Ion Ratio Lower Upper

75 100

155 45.6 37.9 113.6

157 0.0 51.3 154.0#



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

20000

15000

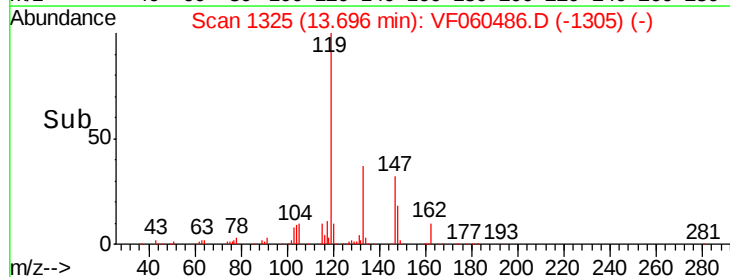
10000

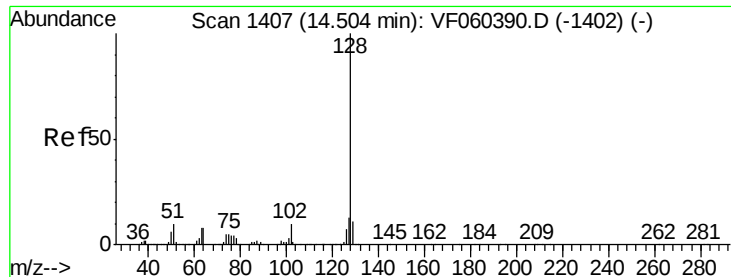
5000

0

13.65 13.70

Time-->





#95  
 Naphthalene  
 Concen: 18.528 ug/l  
 RT: 14.50 min Scan# 1407  
 Delta R.T. 0.00 min  
 Lab File: VF060486.D  
 Acq: 8 Oct 2018 16:03

Instrument :  
 MSVOA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 20.6  | 10.0  | 15.0# |
| 129     | 32.3  | 8.7   | 13.1# |

