

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD061319\  
 Data File : VD062693.D  
 Acq On : 13 Jun 2019 14:45  
 Operator : VA/AP  
 Sample : K3351-03  
 Misc : 6.15g/5ml/MSVOA D/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Jun 14 06:46:48 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D060719S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 08 00:02:21 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.05  | 168  | 551350   | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 829933   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 12.38 | 117  | 648412   | 50.00 | ug/l  | 0.02     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 288289   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.46  | 65   | 312179   | 39.24 | ug/l   | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 78.48% |          |
| 35) Dibromofluoromethane    | 6.93  | 113  | 319971   | 36.56 | ug/l   | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 73.12% |          |
| 50) Toluene-d8              | 10.42 | 98   | 593113   | 32.21 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 64.42% |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 272833   | 31.76 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 63.52% |          |

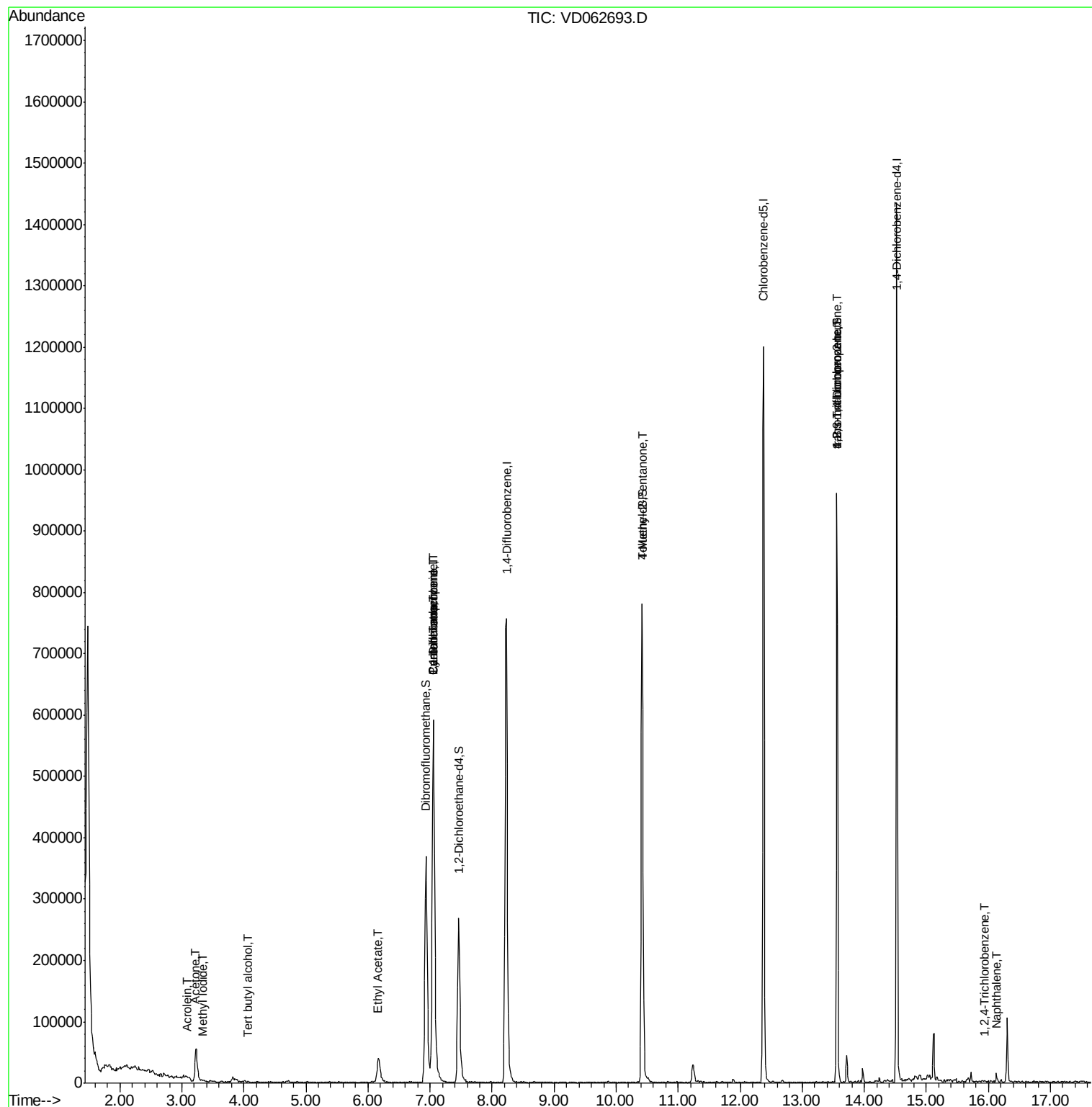
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 10) Methyl Iodide              | 3.34  | 142  | 939      | 4.096   | ug/l # | 24     |
| 11) Tert butyl alcohol         | 4.06  | 59   | 576      | 1.761   | ug/l # | 61     |
| 13) Acrolein                   | 3.09  | 56   | 191      | 1.816   | ug/l # | 12     |
| 16) Acetone                    | 3.22  | 43   | 110558   | 75.888  | ug/l   | 98     |
| 31) Cyclohexane                | 7.06  | 56   | 13604    | 2.167   | ug/l # | 13     |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 45828    | 4.825   | ug/l # | 55     |
| 37) Ethyl Acetate              | 6.17  | 43   | 2634     | 1.836   | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.06  | 117  | 60641    | 4.039   | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 10.43 | 43   | 4027     | 1.148   | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 13.56 | 75   | 100410   | 25.687  | ug/l # | 44     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 128460   | 106.079 | ug/l # | 1      |
| 93) 1,2,4-Trichlorobenzene     | 15.95 | 180  | 235      | 3.598   | ug/l # | 74     |
| 95) Naphthalene                | 16.13 | 128  | 6967     | 4.070   | ug/l # | 86     |

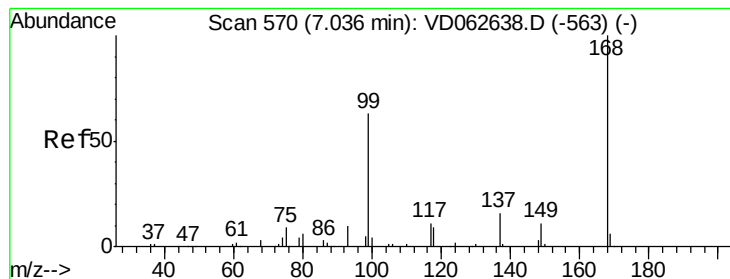
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD061319\  
Data File : VD062693.D  
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Sample : K3351-03  
Misc : 6.15g/5ml/MSVOA D/SOIL  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Jun 14 06:46:48 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D060719S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 08 00:02:21 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 571

Delta R.T. 0.02 min

Lab File: VD062693.D

Acq: 13 Jun 2019 14:45

Instrument :

MSVOA\_D

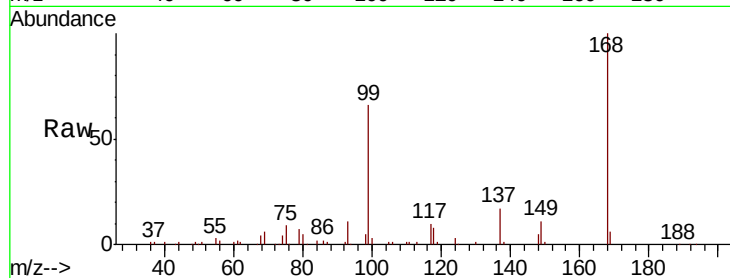
ClientSampleId :

Tot Ion:168 Resp: 551350

Ion Ratio Lower Upper

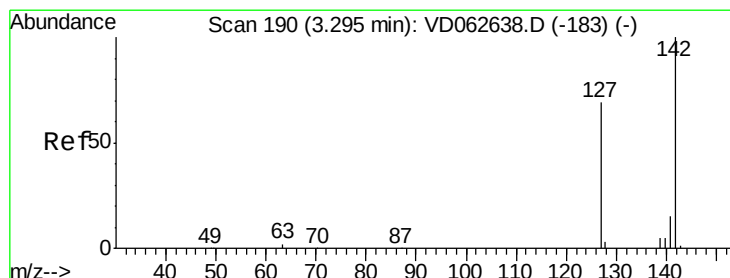
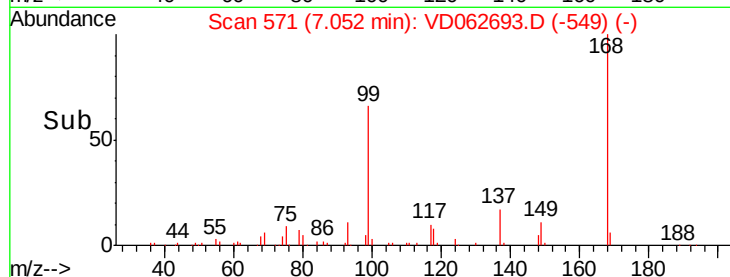
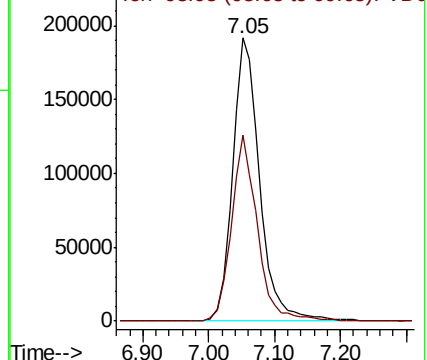
168 100

99 65.8 51.4 77.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): V



#10

Methyl Iodide

Concen: 4.096 ug/l

RT: 3.34 min Scan# 194

Delta R.T. 0.05 min

Lab File: VD062693.D

Acq: 13 Jun 2019 14:45

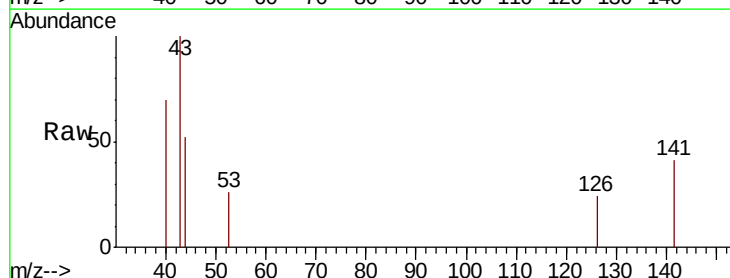
Tgt Ion:142 Resp: 939

Ion Ratio Lower Upper

142 100

127 0.0 55.2 82.8#

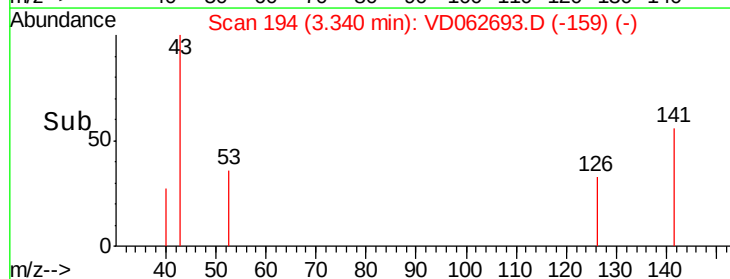
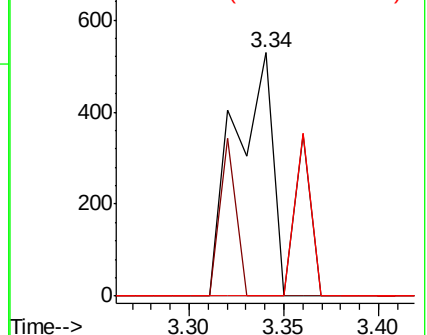
141 0.0 12.1 18.1#

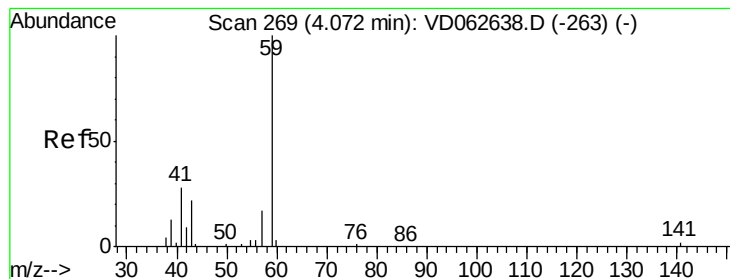


Abundance Ion 141.85 (141.55 to 142.55): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.85 (140.55 to 141.55): V



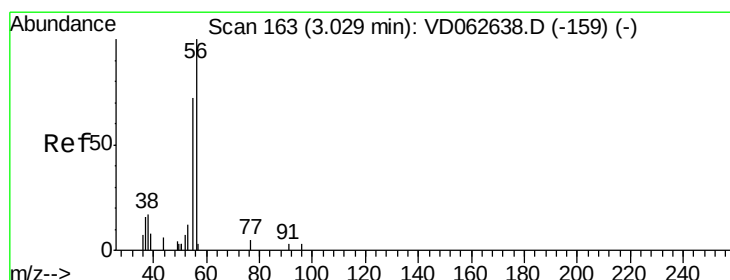
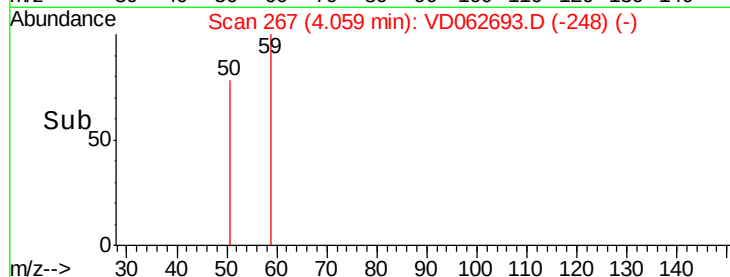
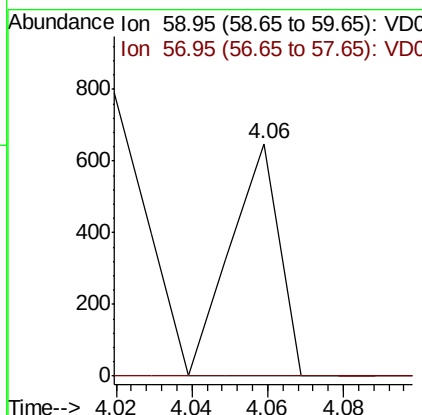
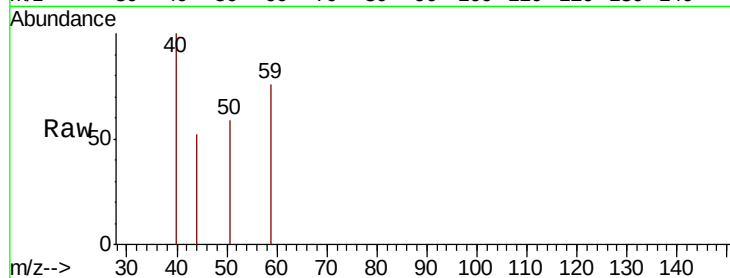


#11

Tert butyl alcohol  
 Concen: 1.761 ug/l  
 RT: 4.06 min Scan# 267  
 Delta R.T. -0.01 min  
 Lab File: VD062693.D  
 Acq: 13 Jun 2019 14:45

Instrument :  
 MSVOA\_D  
 ClientSampled :

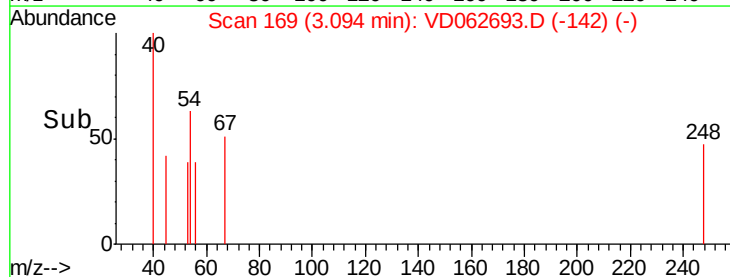
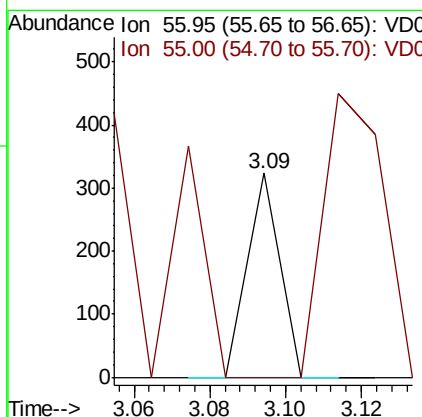
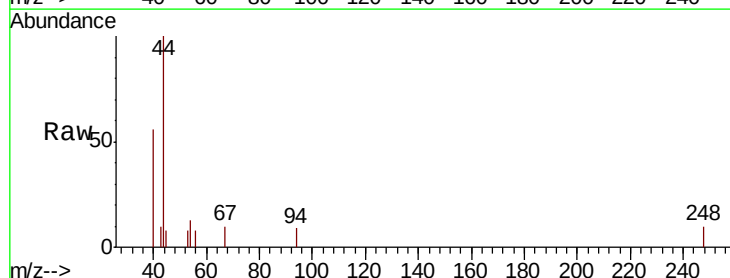
Tot Ion: 59 Resp: 576  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 13.7 20.5#

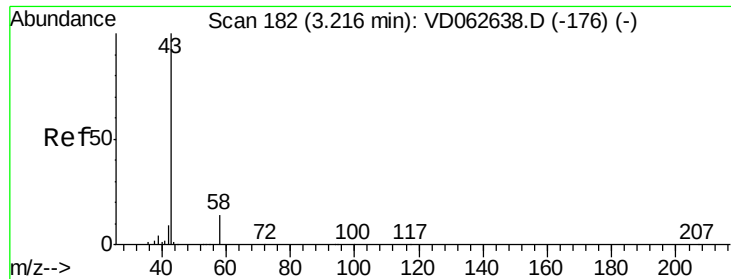


#13

Acrolein  
 Concen: 1.816 ug/l  
 RT: 3.09 min Scan# 169  
 Delta R.T. 0.07 min  
 Lab File: VD062693.D  
 Acq: 13 Jun 2019 14:45

Tgt Ion: 56 Resp: 191  
 Ion Ratio Lower Upper  
 56 100  
 55 0.0 59.4 89.0#

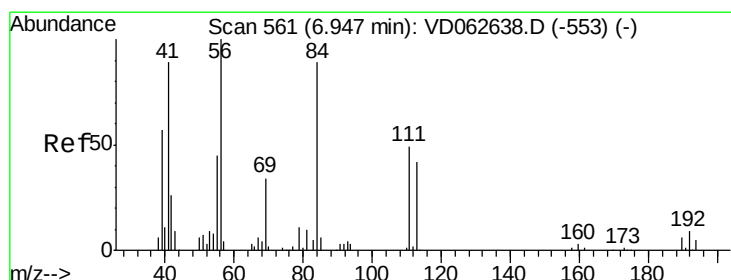
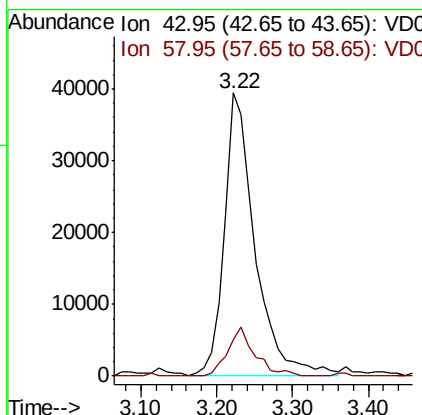
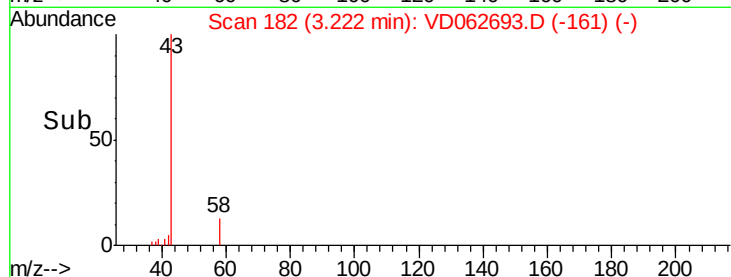
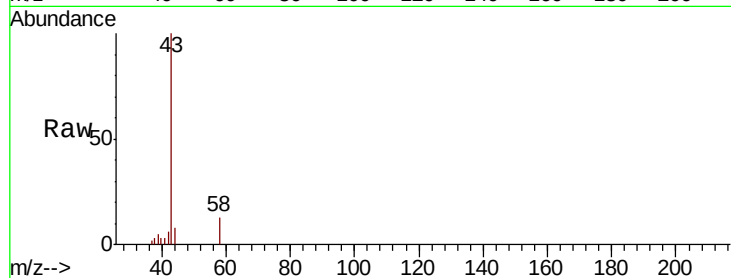




#16  
Acetone  
Concen: 75.888 ug/l  
RT: 3.22 min Scan# 182  
Delta R.T. 0.01 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

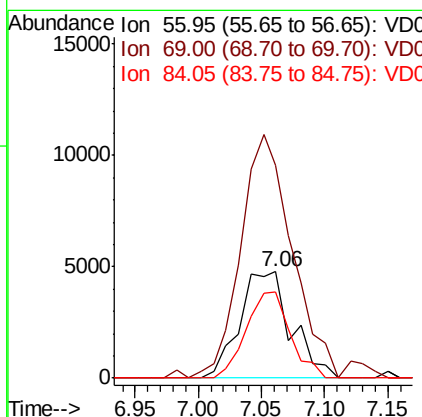
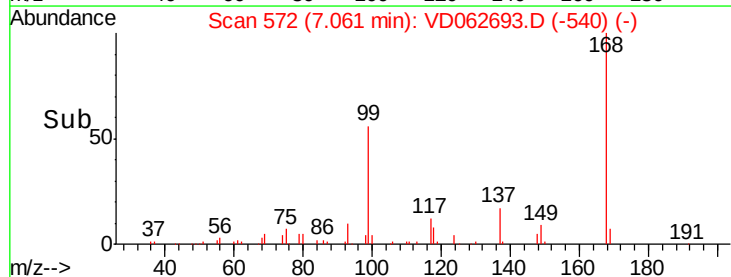
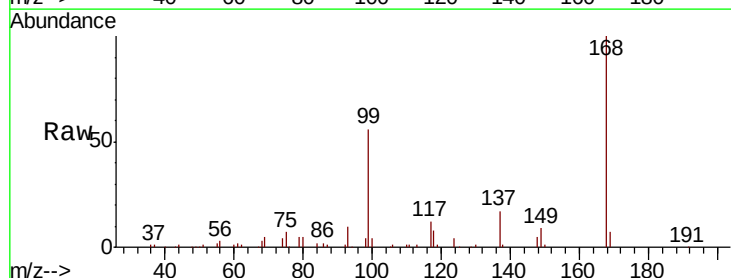
Instrument :  
MSVOA\_D  
ClientSampleId :

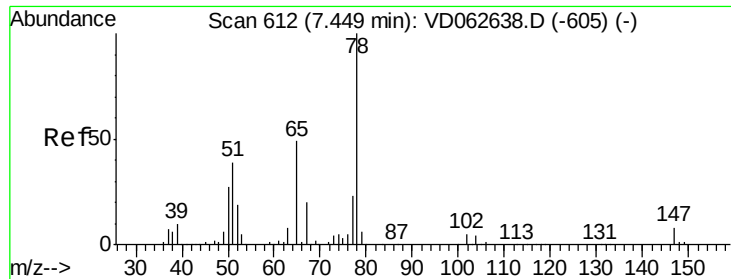
Tot Ion: 43 Resp: 110558  
Ion Ratio Lower Upper  
43 100  
58 12.7 10.8 16.2



#31  
Cyclohexane  
Concen: 2.167 ug/l  
RT: 7.06 min Scan# 572  
Delta R.T. 0.11 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

Tgt Ion: 56 Resp: 13604  
Ion Ratio Lower Upper  
56 100  
69 199.9 26.8 40.2#  
84 80.4 73.9 110.9

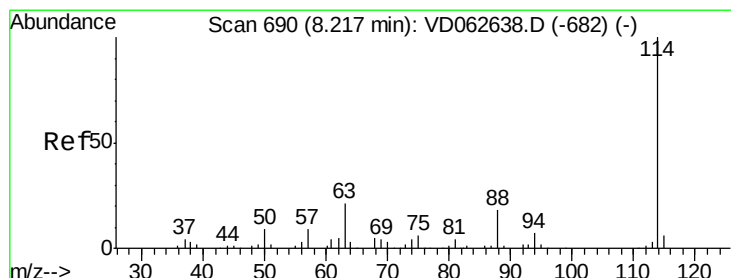
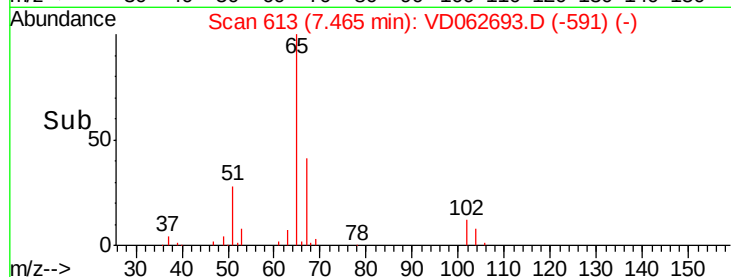
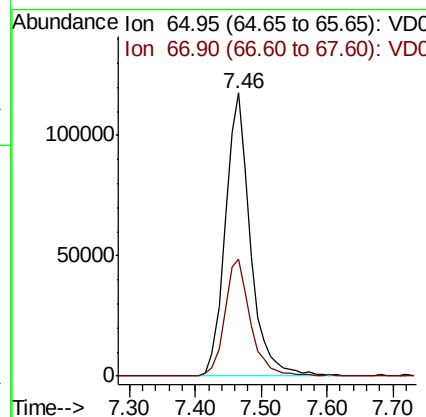
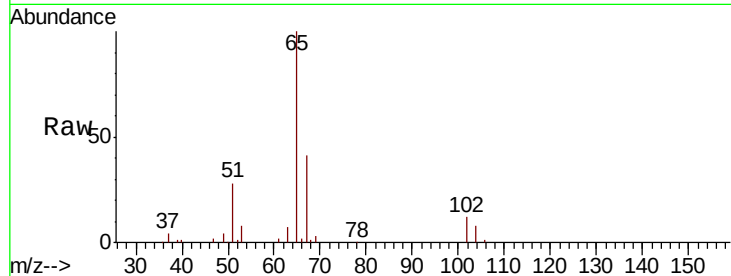




#33  
 1,2-Dichloroethane-d4  
 Concen: 39.239 ug/l  
 RT: 7.46 min Scan# 613  
 Delta R.T. 0.02 min  
 Lab File: VD062693.D  
 Acq: 13 Jun 2019 14:45

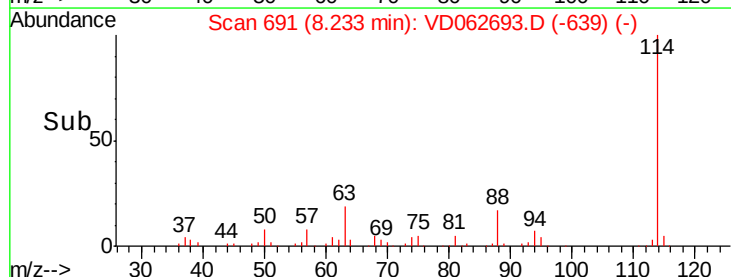
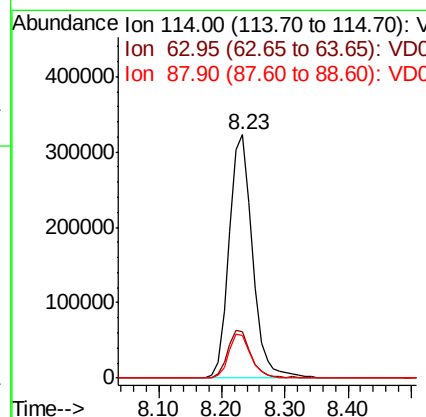
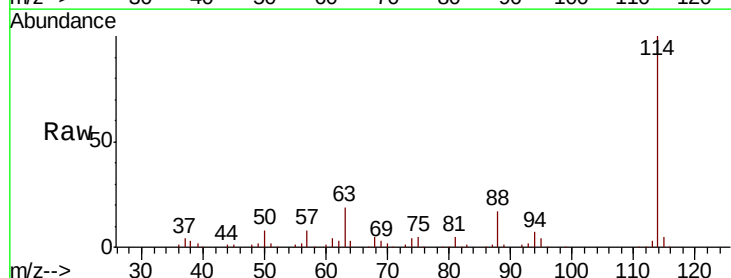
Instrument :  
 MSVOA\_D  
 ClientSampled :

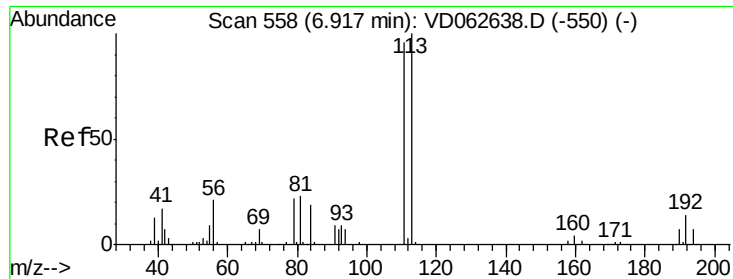
Tot Ion: 65 Resp: 312179  
 Ion Ratio Lower Upper  
 65 100  
 67 41.2 0.0 81.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.23 min Scan# 691  
 Delta R.T. 0.02 min  
 Lab File: VD062693.D  
 Acq: 13 Jun 2019 14:45

Tgt Ion: 114 Resp: 829933  
 Ion Ratio Lower Upper  
 114 100  
 63 18.9 0.0 42.4  
 88 17.5 0.0 36.8

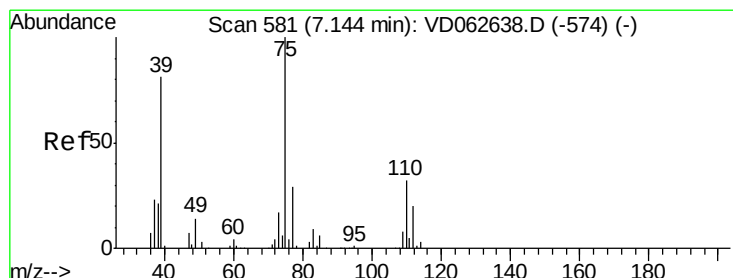
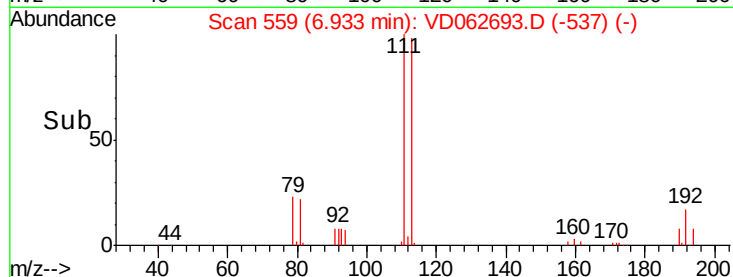
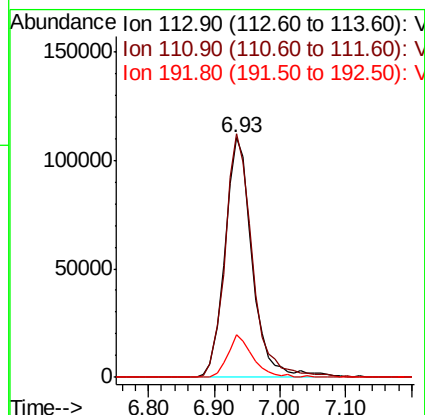
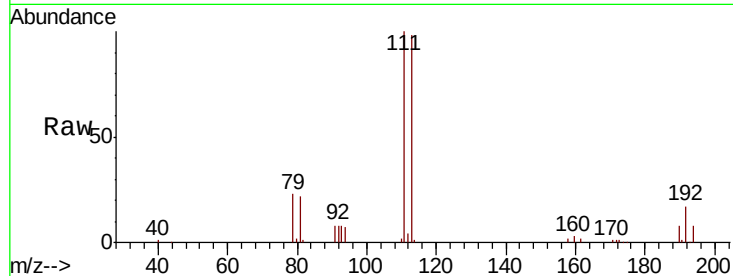




#35  
Dibromofluoromethane  
Concen: 36.557 ug/l  
RT: 6.93 min Scan# 559  
Delta R.T. 0.02 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

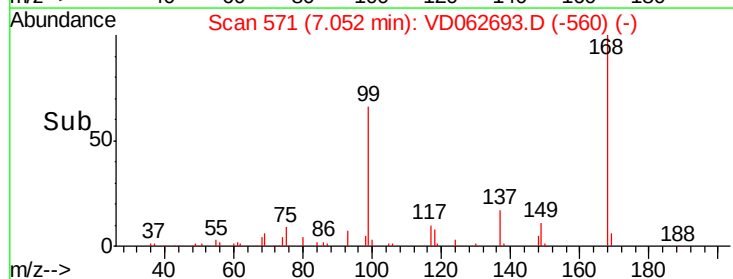
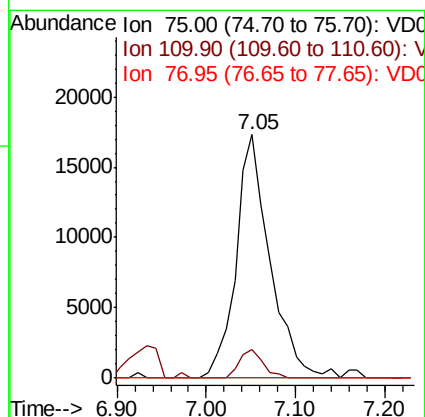
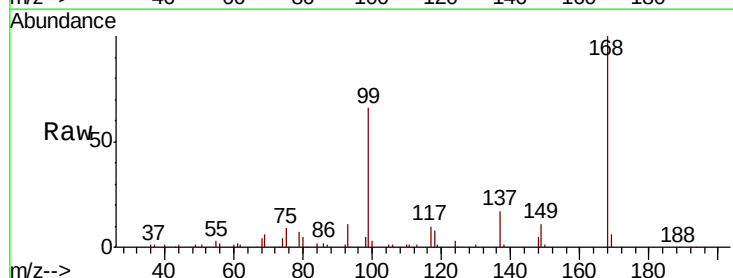
Instrument :  
MSVOA\_D  
ClientSampled :

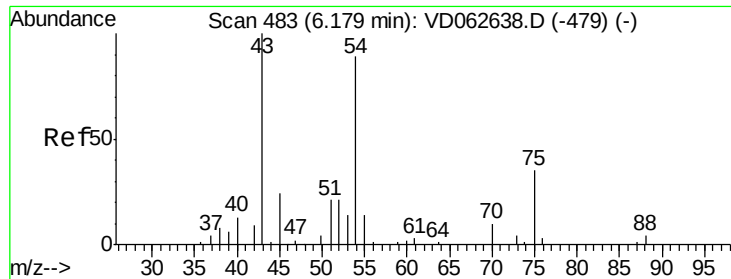
Tot Ion:113 Resp: 319971  
Ion Ratio Lower Upper  
113 100  
111 101.7 76.4 114.6  
192 17.6 11.4 17.0#



#36  
1,1-Dichloropropene  
Concen: 4.825 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. -0.09 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

Tgt Ion: 75 Resp: 45828  
Ion Ratio Lower Upper  
75 100  
110 11.9 15.9 47.7#  
77 0.0 23.3 34.9#

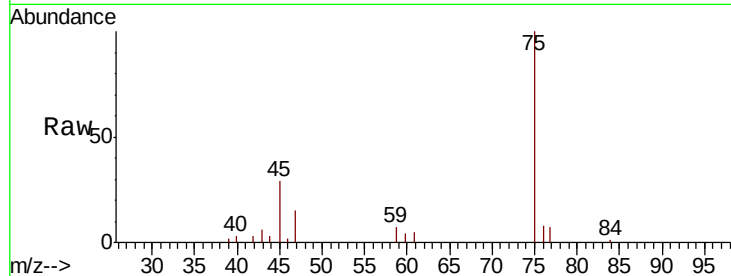




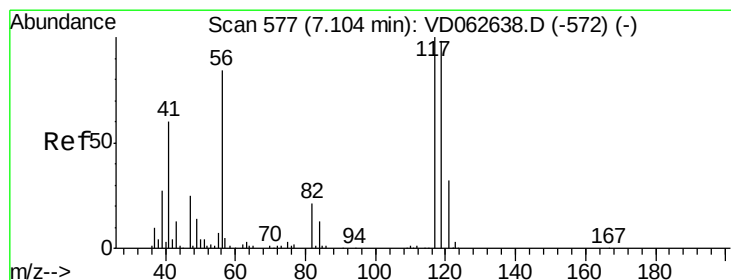
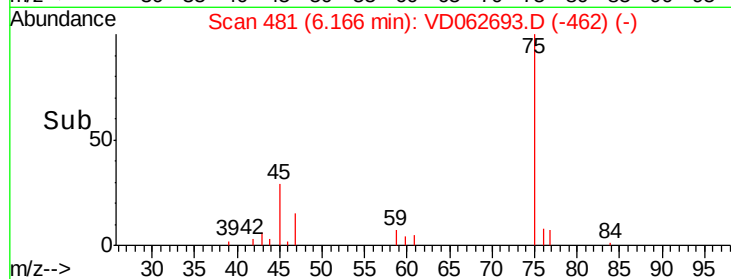
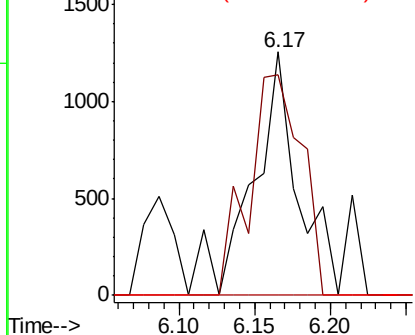
#37  
Ethyl Acetate  
Concen: 1.836 ug/l  
RT: 6.17 min Scan# 481  
Delta R.T. -0.01 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 43 Resp: 2634  
Ion Ratio Lower Upper  
43 100  
61 90.5 8.7 13.1#  
70 0.0 6.5 9.7#

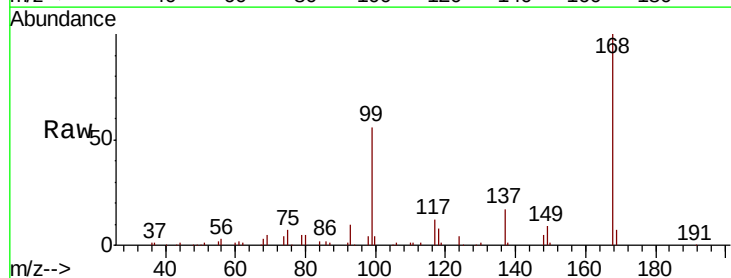


Abundance Ion 42.95 (42.65 to 43.65): VDC  
Ion 60.95 (60.65 to 61.65): VDC  
Ion 70.00 (69.70 to 70.70): VDC

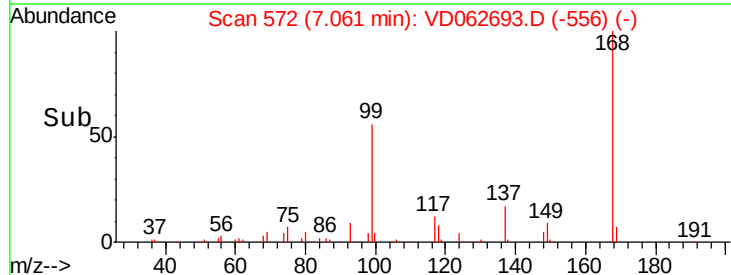
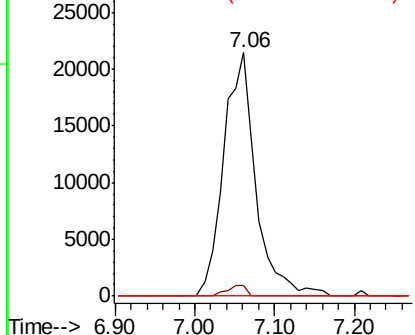


#38  
Carbon Tetrachloride  
Concen: 4.039 ug/l  
RT: 7.06 min Scan# 572  
Delta R.T. -0.04 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

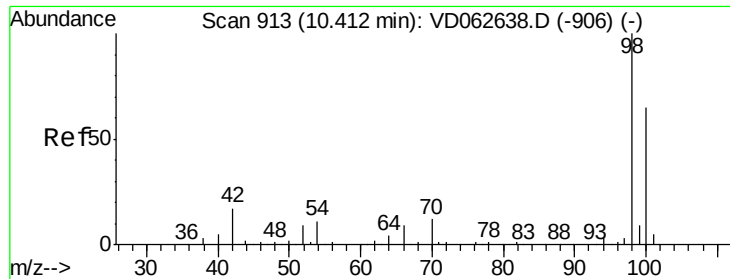
Tgt Ion: 117 Resp: 60641  
Ion Ratio Lower Upper  
117 100  
119 4.2 73.5 110.3#  
121 0.0 24.2 36.4#



Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V



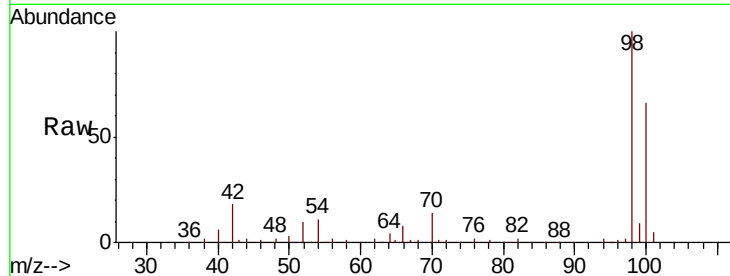




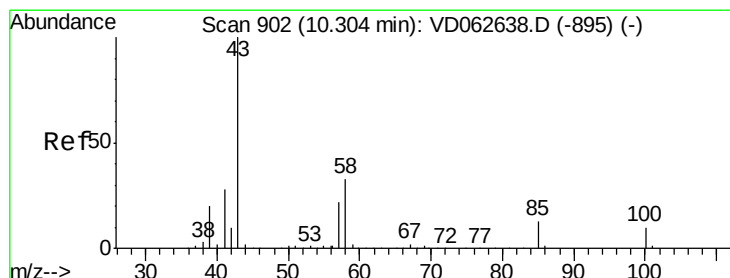
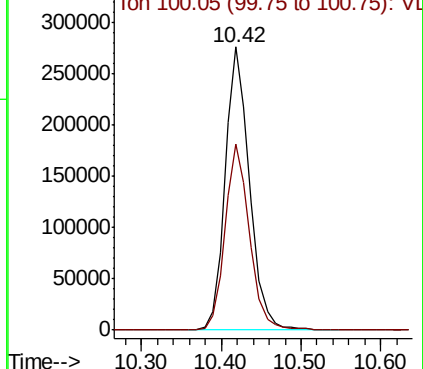
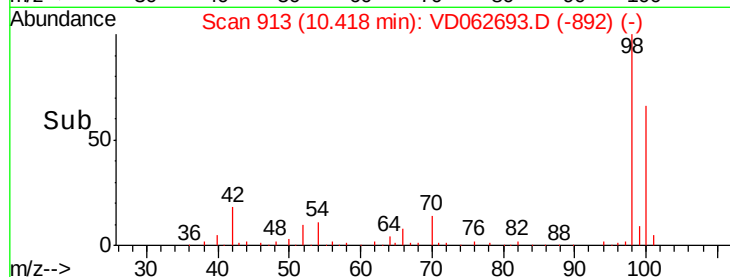
#50  
Toluene-d8  
Concen: 32.212 ug/l  
RT: 10.42 min Scan# 913  
Delta R.T. 0.01 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 98 Resp: 593113  
Ion Ratio Lower Upper  
98 100  
100 65.8 52.1 78.1

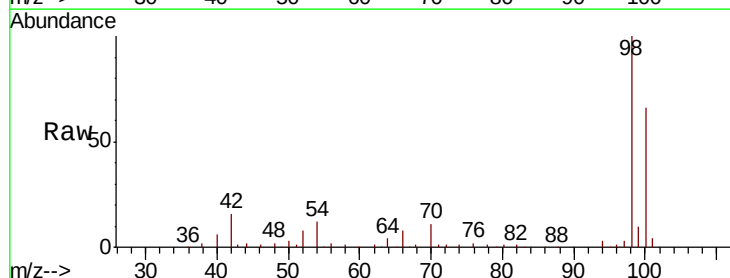


Abundance Ion 98.05 (97.75 to 98.75): VD062693.D (-892) (-)  
Ion 100.05 (99.75 to 100.75): VD062693.D (-892) (-)

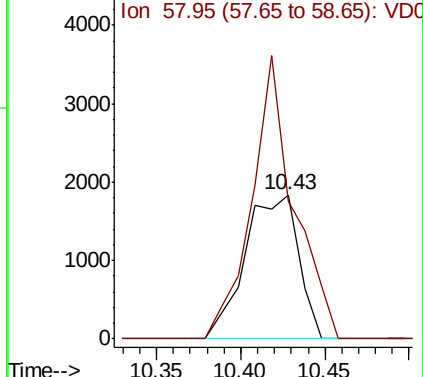
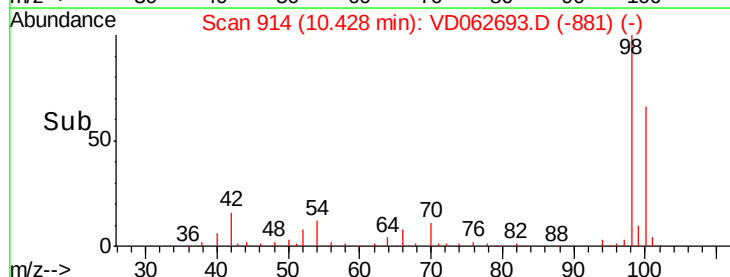


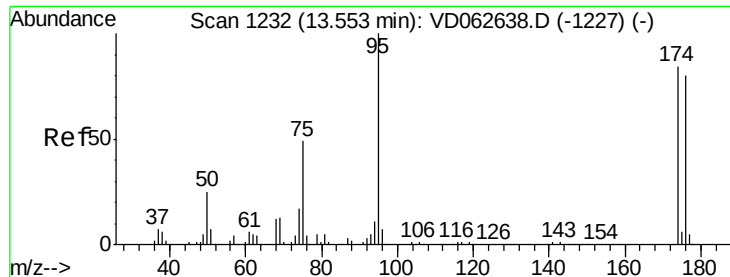
#51  
4-Methyl-2-Pentanone  
Concen: 1.148 ug/l  
RT: 10.43 min Scan# 914  
Delta R.T. 0.12 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

Tgt Ion: 43 Resp: 4027  
Ion Ratio Lower Upper  
43 100  
58 95.5 26.1 39.1#



Abundance Ion 42.95 (42.65 to 43.65): VD062693.D (-881) (-)  
Ion 57.95 (57.65 to 58.65): VD062693.D (-881) (-)





#62

4-Bromofluorobenzene

Concen: 31.761 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.01 min

Lab File: VD062693.D

Acq: 13 Jun 2019 14:45

Instrument :

MSVOA\_D

ClientSampleId :

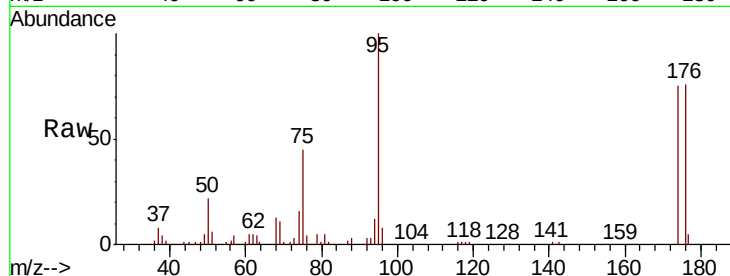
Tot Ion: 95 Resp: 272833

Ion Ratio Lower Upper

95 100

174 75.0 0.0 167.0

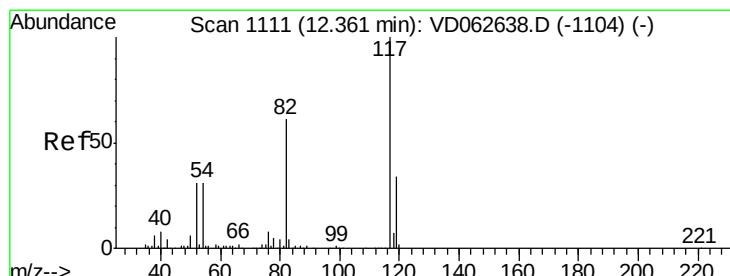
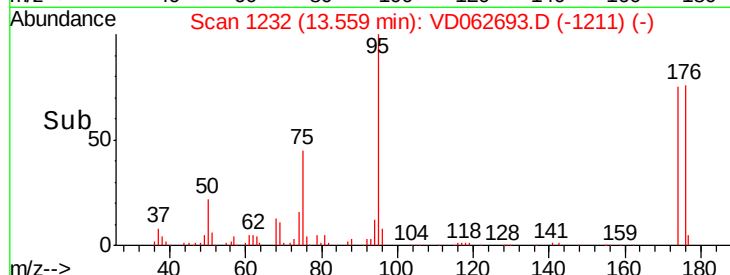
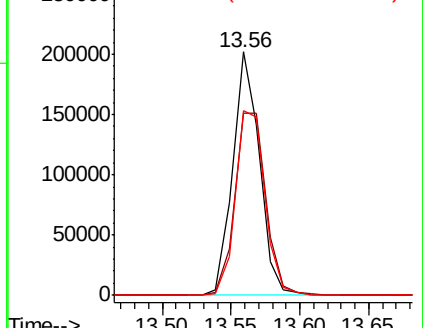
176 75.8 0.0 159.2



Abundance Ion 95.00 (94.70 to 95.70): V

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 12.38 min Scan# 1112

Delta R.T. 0.02 min

Lab File: VD062693.D

Acq: 13 Jun 2019 14:45

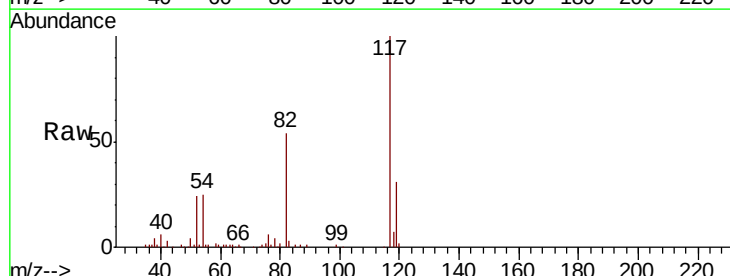
Tgt Ion: 117 Resp: 648412

Ion Ratio Lower Upper

117 100

82 53.8 48.7 73.1

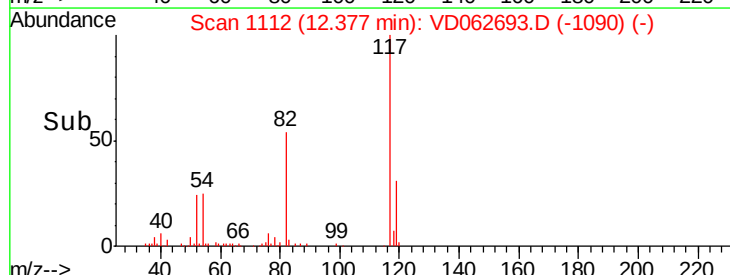
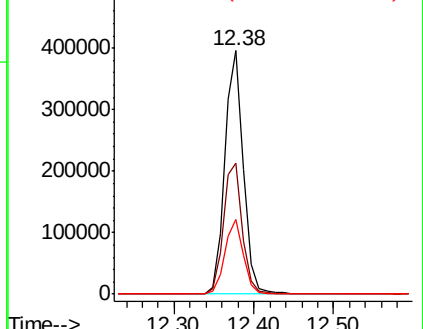
119 30.7 27.0 40.6

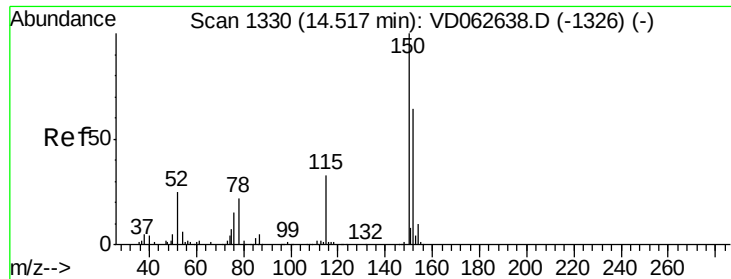


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V

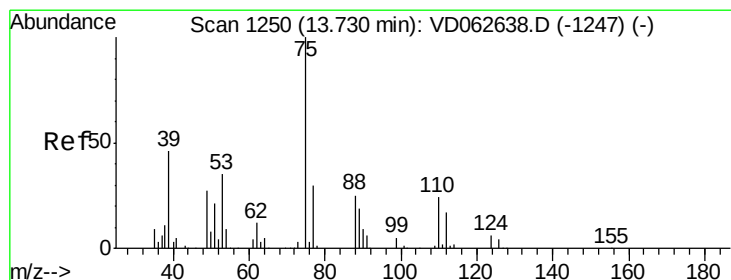
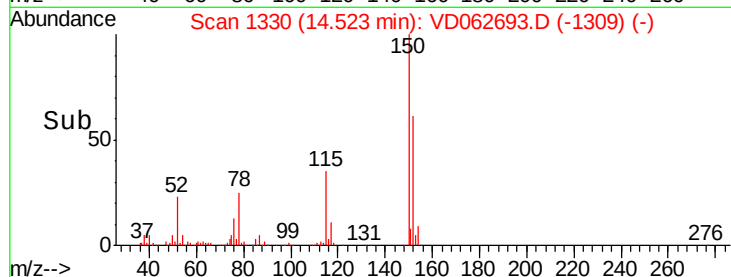
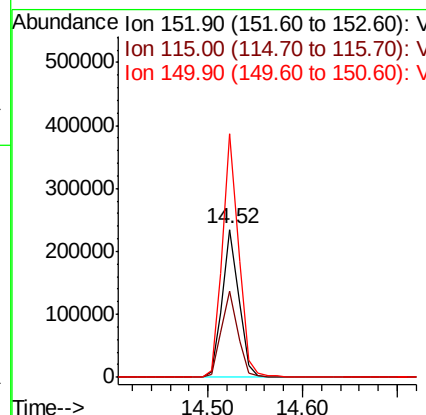
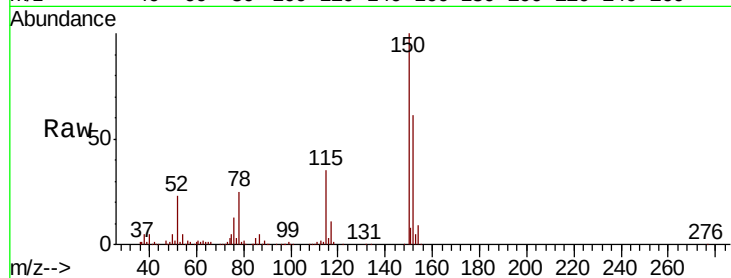




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 14.52 min Scan# 1330  
 Delta R.T. 0.01 min  
 Lab File: VD062693.D  
 Acq: 13 Jun 2019 14:45

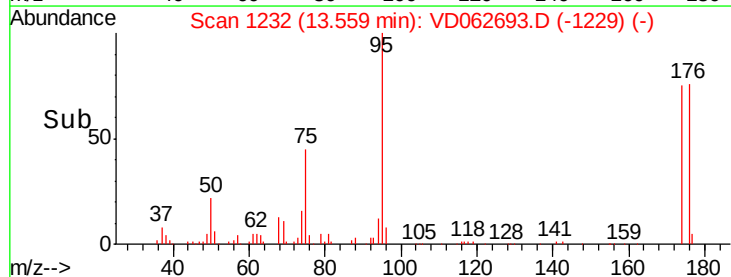
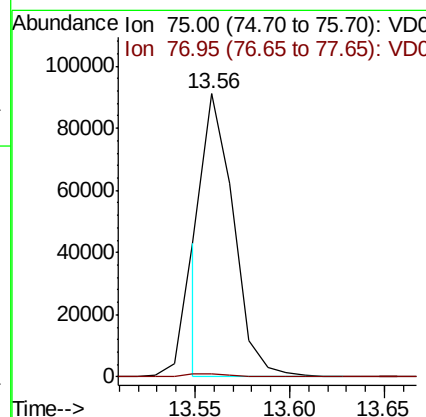
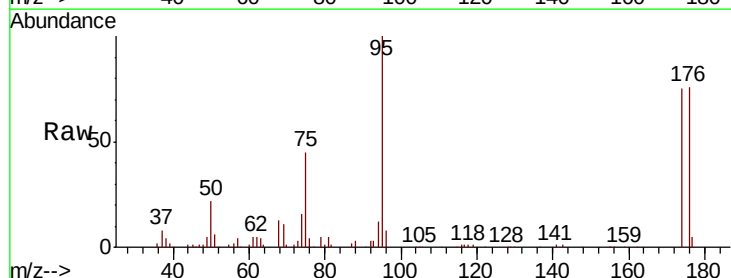
Instrument :  
 MSVOA\_D  
 ClientSampleId :

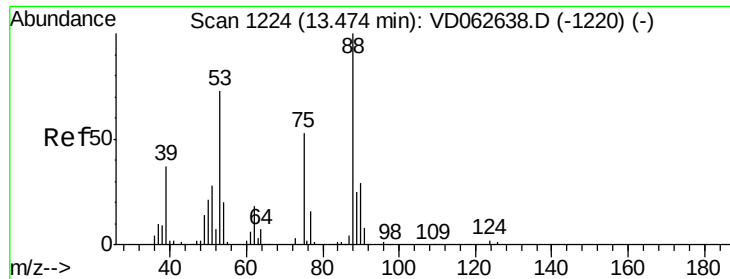
Tot Ion:152 Resp: 288289  
 Ion Ratio Lower Upper  
 152 100  
 115 57.9 30.1 90.5  
 150 164.7 0.0 314.0



#76  
 1,2,3-Trichloropropane  
 Concen: 25.687 ug/l  
 RT: 13.56 min Scan# 1232  
 Delta R.T. -0.17 min  
 Lab File: VD062693.D  
 Acq: 13 Jun 2019 14:45

Tgt Ion: 75 Resp: 100410  
 Ion Ratio Lower Upper  
 75 100  
 77 0.9 16.2 48.6#





#81

trans-1,4-Dichloro-2-butene

Concen: 106.079 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.09 min

Lab File: VD062693.D

Acq: 13 Jun 2019 14:45

Instrument :

MSVOA\_D

ClientSampleId :

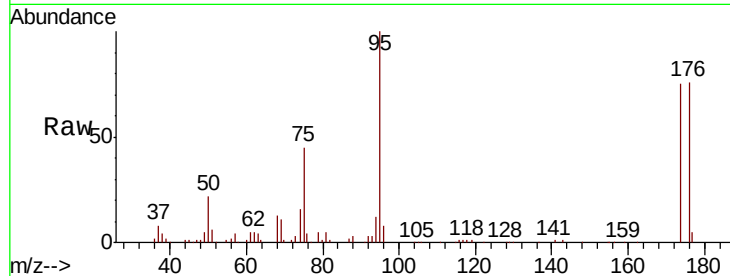
Tot Ion: 75 Resp: 128460

Ion Ratio Lower Upper

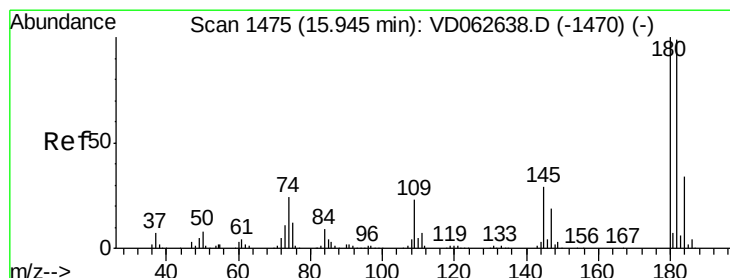
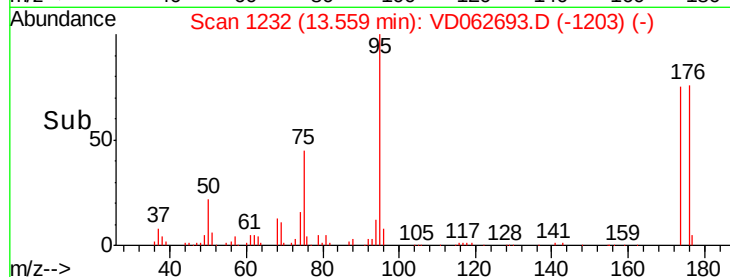
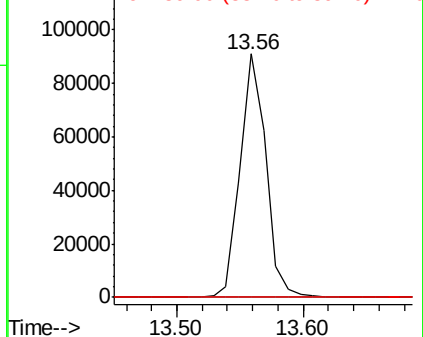
75 100

53 0.0 109.4 164.2#

89 0.0 37.0 55.6#



Abundance Ion 75.00 (74.70 to 75.70): VDC  
Ion 53.00 (52.70 to 53.70): VDC  
Ion 89.00 (88.70 to 89.70): VDC



#93

1,2,4-Trichlorobenzene

Concen: 3.598 ug/l

RT: 15.95 min Scan# 1475

Delta R.T. 0.01 min

Lab File: VD062693.D

Acq: 13 Jun 2019 14:45

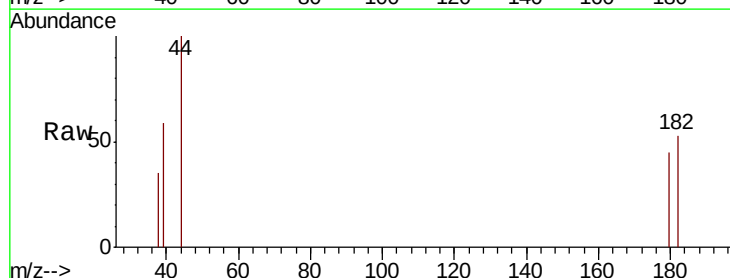
Tgt Ion:180 Resp: 235

Ion Ratio Lower Upper

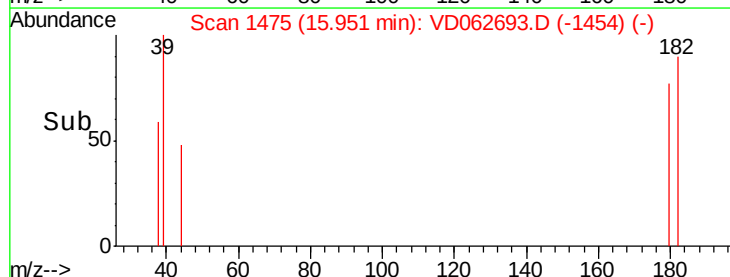
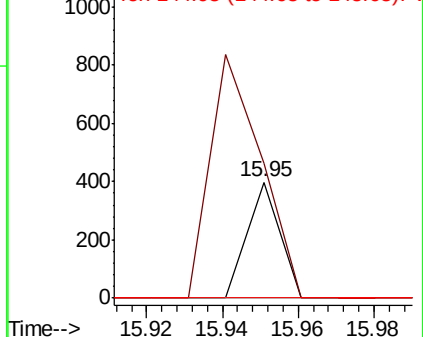
180 100

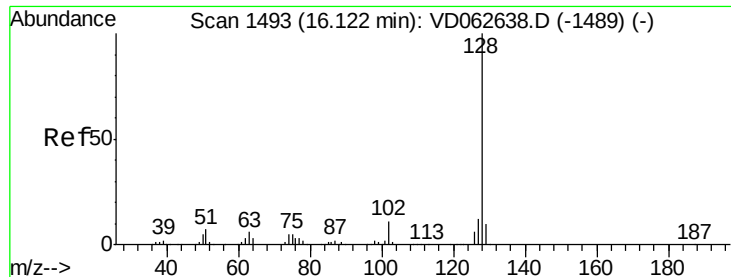
182 116.9 49.4 148.2

145 0.0 14.5 43.6#



Abundance Ion 179.85 (179.55 to 180.55): V  
Ion 181.85 (181.55 to 182.55): V  
Ion 144.95 (144.65 to 145.65): V

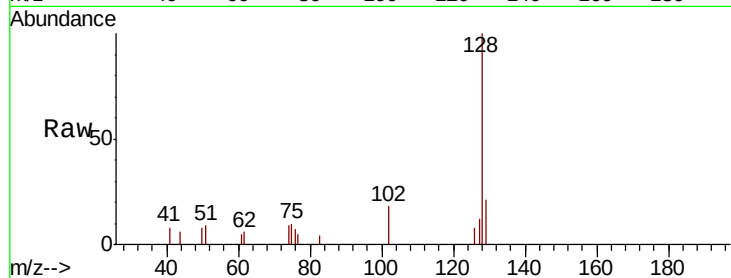




#95  
Naphthalene  
Concen: 4.070 ug/l  
RT: 16.13 min Scan# 1493  
Delta R.T. 0.01 min  
Lab File: VD062693.D  
Acq: 13 Jun 2019 14:45

Instrument :  
MSVOA\_D  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.4  | 9.7   | 14.5  |
| 129     | 20.9  | 8.1   | 12.1  |



Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

