

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062418\  
 Data File : VD058364.D  
 Acq On : 24 Jun 2018 11:31  
 Operator : VA/AP  
 Sample : VD0624SBL01  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Jun 25 04:00:07 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D061918S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 20 05:52:56 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 1029618  | 50.00 | ug/l  | 0.03     |
| 34) 1,4-Difluorobenzene    | 6.72  | 114  | 1283637  | 50.00 | ug/l  | 0.03     |
| 63) Chlorobenzene-d5       | 10.72 | 117  | 1073430  | 50.00 | ug/l  | 0.03     |
| 72) 1,4-Dichlorobenzene-d4 | 12.93 | 152  | 551110   | 50.00 | ug/l  | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.04  | 65   | 541593   | 52.08 | ug/l    | 0.03     |
| Spiked Amount               |       |      | Recovery | =     | 104.16% |          |
| 35) Dibromofluoromethane    | 5.57  | 113  | 579895   | 55.51 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 111.02% |          |
| 50) Toluene-d8              | 8.74  | 98   | 1378568  | 54.54 | ug/l    | 0.03     |
| Spiked Amount               |       |      | Recovery | =     | 109.08% |          |
| 62) 4-Bromofluorobenzene    | 11.96 | 95   | 576412   | 55.83 | ug/l    | 0.03     |
| Spiked Amount               |       |      | Recovery | =     | 111.66% |          |

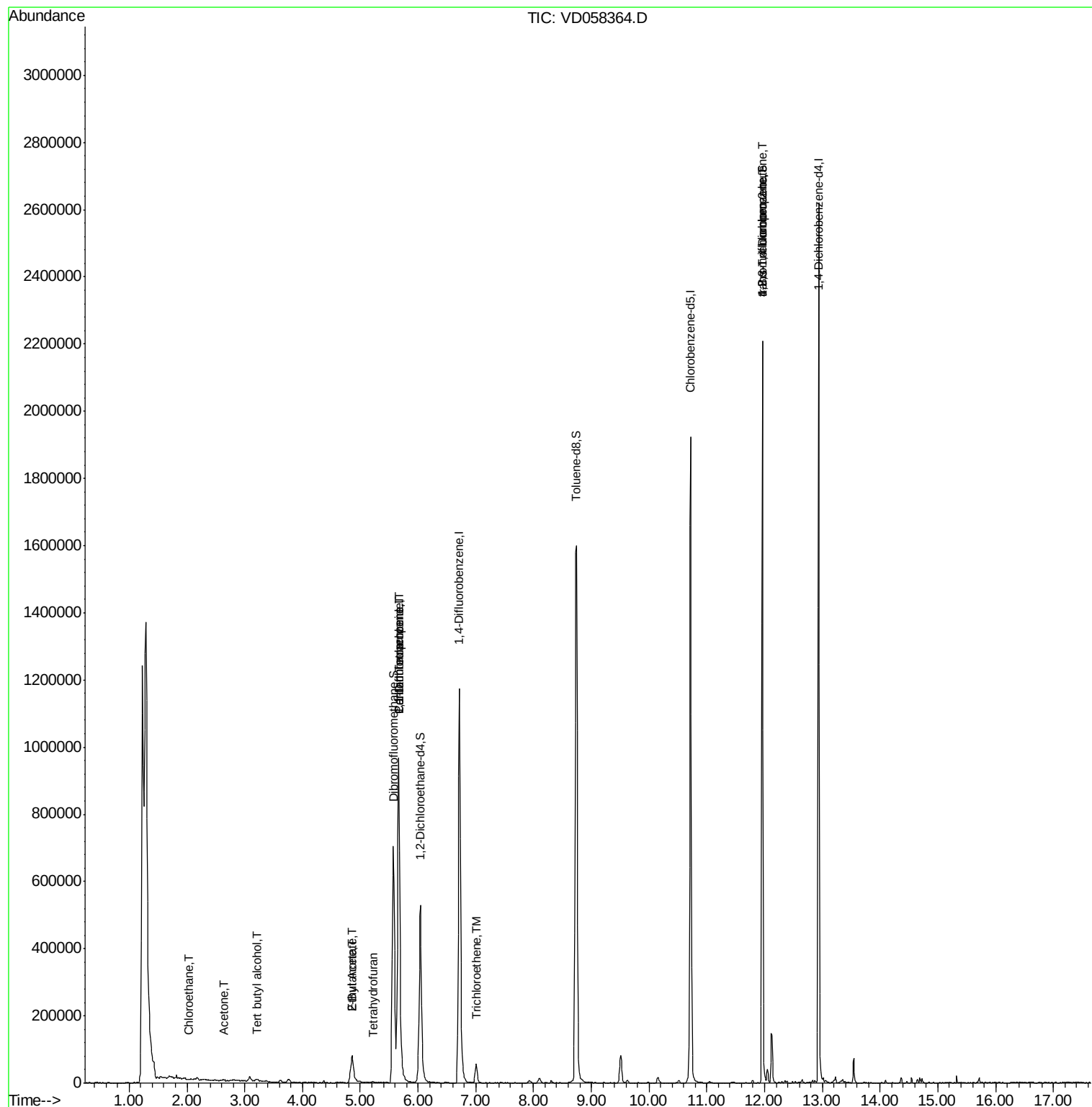
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.36  | 85   | 2043     | Below Cal | #      | 43     |
| 3) Chloromethane               | 1.53  | 50   | 1245     | Below Cal | #      | 43     |
| 6) Chloroethane                | 2.03  | 64   | 185      | 1.487     | ug/l # | 41     |
| 11) Tert butyl alcohol         | 3.22  | 59   | 6086     | 17.743    | ug/l # | 78     |
| 16) Acetone                    | 2.64  | 43   | 8180     | 5.751     | ug/l # | 62     |
| 20) Methylene Chloride         | 3.10  | 84   | 4722     | Below Cal | #      | 64     |
| 25) 2-Butanone                 | 4.86  | 43   | 9320     | 3.007     | ug/l   | 99     |
| 29) Tetrahydrofuran            | 5.22  | 42   | 2250     | 1.364     | ug/l # | 67     |
| 31) Cyclohexane                | 5.66  | 56   | 23214    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 88071    | 6.936     | ug/l # | 49     |
| 37) Ethyl Acetate              | 4.86  | 43   | 9320     | 1.288     | ug/l # | 8      |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 84354    | 6.686     | ug/l # | 13     |
| 44) Trichloroethene            | 7.01  | 130  | 22566    | 2.484     | ug/l   | 87     |
| 76) 1,2,3-Trichloropropane     | 11.96 | 75   | 274166   | 34.073    | ug/l # | 45     |
| 81) trans-1,4-Dichloro-2-buten | 11.96 | 75   | 273010   | 139.117   | ug/l # | 1      |
| 82) 4-Chlorotoluene            | 12.35 | 91   | 2872     | Below Cal |        | 83     |

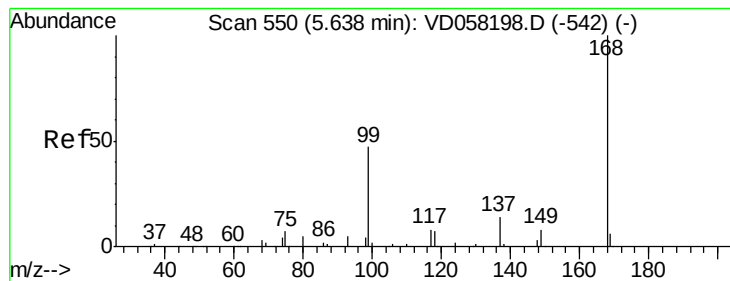
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD062418\  
Data File : VD058364.D  
Acq On : 24 Jun 2018 11:31  
Operator : VA/AP  
Sample : VD0624SBL01  
Misc : 5.00g/5ml/MSVOA D/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Jun 25 04:00:07 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D061918S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jun 20 05:52:56 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 553

Delta R.T. 0.03 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

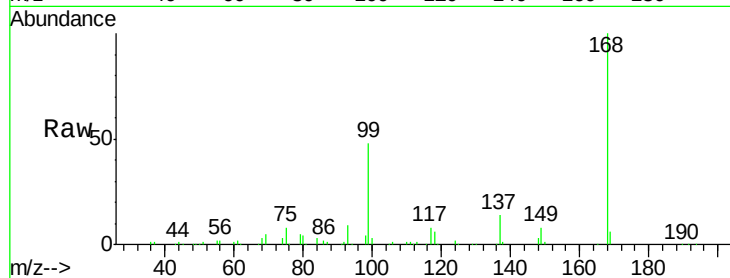
Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:168 Resp: 1029618

Ion Ratio Lower Upper

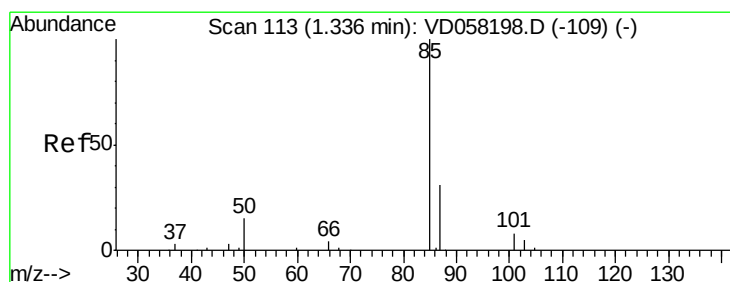
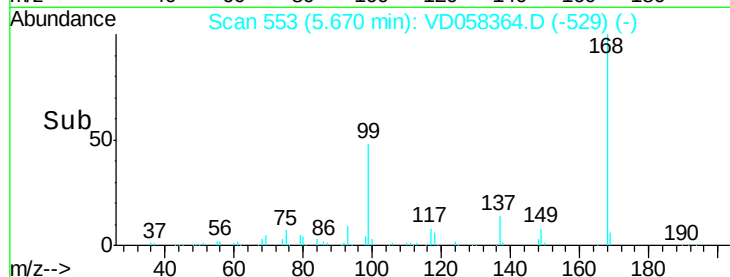
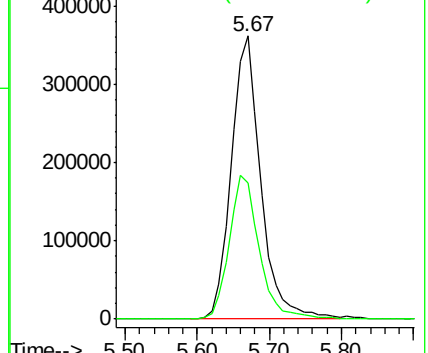
168 100

99 48.2 41.1 61.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.36 min Scan# 115

Delta R.T. 0.02 min

Lab File: VD058364.D

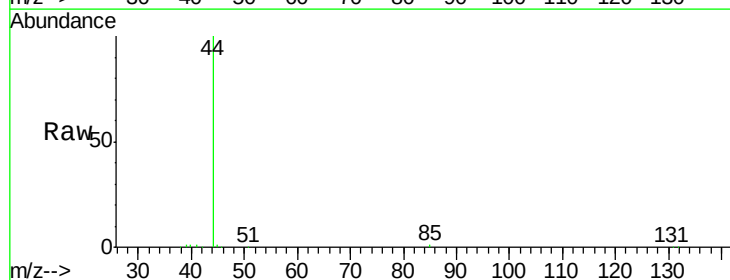
Acq: 24 Jun 2018 11:31

Tgt Ion: 85 Resp: 2043

Ion Ratio Lower Upper

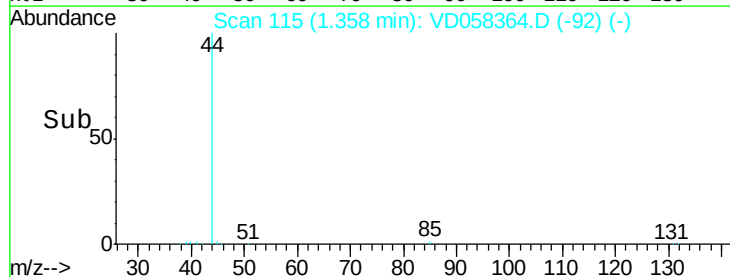
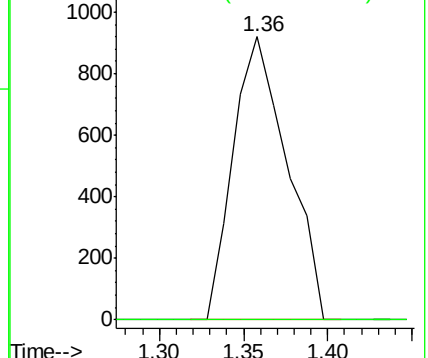
85 100

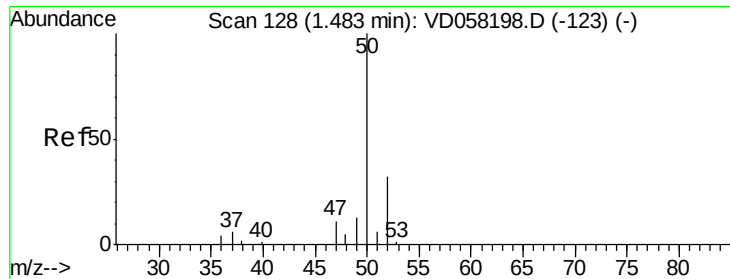
87 0.0 15.7 47.0#



Abundance Ion 84.95 (84.65 to 85.65): VDC

Ion 86.90 (86.60 to 87.60): VDC





#3

Chloromethane

Concen: Below Cal

RT: 1.53 min Scan# 132

Delta R.T. 0.04 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

Instrument :

MSVOA\_D

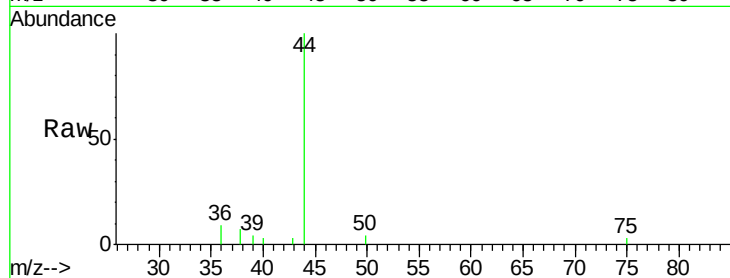
ClientSampled :

Tot Ion: 50 Resp: 1245

Ion Ratio Lower Upper

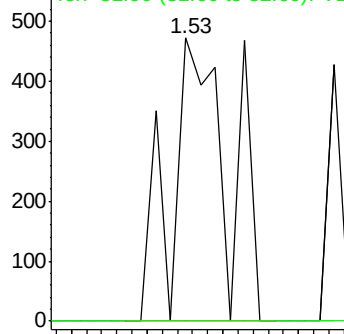
50 100

52 0.0 25.0 37.4#

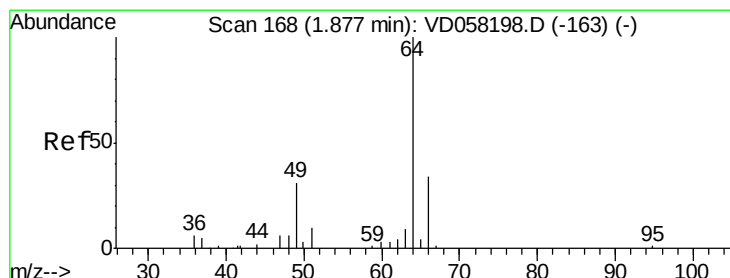
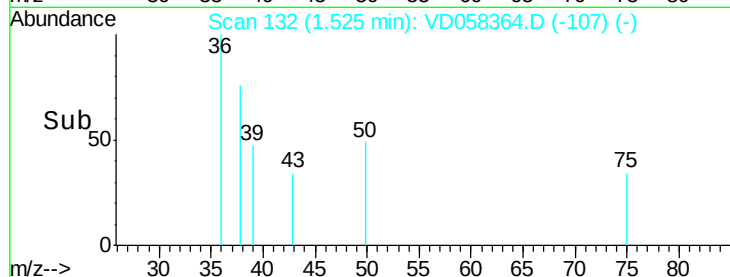


Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC



Time-->



#6

Chloroethane

Concen: 1.487 ug/l

RT: 2.03 min Scan# 183

Delta R.T. 0.15 min

Lab File: VD058364.D

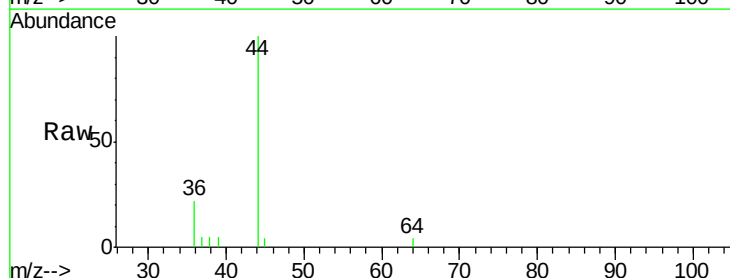
Acq: 24 Jun 2018 11:31

Tgt Ion: 64 Resp: 185

Ion Ratio Lower Upper

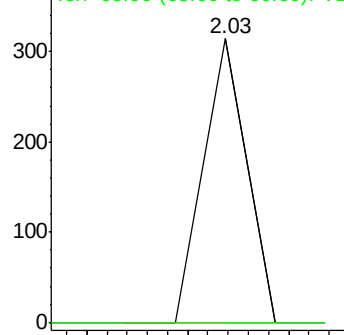
64 100

66 0.0 27.3 40.9#

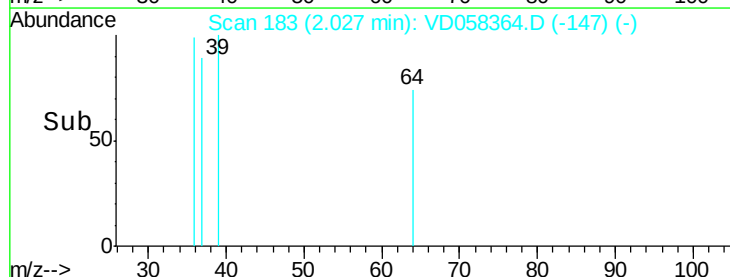


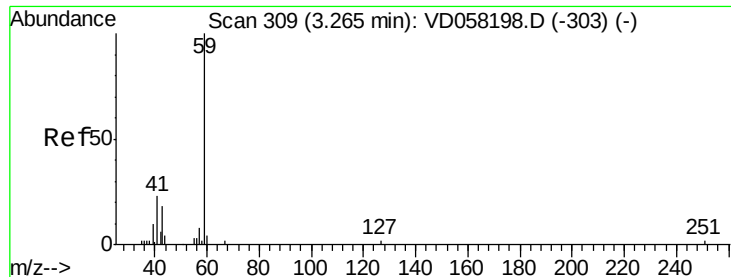
Abundance Ion 63.95 (63.65 to 64.65): VDC

Ion 65.90 (65.60 to 66.60): VDC



Time-->

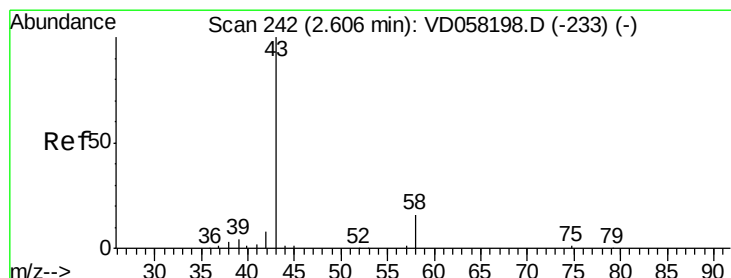
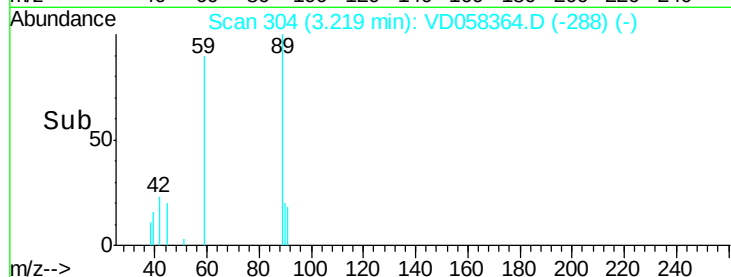
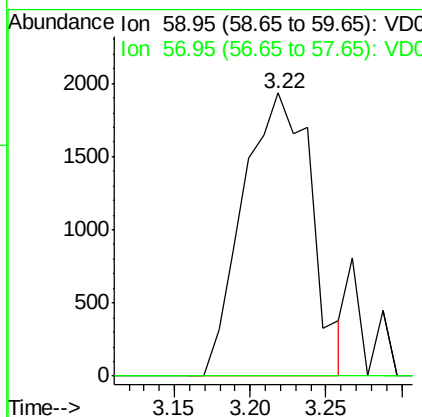
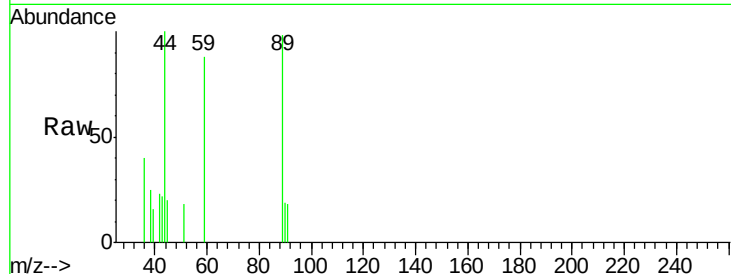




#11  
Tert butyl alcohol  
Concen: 17.743 ug/l  
RT: 3.22 min Scan# 304  
Delta R.T. -0.05 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

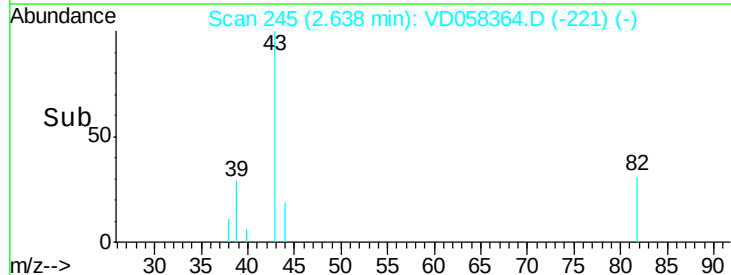
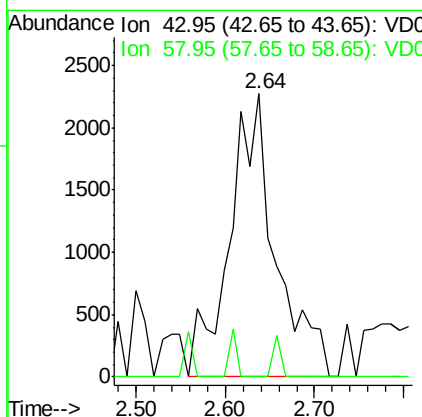
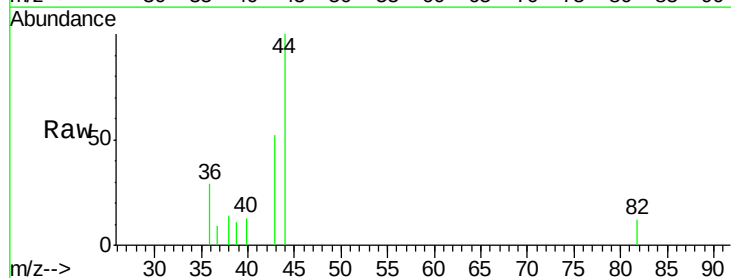
Instrument :  
MSVOA\_D  
ClientSampleId :

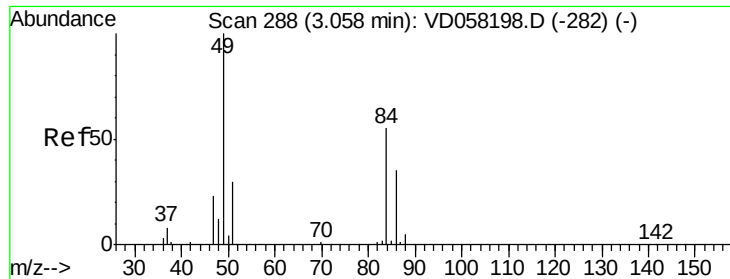
Tot Ion: 59 Resp: 6086  
Ion Ratio Lower Upper  
59 100  
57 0.0 6.2 9.4#



#16  
Acetone  
Concen: 5.751 ug/l  
RT: 2.64 min Scan# 245  
Delta R.T. 0.03 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Tgt Ion: 43 Resp: 8180  
Ion Ratio Lower Upper  
43 100  
58 0.0 12.7 19.1#

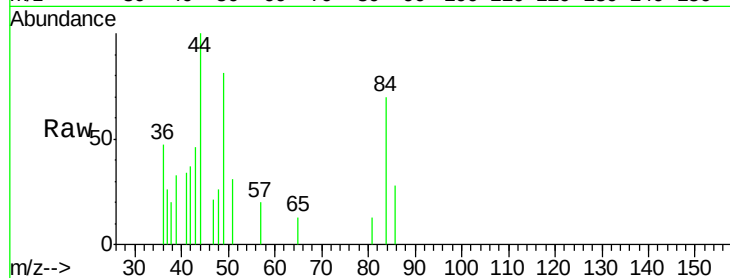




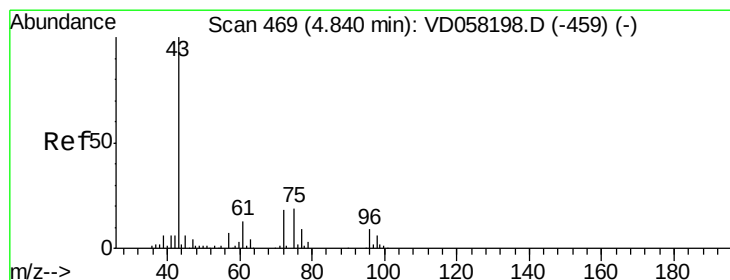
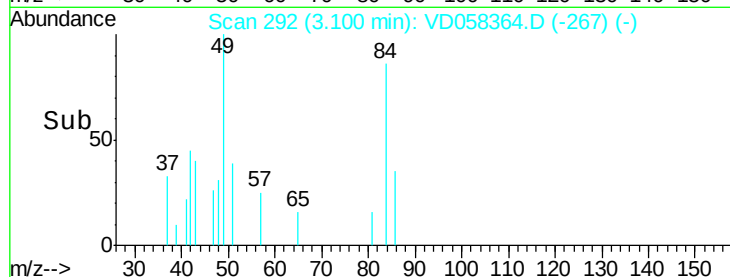
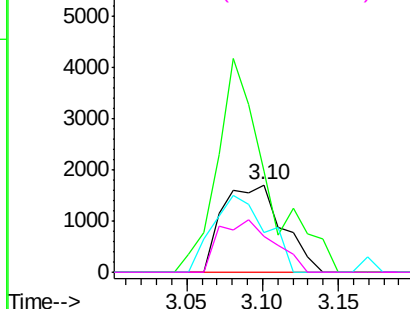
#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 3.10 min Scan# 292  
Delta R.T. 0.04 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 84 Resp: 4722  
Ion Ratio Lower Upper  
84 100  
49 116.3 145.0 217.6#  
51 45.0 42.9 64.3  
86 40.7 50.1 75.1#

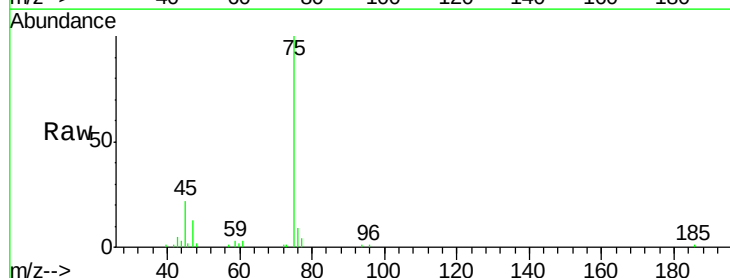


Abundance Ion 83.95 (83.65 to 84.65): VDC  
Ion 48.90 (48.60 to 49.60): VDC  
Ion 50.90 (50.60 to 51.60): VDC  
Ion 85.90 (85.60 to 86.60): VDC

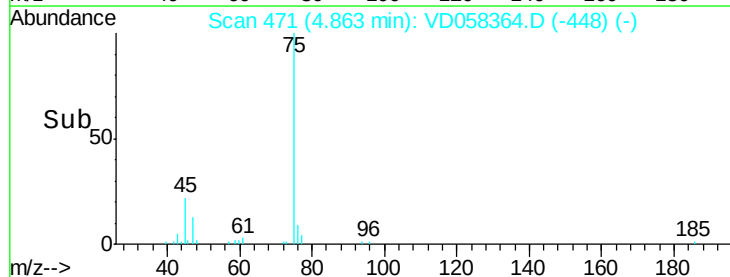
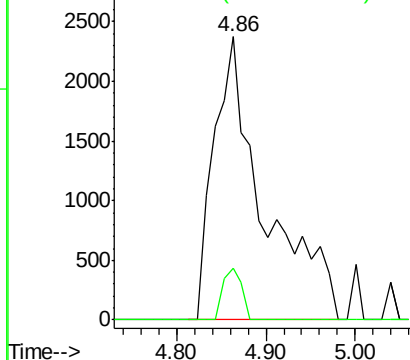


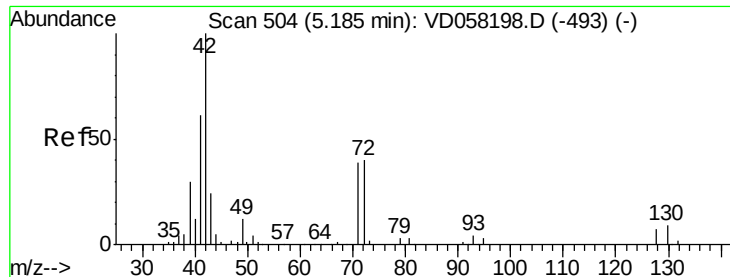
#25  
2-Butanone  
Concen: 3.007 ug/l  
RT: 4.86 min Scan# 471  
Delta R.T. 0.02 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Tgt Ion: 43 Resp: 9320  
Ion Ratio Lower Upper  
43 100  
72 18.2 14.1 21.1



Abundance Ion 42.95 (42.65 to 43.65): VDC  
Ion 72.00 (71.70 to 72.70): VDC

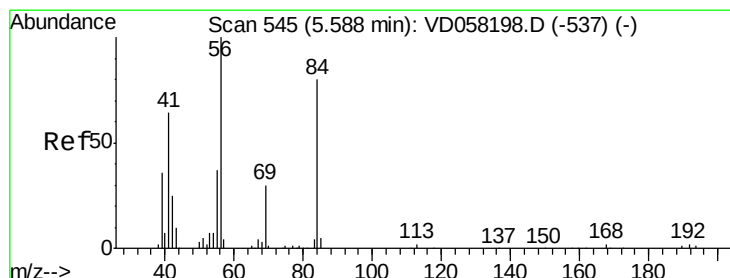
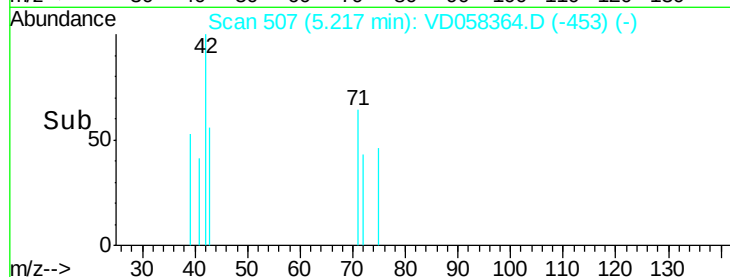
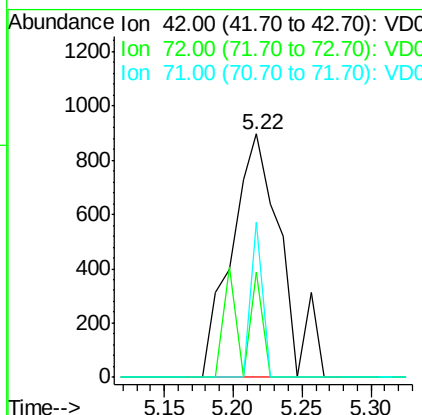
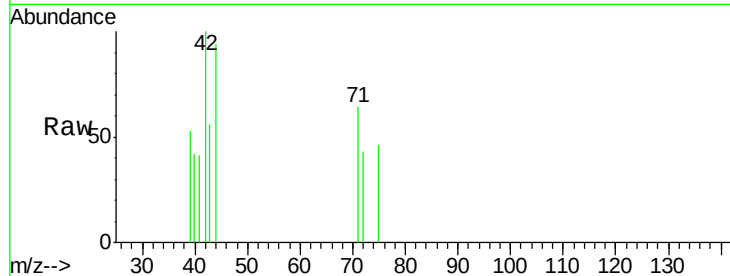




#29  
Tetrahydrofuran  
Concen: 1.364 ug/l  
RT: 5.22 min Scan# 507  
Delta R.T. 0.03 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

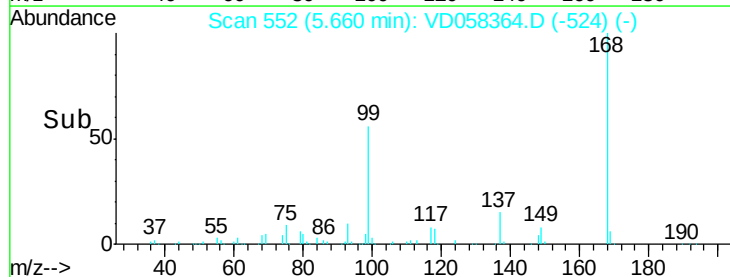
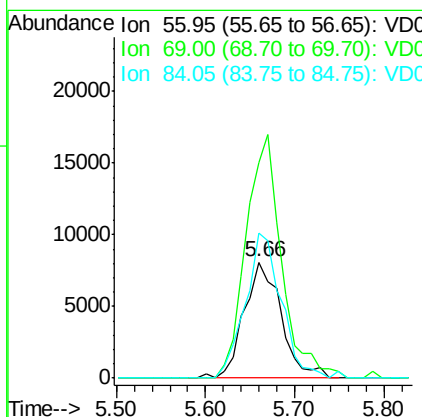
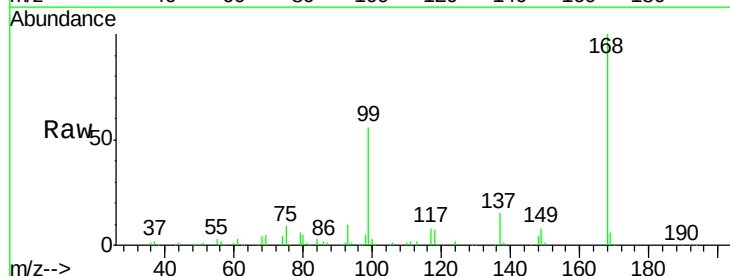
Instrument :  
MSVOA\_D  
ClientSampleId :

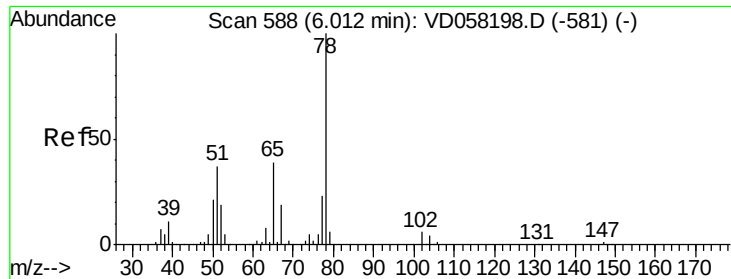
Tot Ion: 42 Resp: 2250  
Ion Ratio Lower Upper  
42 100  
72 20.9 30.2 45.2#  
71 15.0 30.1 45.1#



#31  
Cyclohexane  
Concen: Below Cal  
RT: 5.66 min Scan# 552  
Delta R.T. 0.07 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Tgt Ion: 56 Resp: 23214  
Ion Ratio Lower Upper  
56 100  
69 186.4 23.6 35.4#  
84 125.9 65.2 97.8#

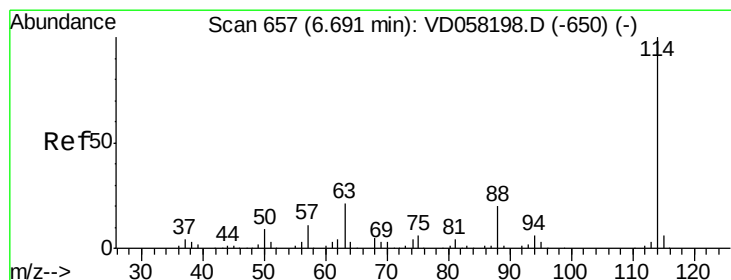
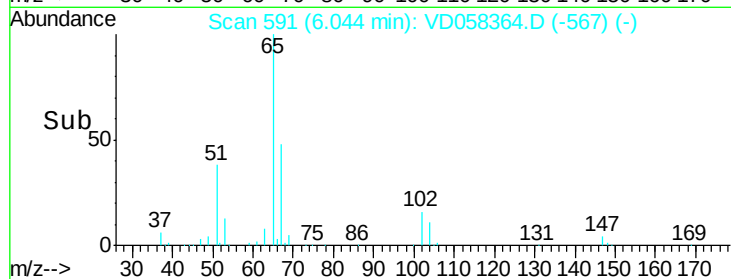
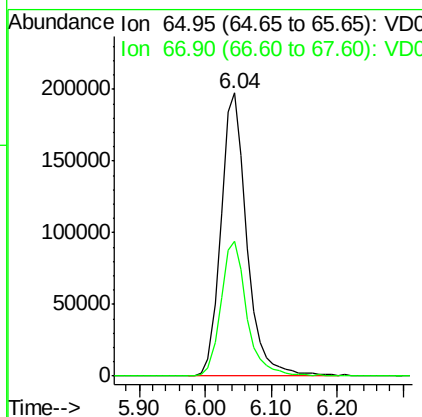
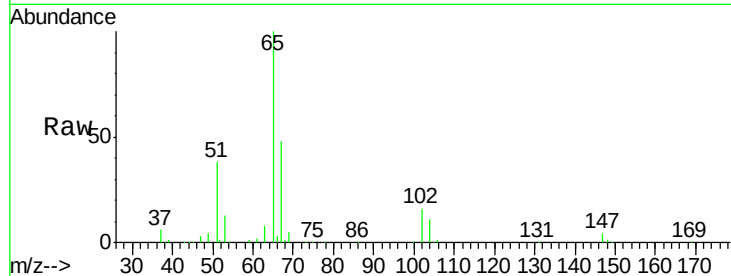




#33  
 1,2-Dichloroethane-d4  
 Concen: Below ug/l  
 RT: 6.04 min Scan# 591  
 Delta R.T. 0.03 min  
 Lab File: VD058364.D  
 Acq: 24 Jun 2018 11:31

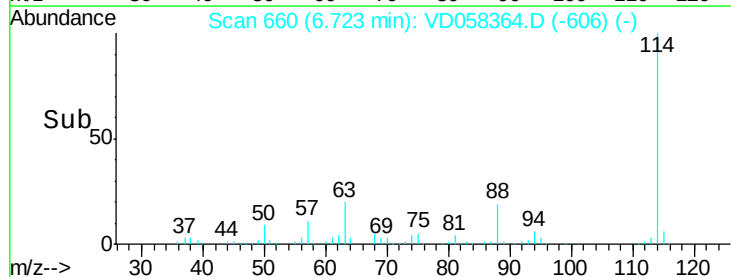
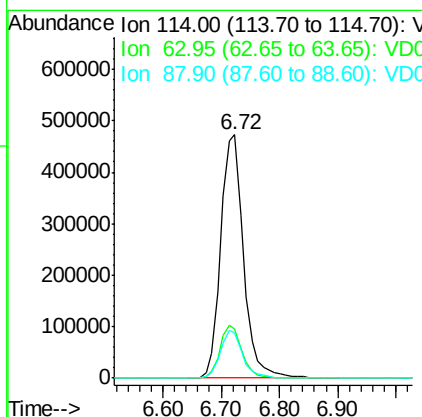
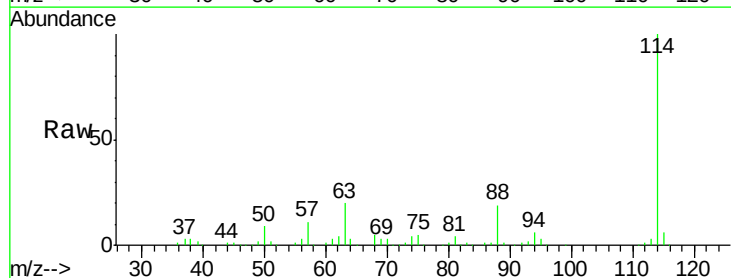
Instrument :  
 MSVOA\_D  
 ClientSampled :

Tot Ion: 65 Resp: 541593  
 Ion Ratio Lower Upper  
 65 100  
 67 47.9 0.0 97.8

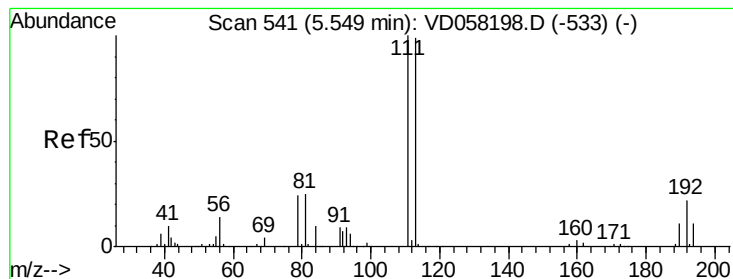


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.72 min Scan# 660  
 Delta R.T. 0.03 min  
 Lab File: VD058364.D  
 Acq: 24 Jun 2018 11:31

Tgt Ion: 114 Resp: 1283637  
 Ion Ratio Lower Upper  
 114 100  
 63 20.4 0.0 42.6  
 88 18.7 0.0 40.6







#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 5.57 min Scan# 543

Delta R.T. 0.02 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

Instrument :  
MSVOA\_D  
ClientSampleId :

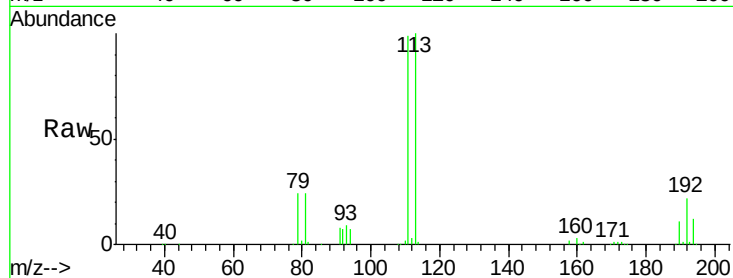
Tot Ion:113 Resp: 579895

Ion Ratio Lower Upper

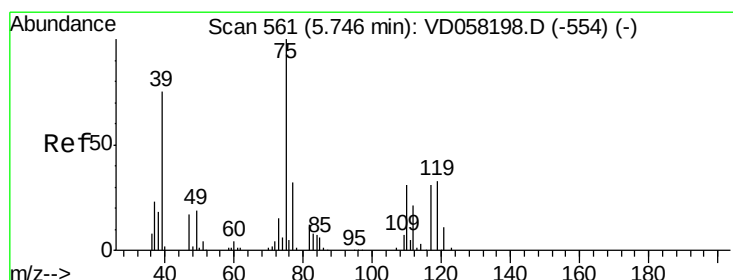
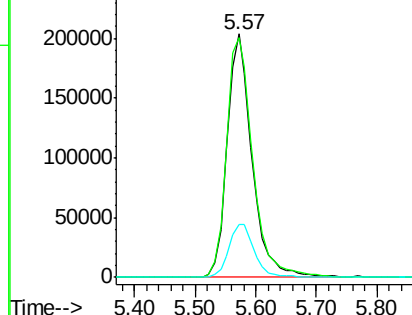
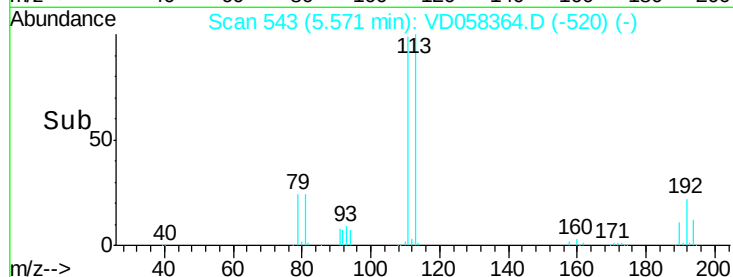
113 100

111 98.7 80.6 121.0

192 21.8 17.8 26.6



Abundance Ion 112.90 (112.60 to 113.60): V  
Ion 110.90 (110.60 to 111.60): V  
Ion 191.80 (191.50 to 192.50): V



#36

1,1-Dichloropropene

Concen: 6.936 ug/l

RT: 5.66 min Scan# 552

Delta R.T. -0.09 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

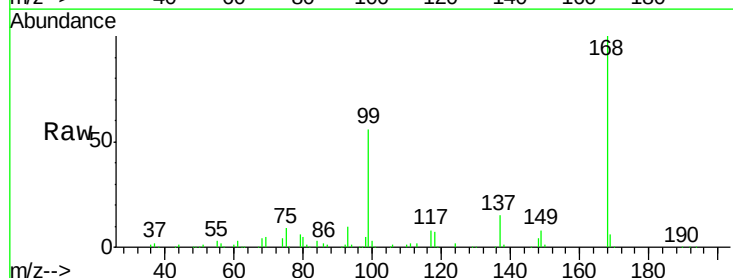
Tgt Ion: 75 Resp: 88071

Ion Ratio Lower Upper

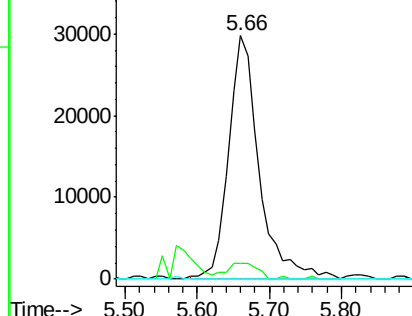
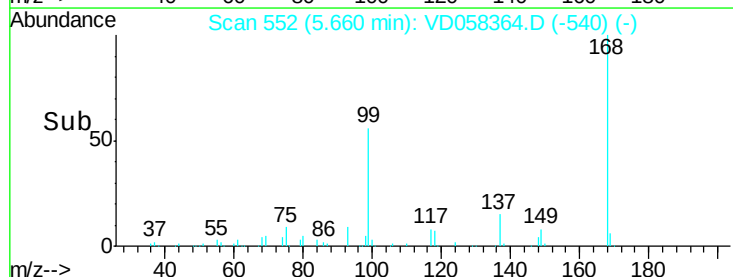
75 100

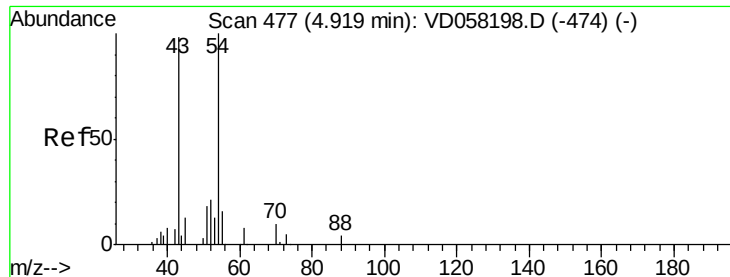
110 6.3 15.4 46.4#

77 0.0 25.4 38.2#



Abundance Ion 75.00 (74.70 to 75.70): VDC  
Ion 109.90 (109.60 to 110.60): V  
Ion 76.95 (76.65 to 77.65): VDC





#37

Ethyl Acetate

Concen: 1.288 ug/l

RT: 4.86 min Scan# 471

Delta R.T. -0.06 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

Instrument :

MSVOA\_D

ClientSampleId :

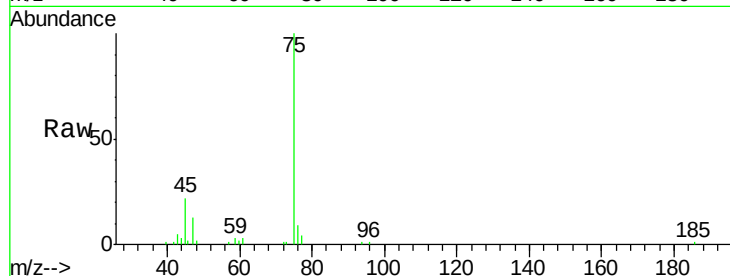
Tot Ion: 43 Resp: 9320

Ion Ratio Lower Upper

43 100

61 64.9 10.3 15.5#

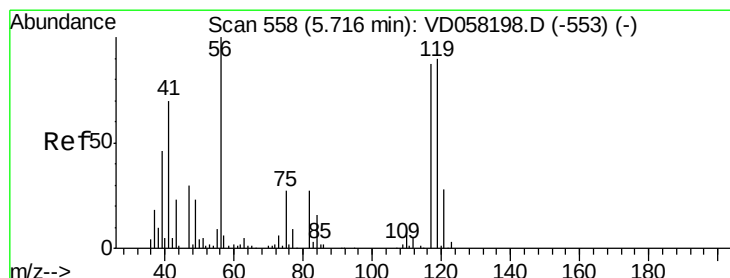
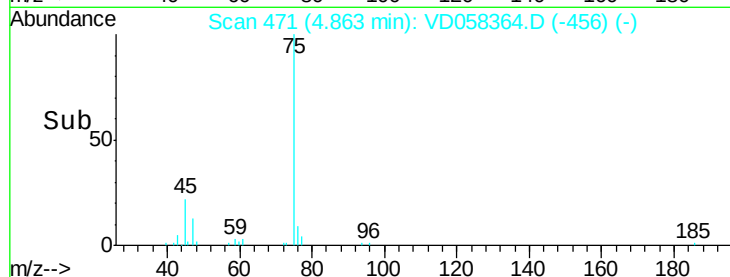
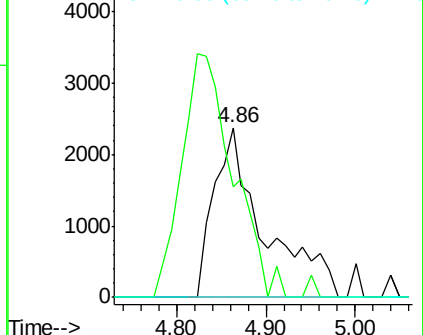
70 0.0 5.7 8.5#



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: 6.686 ug/l

RT: 5.67 min Scan# 553

Delta R.T. -0.05 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

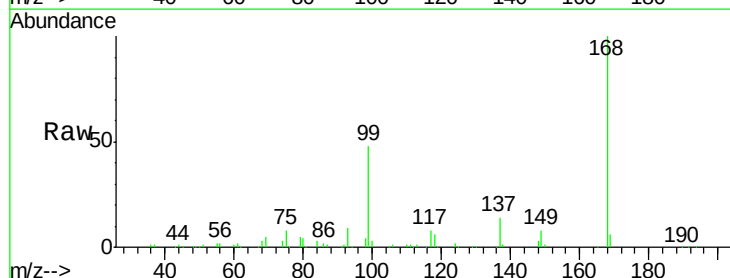
Tgt Ion: 117 Resp: 84354

Ion Ratio Lower Upper

117 100

119 3.2 78.8 118.2#

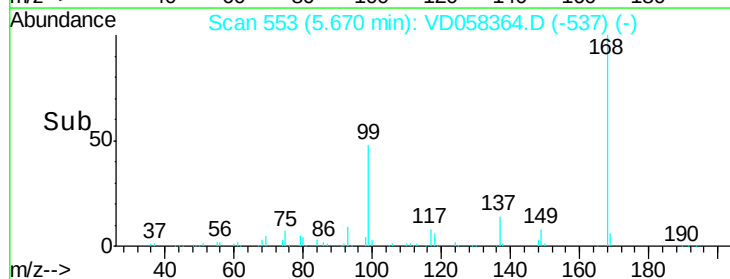
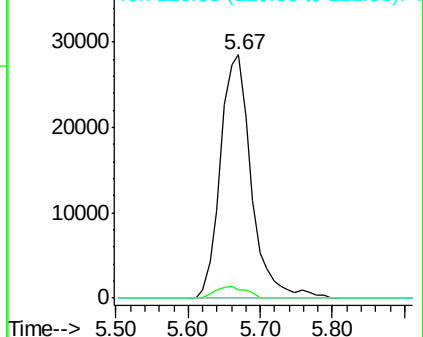
121 0.0 25.0 37.6#

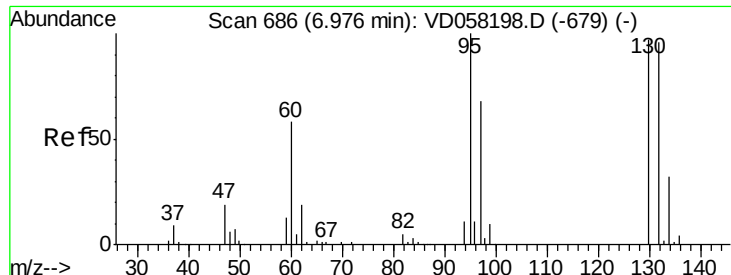


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V

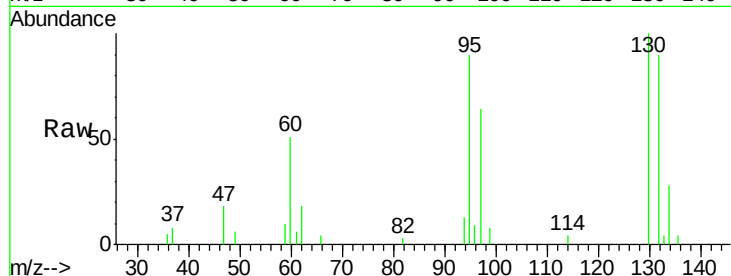




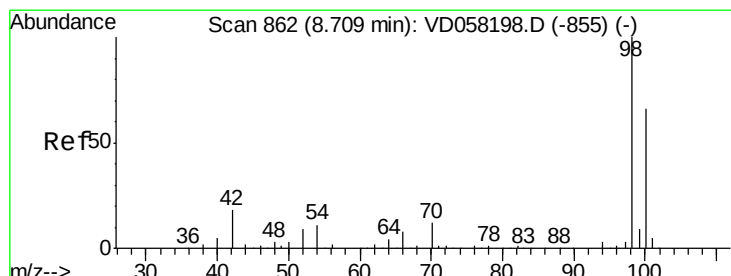
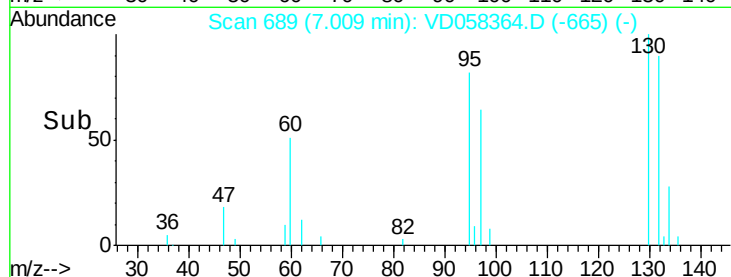
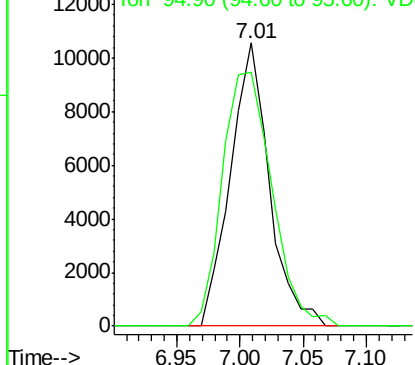
#44  
 Trichloroethene  
 Concen: 2.484 ug/l  
 RT: 7.01 min Scan# 689  
 Delta R.T. 0.03 min  
 Lab File: VD058364.D  
 Acq: 24 Jun 2018 11:31

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Tot Ion:130 Resp: 22566  
 Ion Ratio Lower Upper  
 130 100  
 95 89.8 0.0 205.6

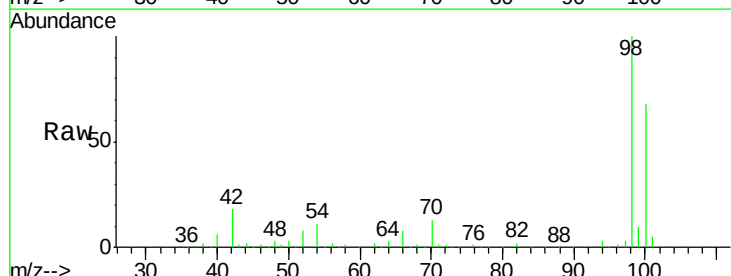


Abundance Ion 129.80 (129.50 to 130.50): V  
 Ion 94.90 (94.60 to 95.60): VDC

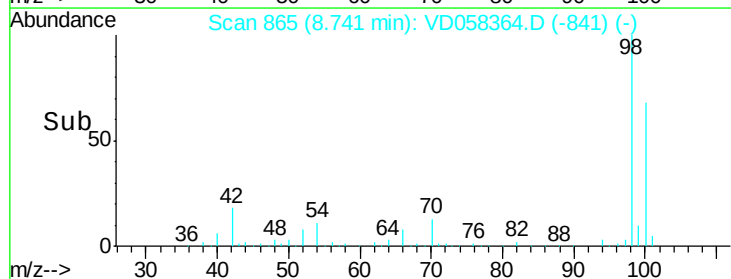
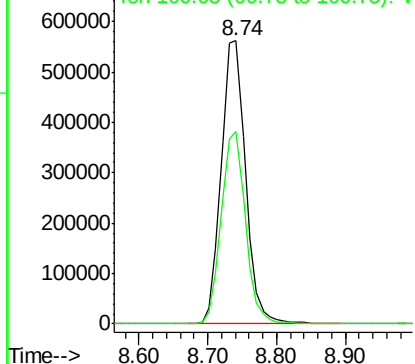


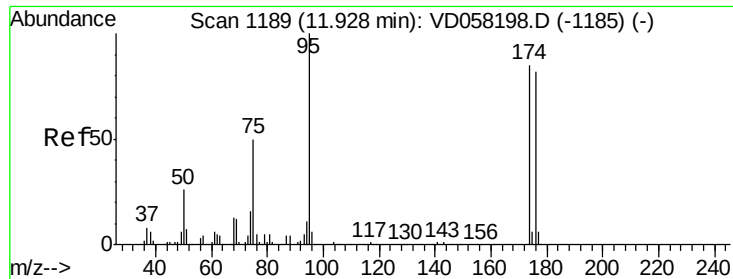
#50  
 Toluene-d8  
 Concen: N.D. ug/l  
 RT: 8.74 min Scan# 865  
 Delta R.T. 0.03 min  
 Lab File: VD058364.D  
 Acq: 24 Jun 2018 11:31

Tgt Ion: 98 Resp: 1378568  
 Ion Ratio Lower Upper  
 98 100  
 100 67.8 53.6 80.4



Abundance Ion 98.05 (97.75 to 98.75): VDC  
 Ion 100.05 (99.75 to 100.75): VDC

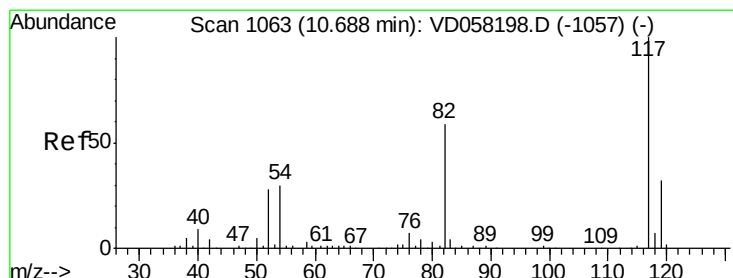
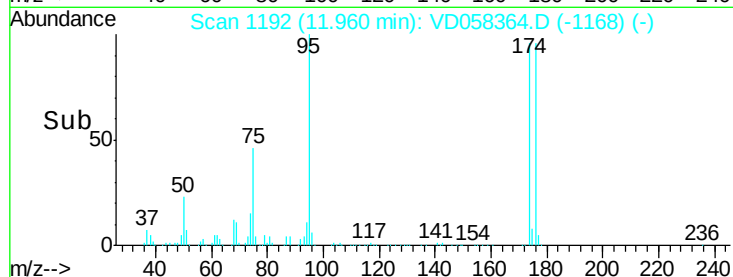
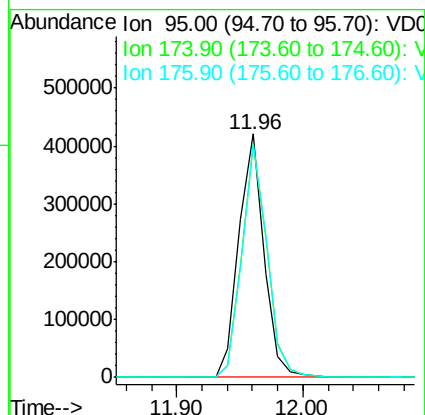
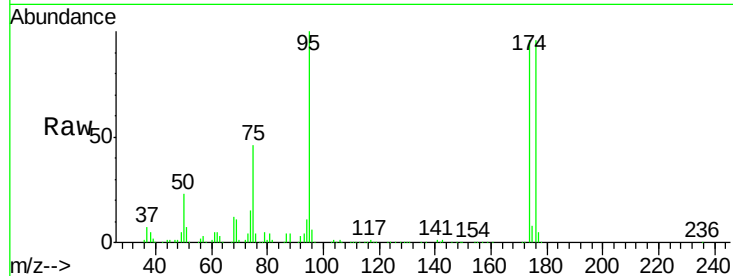




#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 11.96 min Scan# 1192  
Delta R.T. 0.03 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

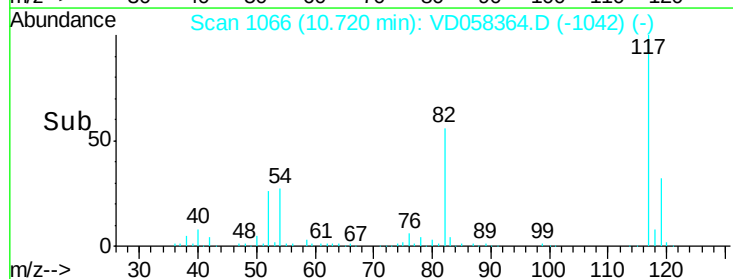
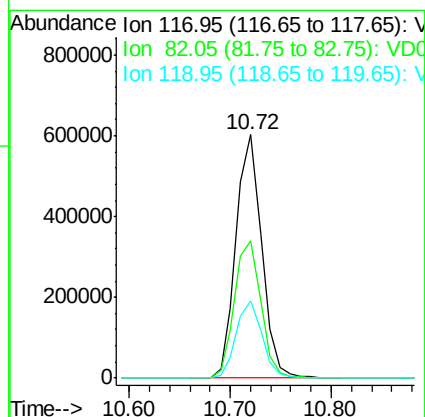
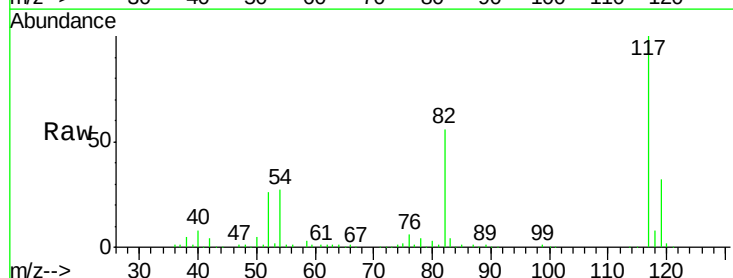
Instrument :  
MSVOA\_D  
ClientSampled :

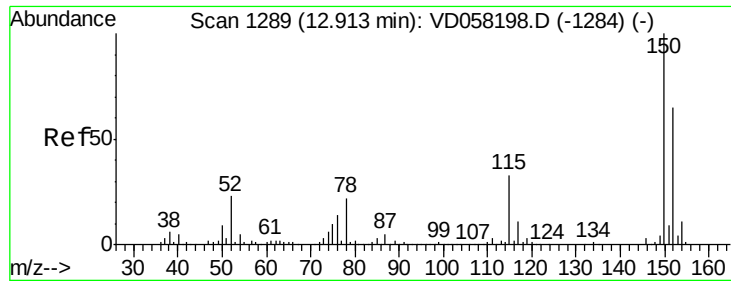
Tot Ion: 95 Resp: 576412  
Ion Ratio Lower Upper  
95 100  
174 95.7 0.0 170.2  
176 95.7 0.0 164.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.72 min Scan# 1066  
Delta R.T. 0.03 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Tgt Ion: 117 Resp: 1073430  
Ion Ratio Lower Upper  
117 100  
82 56.3 47.0 70.6  
119 31.8 25.3 37.9





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.93 min Scan# 1291

Delta R.T. 0.02 min

Lab File: VD058364.D

Acq: 24 Jun 2018 11:31

Instrument :

MSVOA\_D

ClientSampleId :

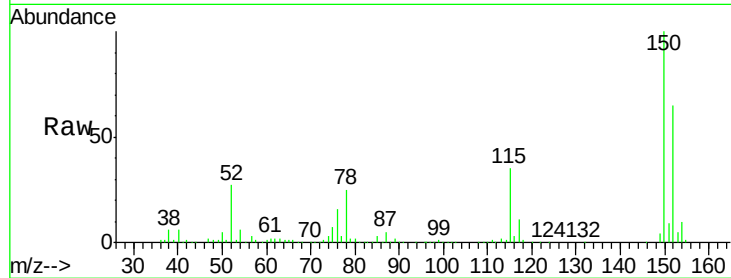
Tot Ion:152 Resp: 551110

Ion Ratio Lower Upper

152 100

115 53.5 25.1 75.3

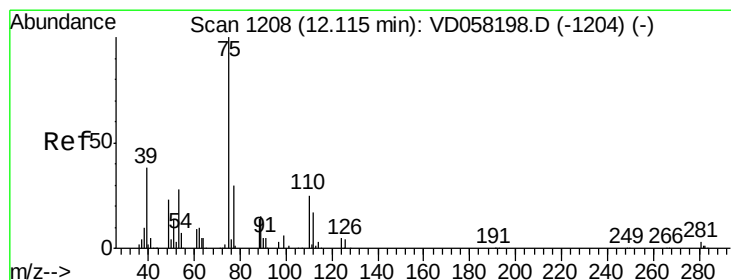
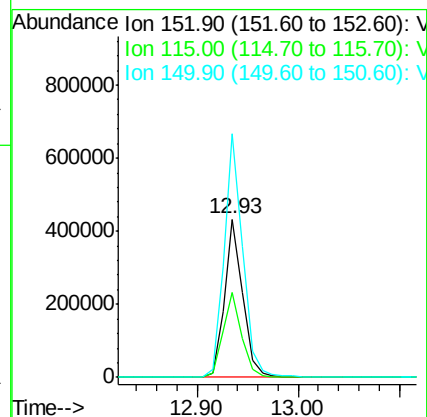
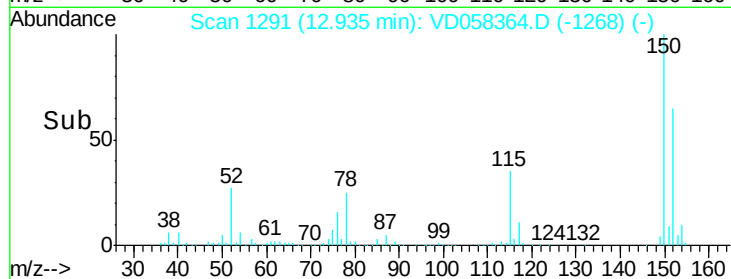
150 154.2 0.0 308.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 115.00 (114.70 to 115.70): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 34.073 ug/l

RT: 11.96 min Scan# 1192

Delta R.T. -0.15 min

Lab File: VD058364.D

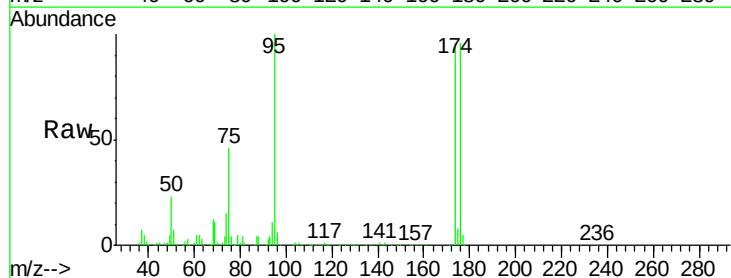
Acq: 24 Jun 2018 11:31

Tgt Ion: 75 Resp: 274166

Ion Ratio Lower Upper

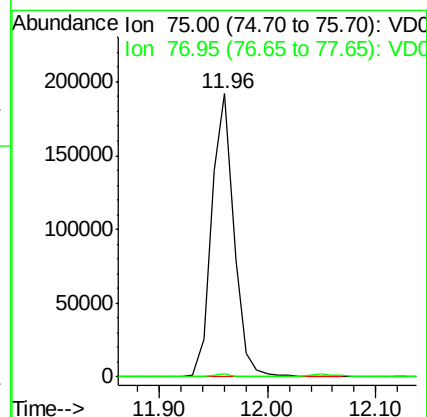
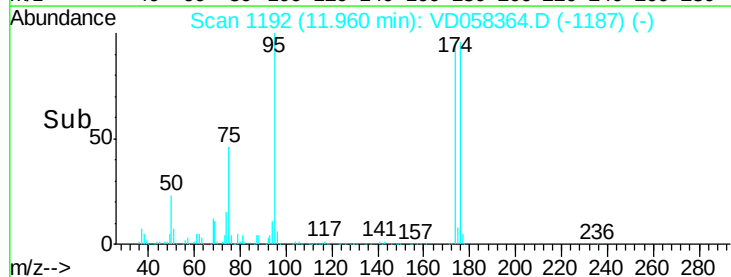
75 100

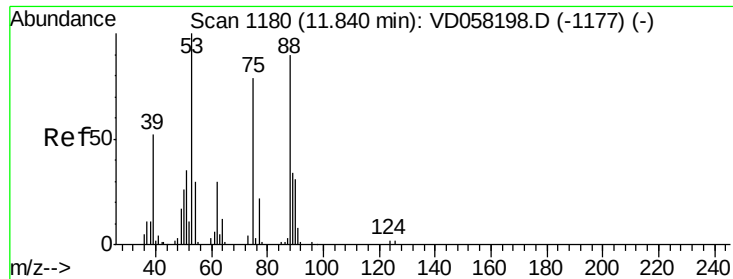
77 1.1 16.0 47.9#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 76.95 (76.65 to 77.65): VDC

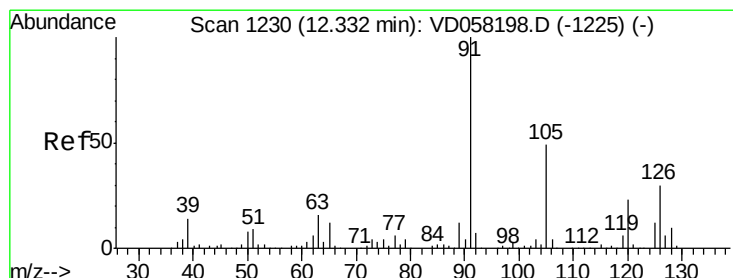
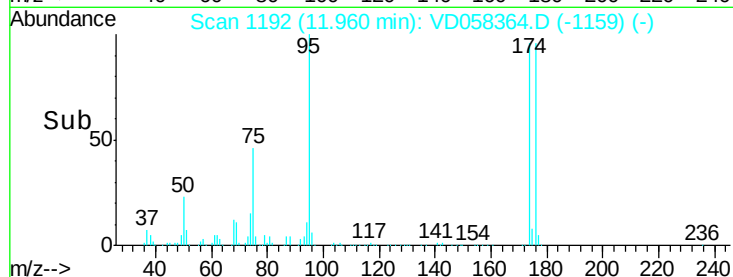
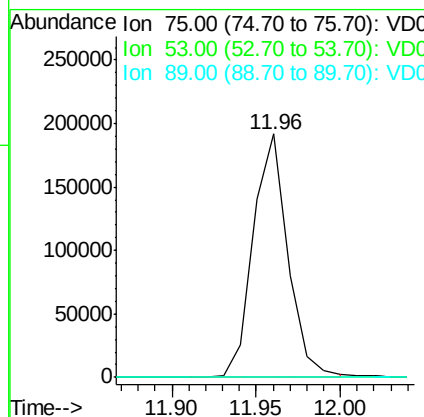
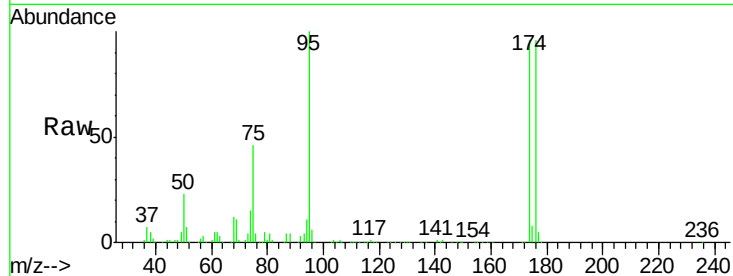




#81  
trans-1,4-Dichloro-2-butene  
Concen: 139.117 ug/l  
RT: 11.96 min Scan# 1192  
Delta R.T. 0.12 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 75 Resp: 273010  
Ion Ratio Lower Upper  
75 100  
53 0.0 100.8 151.2#  
89 0.0 34.6 52.0#



#82  
4-Chlorotoluene  
Concen: Below Cal  
RT: 12.35 min Scan# 1232  
Delta R.T. 0.02 min  
Lab File: VD058364.D  
Acq: 24 Jun 2018 11:31

Tgt Ion: 91 Resp: 2872  
Ion Ratio Lower Upper  
91 100  
126 20.6 14.9 44.9

