

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062818\  
 Data File : VD059466.D  
 Acq On : 28 Jun 2018 16:52  
 Operator : VA/AP  
 Sample : J3629-08RE  
 Misc : 4.92g/5ml/MSVOA D/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Jun 29 01:27:17 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D062518S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jun 25 07:29:35 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 487883   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.69  | 114  | 690829   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.69 | 117  | 437156   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.91 | 152  | 124944   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.02  | 65   | 370178   | 74.19 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 148.38% |          |
| 35) Dibromofluoromethane    | 5.56  | 113  | 371707   | 66.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 132.12% |          |
| 50) Toluene-d8              | 8.71  | 98   | 647114   | 49.19 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.38%  |          |
| 62) 4-Bromofluorobenzene    | 11.93 | 95   | 195677   | 35.76 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 71.52%  |          |

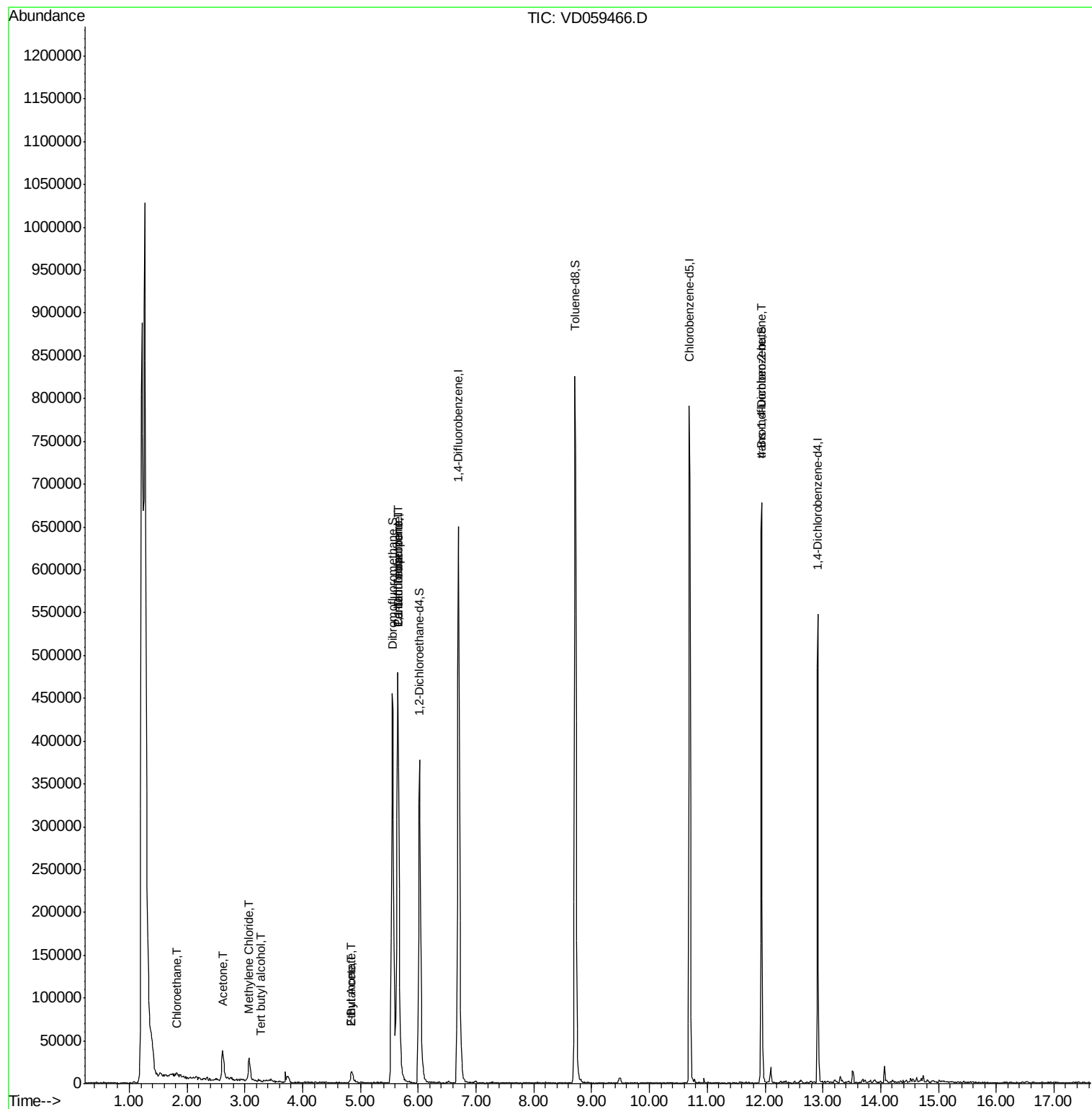
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.83  | 94   | 540      | Below Cal | #      | 4      |
| 6) Chloroethane                | 1.81  | 64   | 223      | 2.096     | ug/l # | 41     |
| 11) Tert butyl alcohol         | 3.27  | 59   | 221      | 1.280     | ug/l # | 72     |
| 16) Acetone                    | 2.62  | 43   | 76286    | 121.148   | ug/l   | 95     |
| 18) Methyl Acetate             | 2.94  | 43   | 3352     | Below Cal | #      | 66     |
| 20) Methylene Chloride         | 3.07  | 84   | 12598    | 4.967     | ug/l # | 95     |
| 25) 2-Butanone                 | 4.84  | 43   | 16111    | 12.214    | ug/l # | 90     |
| 31) Cyclohexane                | 5.64  | 56   | 10111    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 5.64  | 75   | 36558    | 5.834     | ug/l # | 51     |
| 37) Ethyl Acetate              | 4.84  | 43   | 16111    | 4.221     | ug/l # | 69     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 39470    | 6.109     | ug/l # | 16     |
| 81) trans-1,4-Dichloro-2-buten | 11.93 | 75   | 92902    | 237.167   | ug/l # | 1      |

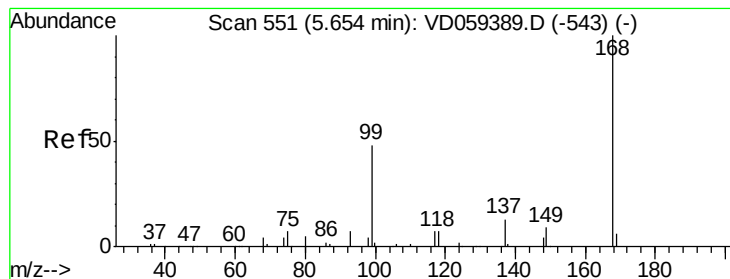
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD062818\  
Data File : VD059466.D  
Acq On : 28 Jun 2018 16:52  
Operator : VA/AP  
Sample : J3629-08RE  
Misc : 4.92g/5ml/MSVOA D/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Jun 29 01:27:17 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D062518S.M  
Quant Title : SW846 8260  
QLast Update : Mon Jun 25 07:29:35 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 551

Delta R.T. -0.00 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Instrument :

MSVOA\_D

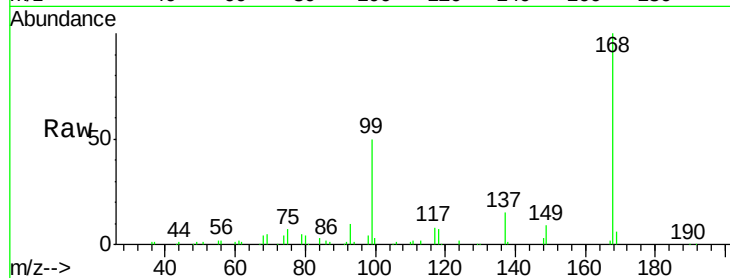
ClientSampleId :

Tot Ion:168 Resp: 487883

Ion Ratio Lower Upper

168 100

99 50.1 41.0 61.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

5.65

200000

150000

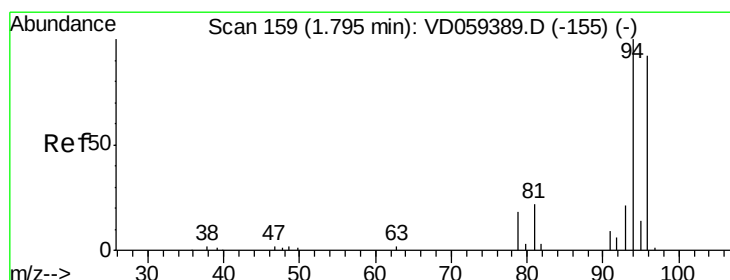
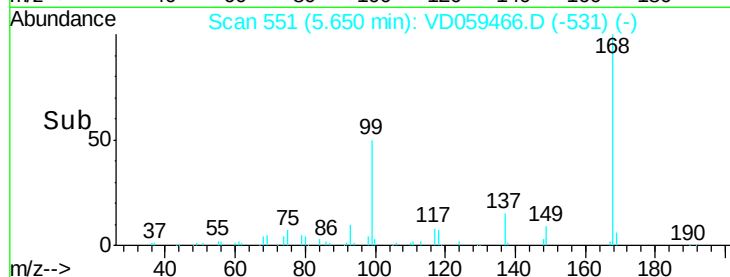
100000

50000

0

Time-->

5.50 5.60 5.70 5.80 5.90



#5

Bromomethane

Concen: Below Cal

RT: 1.83 min Scan# 163

Delta R.T. 0.04 min

Lab File: VD059466.D

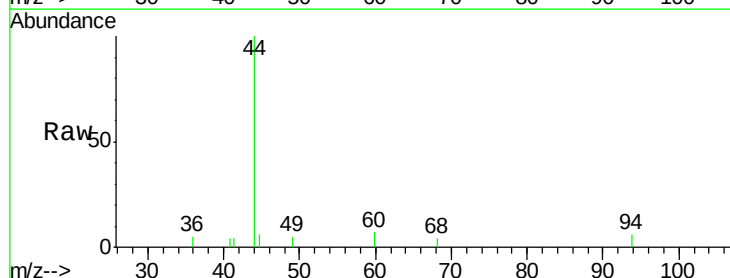
Acq: 28 Jun 2018 16:52

Tgt Ion: 94 Resp: 540

Ion Ratio Lower Upper

94 100

96 0.0 73.4 110.0#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC

600

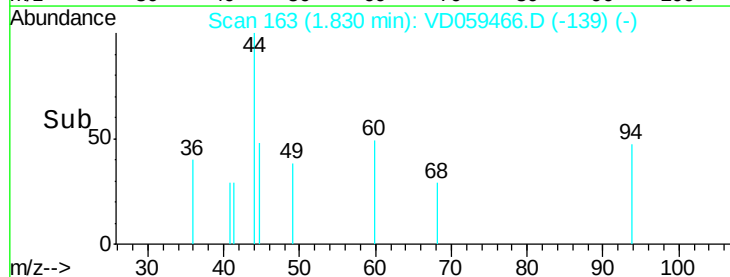
400

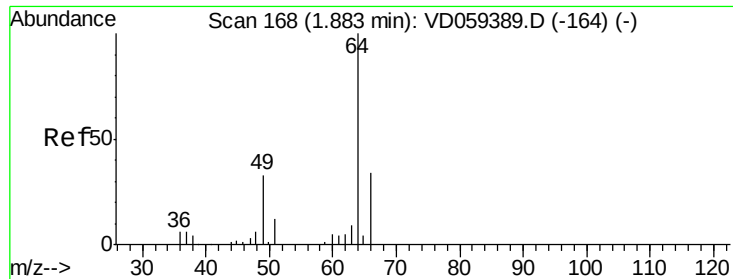
200

0

Time-->

1.78 1.80 1.82 1.84 1.86





#6

Chloroethane

Concen: 2.096 ug/l

RT: 1.81 min Scan# 161

Delta R.T. -0.07 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Instrument :

MSVOA\_D

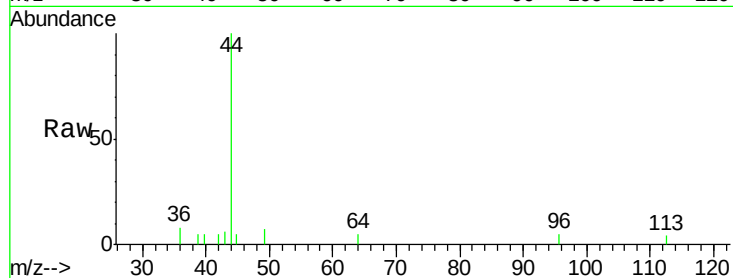
ClientSampleId :

Tot Ion: 64 Resp: 223

Ion Ratio Lower Upper

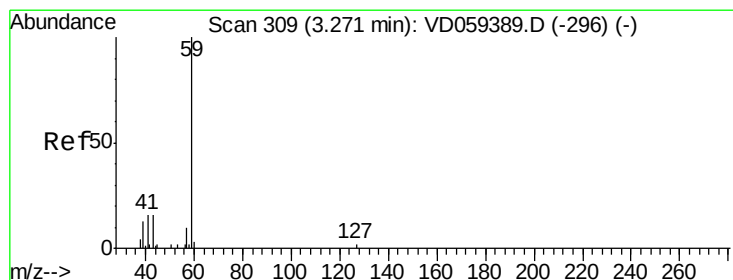
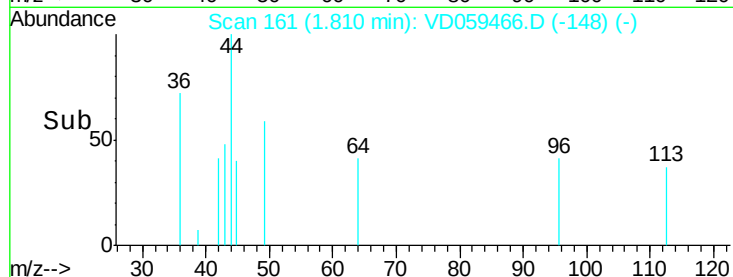
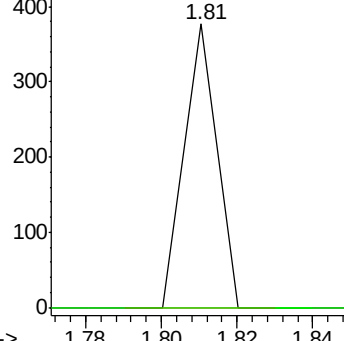
64 100

66 0.0 27.1 40.7#



Abundance Ion 63.95 (63.65 to 64.65): VDC

Ion 65.90 (65.60 to 66.60): VDC



#11

Tert butyl alcohol

Concen: 1.280 ug/l

RT: 3.27 min Scan# 309

Delta R.T. -0.00 min

Lab File: VD059466.D

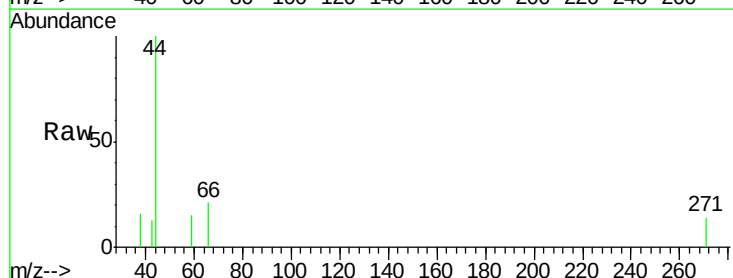
Acq: 28 Jun 2018 16:52

Tgt Ion: 59 Resp: 221

Ion Ratio Lower Upper

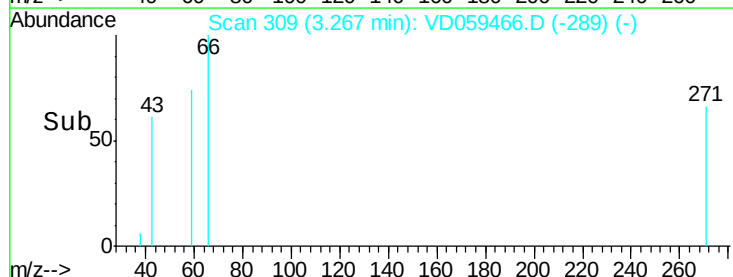
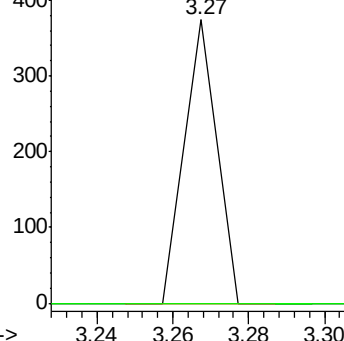
59 100

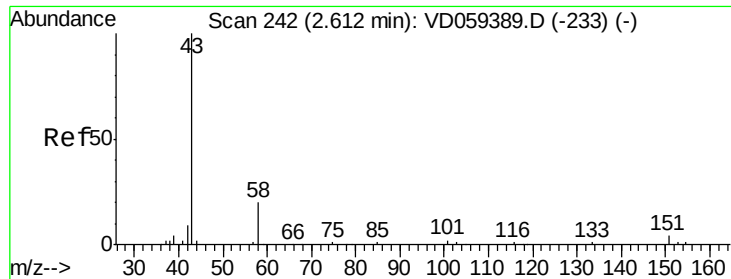
57 0.0 8.3 12.5#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#16

Acetone

Concen: 121.148 ug/l

RT: 2.62 min Scan# 243

Delta R.T. 0.01 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Instrument :

MSVOA\_D

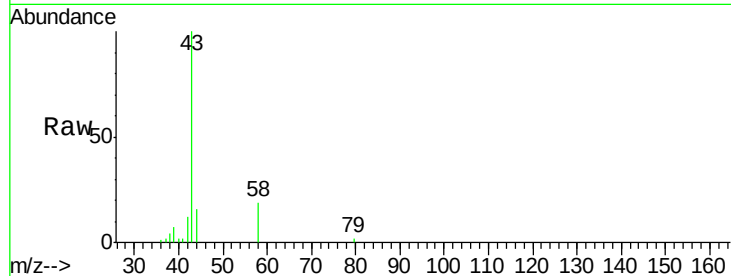
ClientSampleId :

Tot Ion: 43 Resp: 76286

Ion Ratio Lower Upper

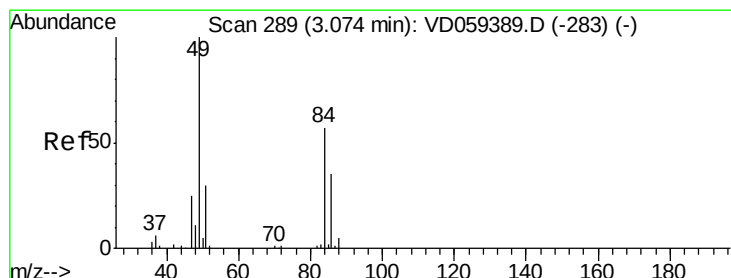
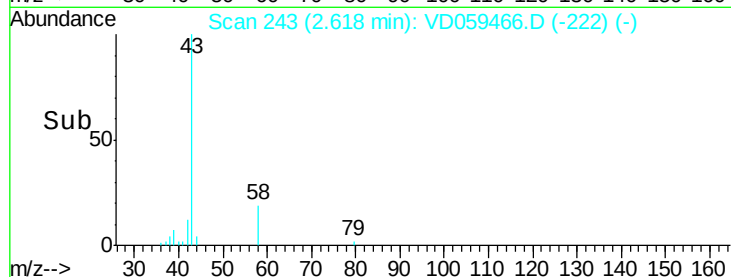
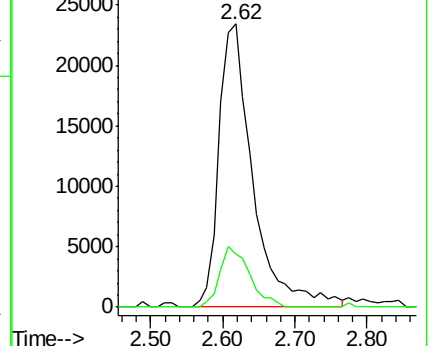
43 100

58 18.7 16.8 25.2



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#20

Methylene Chloride

Concen: 4.967 ug/l

RT: 3.07 min Scan# 289

Delta R.T. -0.00 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Tgt Ion: 84 Resp: 12598

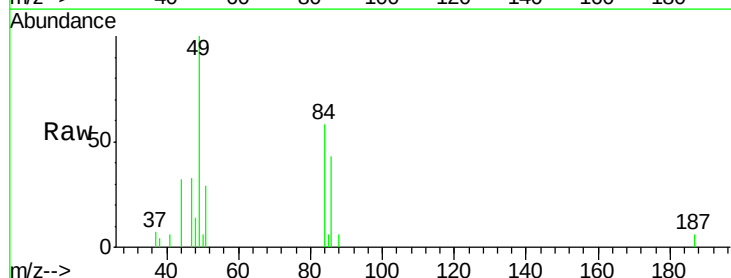
Ion Ratio Lower Upper

84 100

49 173.1 140.3 210.5

51 51.0 41.6 62.4

86 75.1 49.4 74.2#

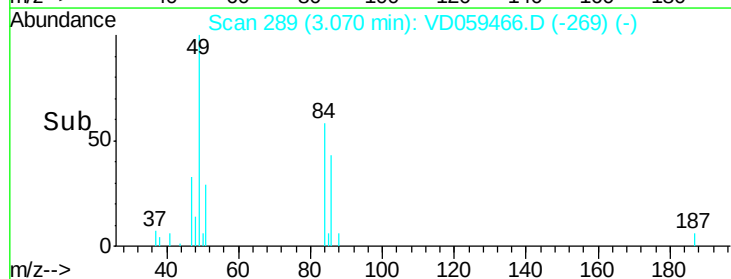
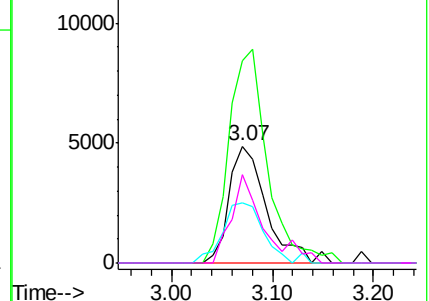


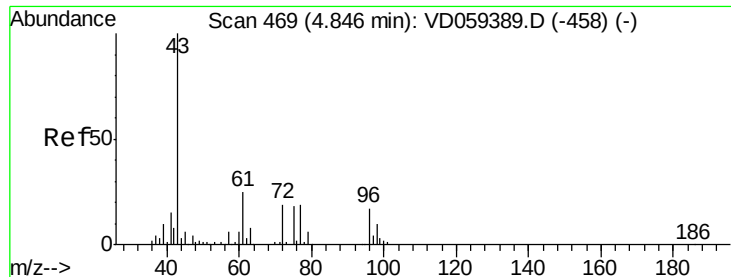
Abundance Ion 83.95 (83.65 to 84.65): VDC

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: 12.214 ug/l

RT: 4.84 min Scan# 469

Delta R.T. -0.00 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Instrument :

MSVOA\_D

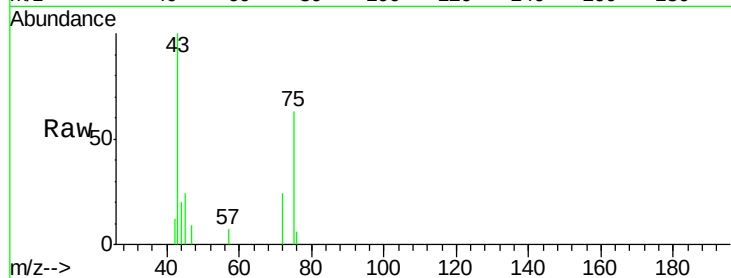
ClientSampleId :

Tot Ion: 43 Resp: 16111

Ion Ratio Lower Upper

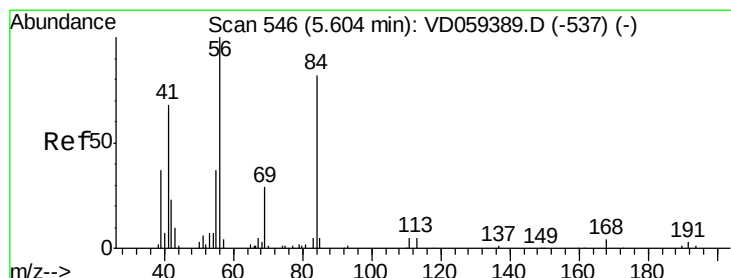
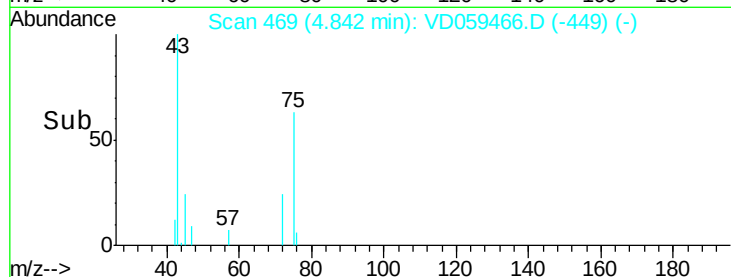
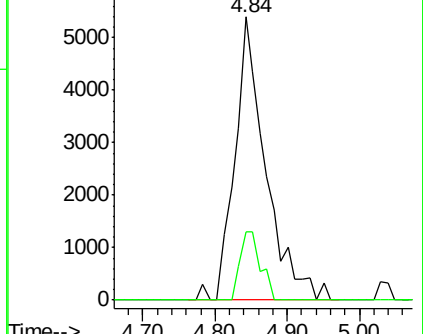
43 100

72 23.9 15.4 23.2#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC



#31

Cyclohexane

Concen: Below Cal

RT: 5.64 min Scan# 550

Delta R.T. 0.04 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

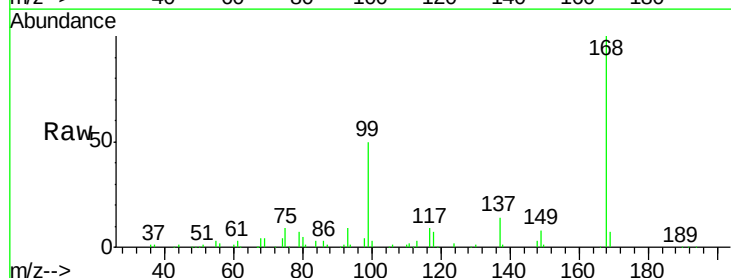
Tgt Ion: 56 Resp: 10111

Ion Ratio Lower Upper

56 100

69 182.4 22.9 34.3#

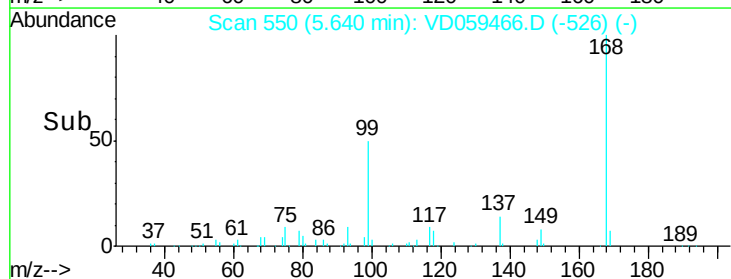
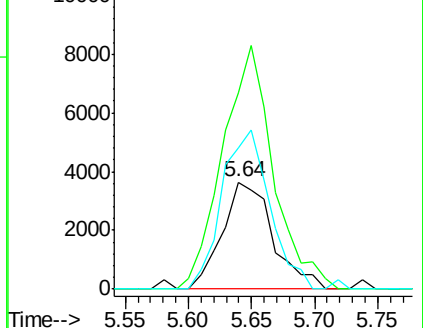
84 131.6 67.3 100.9#

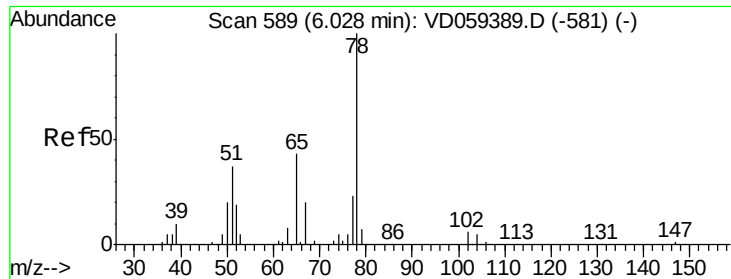


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.05 (83.75 to 84.75): VDC

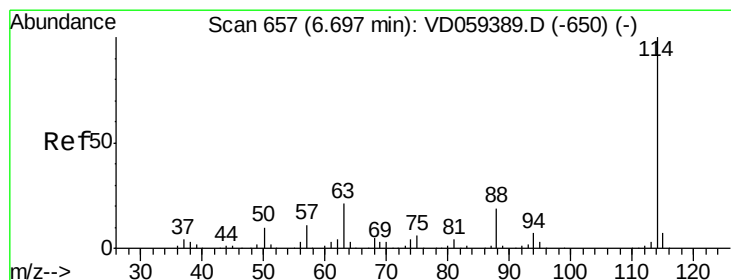
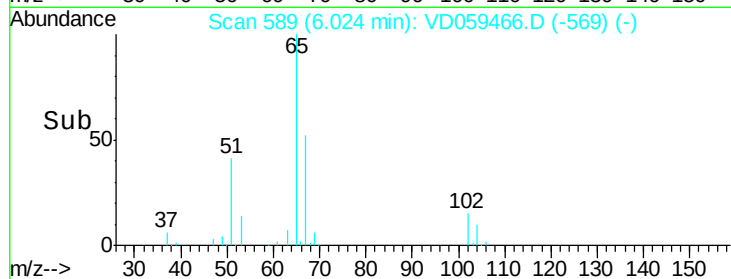
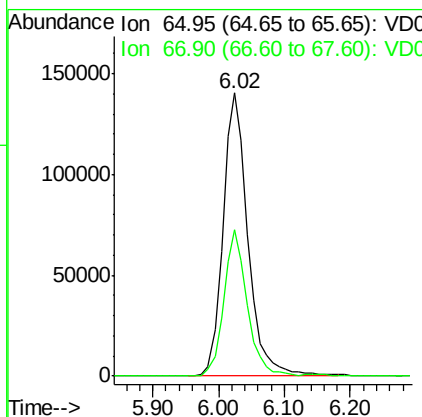
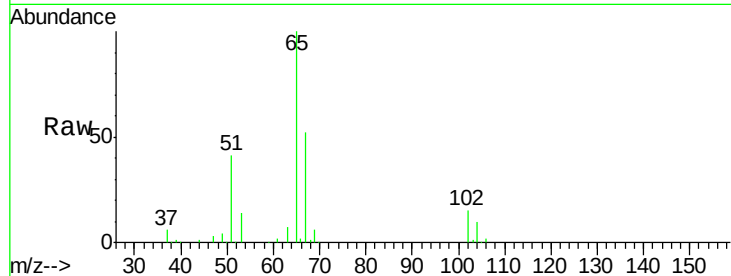




#33  
 1,2-Dichloroethane-d4  
 Concen: N.D. ug/l  
 RT: 6.02 min Scan# 589  
 Delta R.T. -0.00 min  
 Lab File: VD059466.D  
 Acq: 28 Jun 2018 16:52

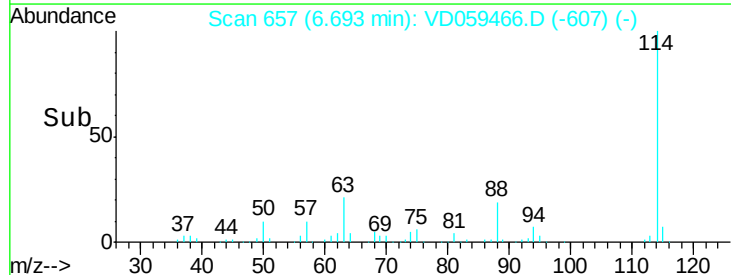
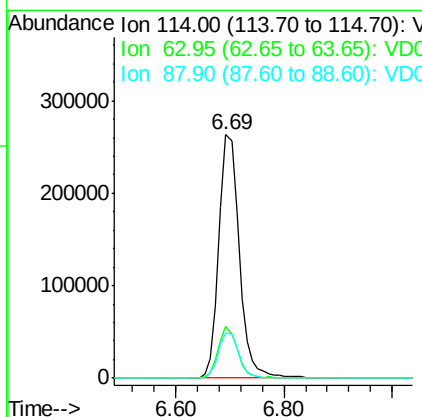
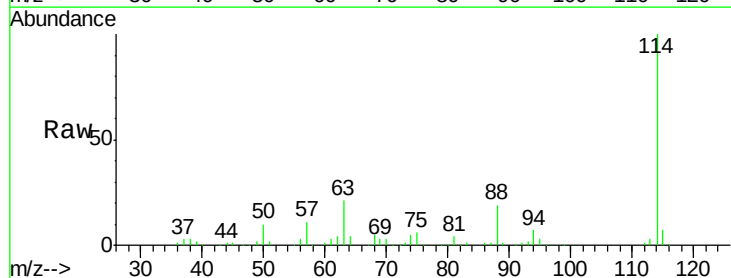
Instrument :  
 MSVOA\_D  
 ClientSampled :

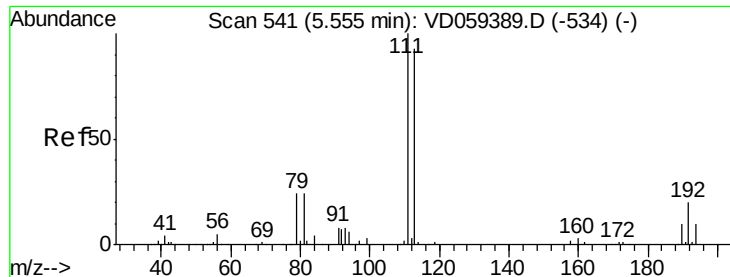
Tot Ion: 65 Resp: 370178  
 Ion Ratio Lower Upper  
 65 100  
 67 51.7 0.0 93.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.69 min Scan# 657  
 Delta R.T. -0.00 min  
 Lab File: VD059466.D  
 Acq: 28 Jun 2018 16:52

Tgt Ion: 114 Resp: 690829  
 Ion Ratio Lower Upper  
 114 100  
 63 21.1 0.0 42.4  
 88 18.6 0.0 38.0

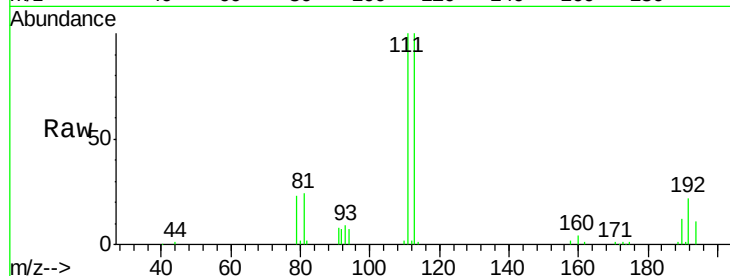




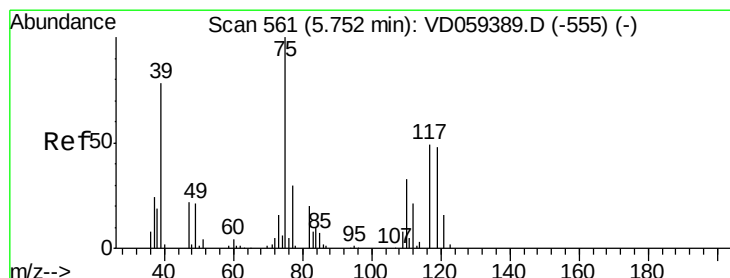
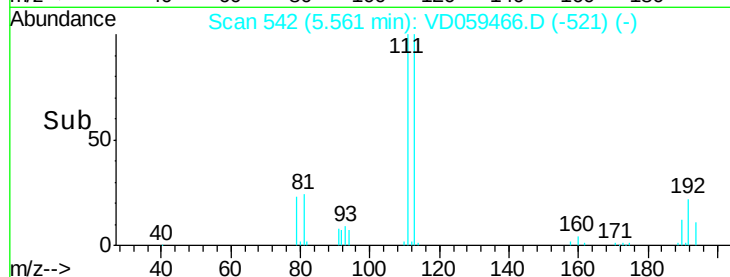
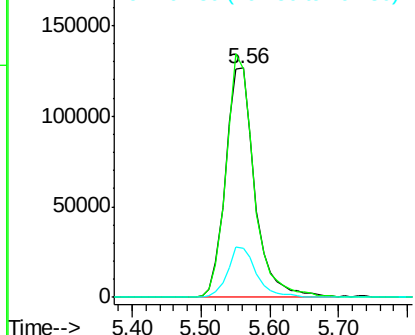
#35  
Dibromofluoromethane  
Concen: 50.000 ug/l  
RT: 5.56 min Scan# 542  
Delta R.T. 0.01 min  
Lab File: VD059466.D  
Acq: 28 Jun 2018 16:52

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:113 Resp: 371707  
Ion Ratio Lower Upper  
113 100  
111 99.7 85.7 128.5  
192 21.6 16.9 25.3

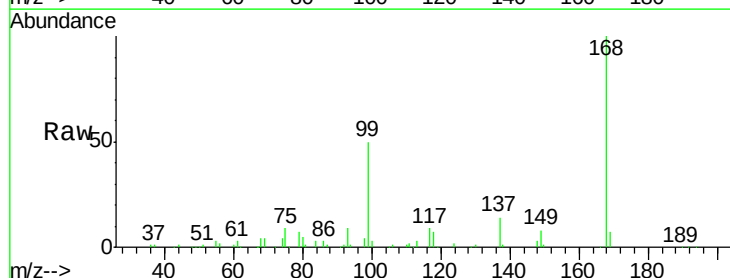


Abundance Ion 112.90 (112.60 to 113.60): V  
Ion 110.90 (110.60 to 111.60): V  
Ion 191.80 (191.50 to 192.50): V

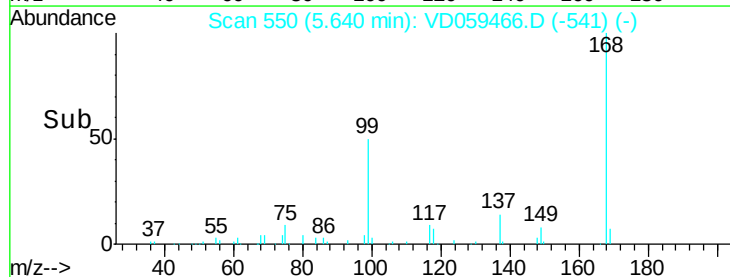
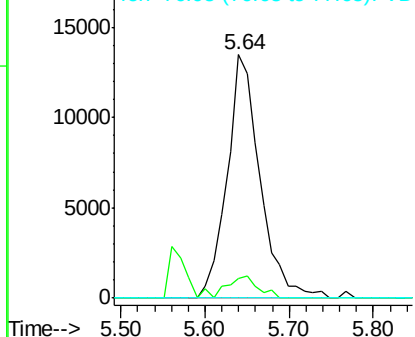


#36  
1,1-Dichloropropene  
Concen: 5.834 ug/l  
RT: 5.64 min Scan# 550  
Delta R.T. -0.11 min  
Lab File: VD059466.D  
Acq: 28 Jun 2018 16:52

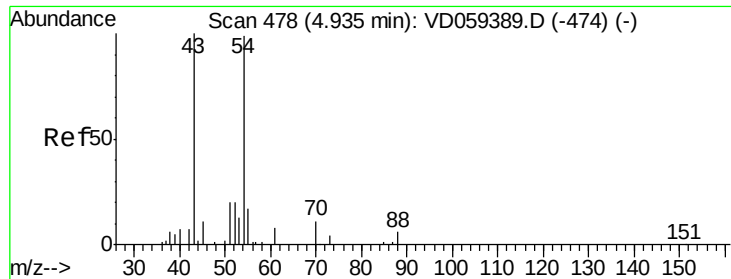
Tgt Ion: 75 Resp: 36558  
Ion Ratio Lower Upper  
75 100  
110 7.8 16.1 48.2#  
77 0.0 23.4 35.2#



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



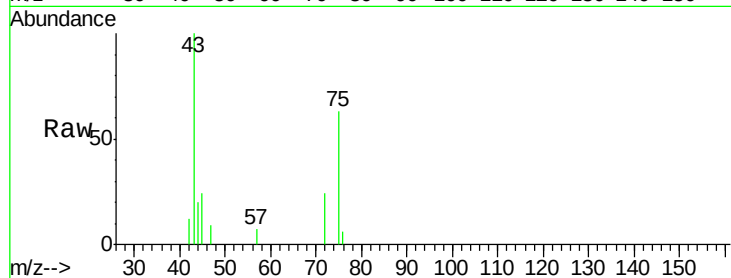




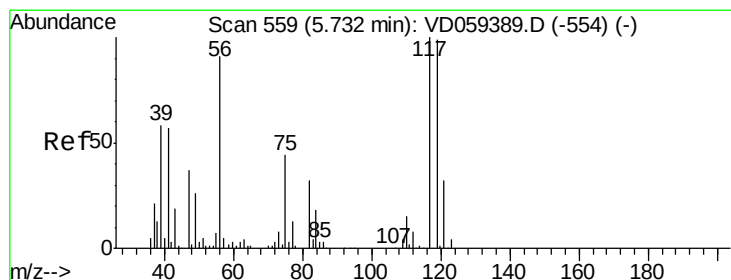
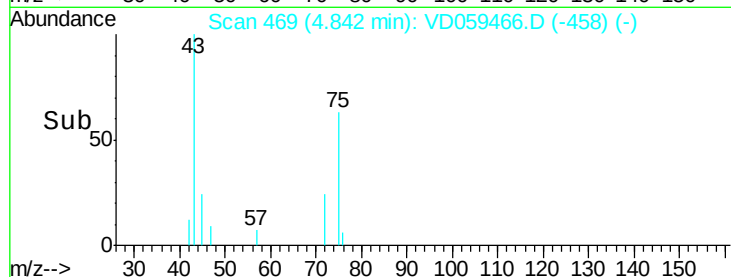
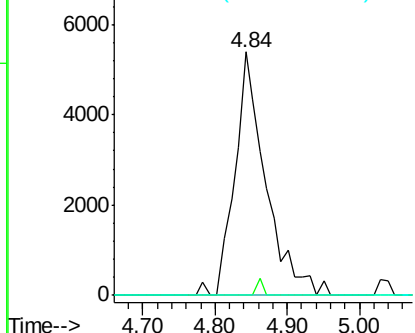
#37  
Ethyl Acetate  
Concen: 4.221 ug/l  
RT: 4.84 min Scan# 469  
Delta R.T. -0.09 min  
Lab File: VD059466.D  
Acq: 28 Jun 2018 16:52

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 43 Resp: 16111  
Ion Ratio Lower Upper  
43 100  
61 0.0 11.8 17.8#  
70 0.0 6.1 9.1#

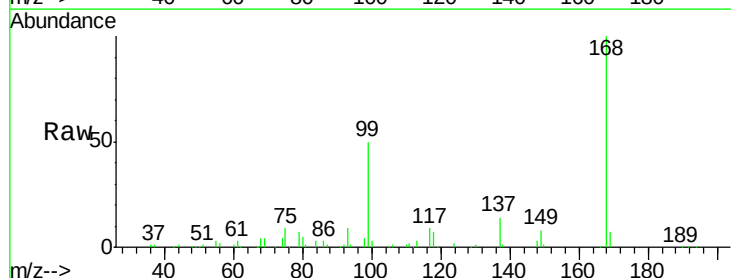


Abundance Ion 42.95 (42.65 to 43.65): VDC  
Ion 60.95 (60.65 to 61.65): VDC  
Ion 70.00 (69.70 to 70.70): VDC

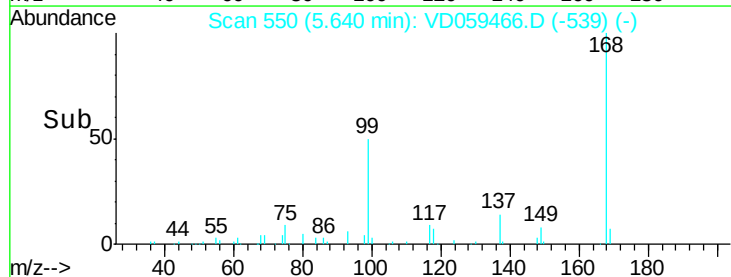
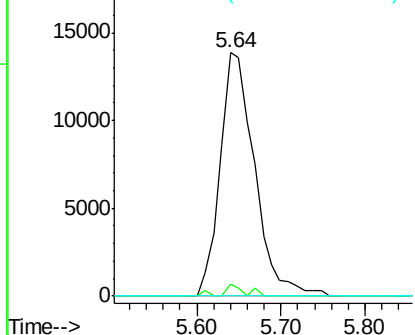


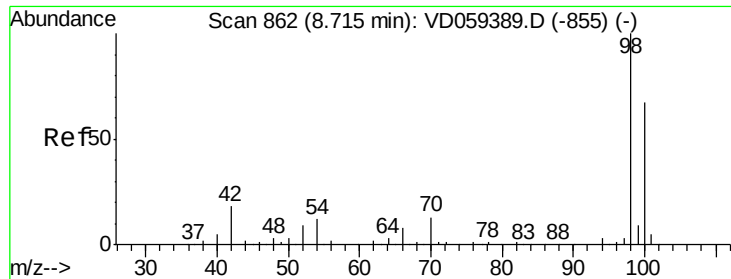
#38  
Carbon Tetrachloride  
Concen: 6.109 ug/l  
RT: 5.64 min Scan# 550  
Delta R.T. -0.09 min  
Lab File: VD059466.D  
Acq: 28 Jun 2018 16:52

Tgt Ion: 117 Resp: 39470  
Ion Ratio Lower Upper  
117 100  
119 4.6 76.6 115.0#  
121 0.0 25.0 37.4#



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: N.D. ug/l

RT: 8.71 min Scan# 862

Delta R.T. -0.00 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Instrument :

MSVOA\_D

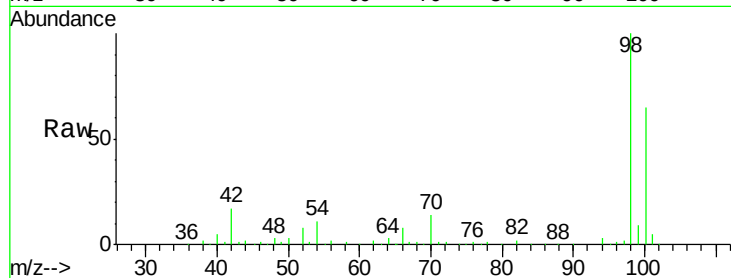
ClientSampleId :

Tot Ion: 98 Resp: 647114

Ion Ratio Lower Upper

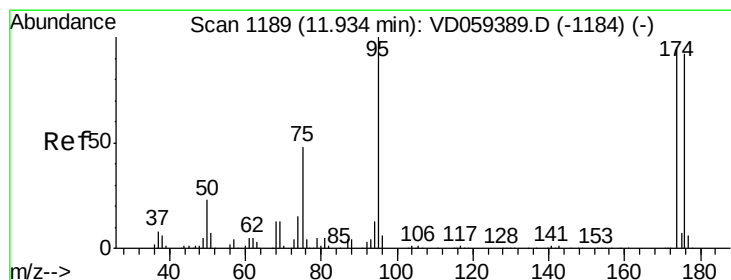
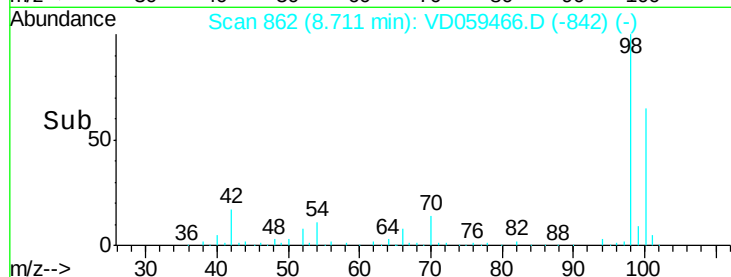
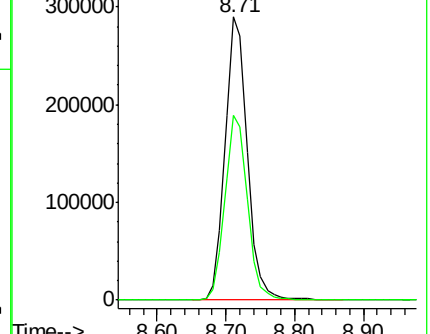
98 100

100 65.3 54.4 81.6



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: 11.93 min Scan# 1189

Delta R.T. -0.00 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

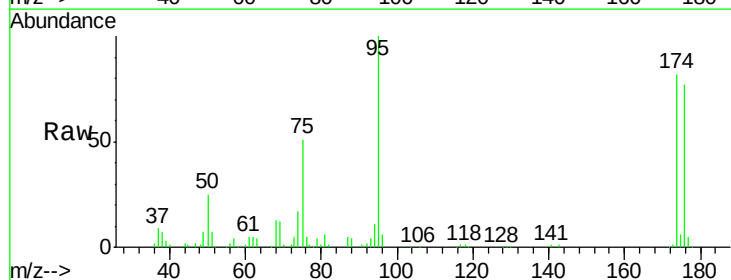
Tgt Ion: 95 Resp: 195677

Ion Ratio Lower Upper

95 100

174 81.7 0.0 190.4

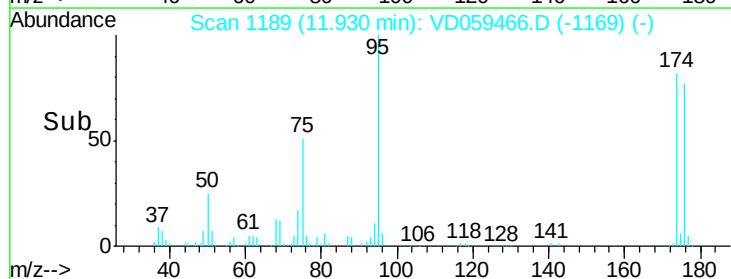
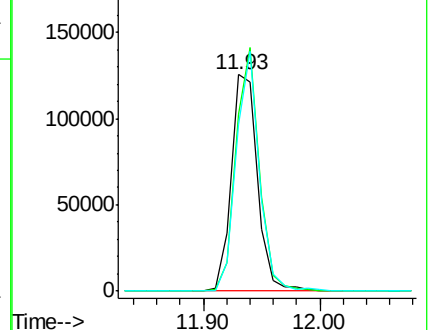
176 77.2 0.0 183.2

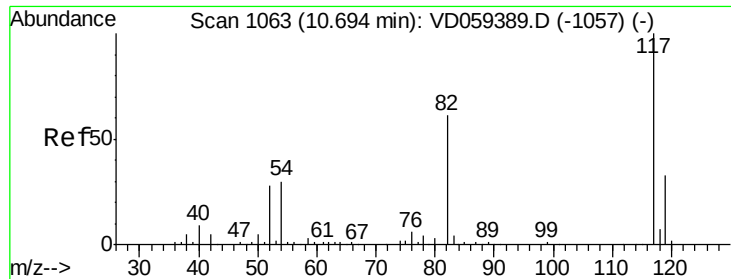


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): VDC

Ion 175.90 (175.60 to 176.60): VDC

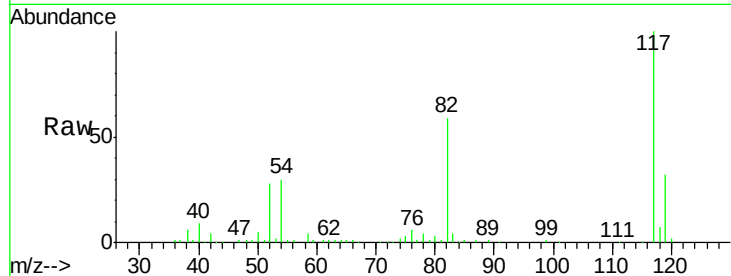




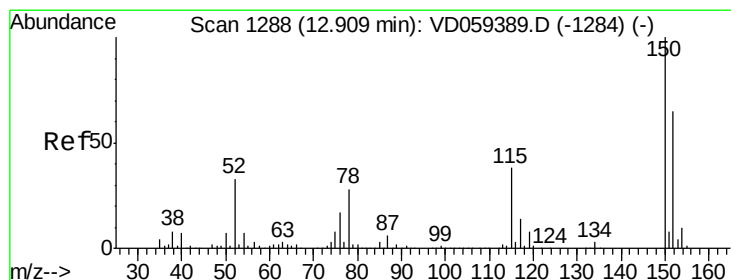
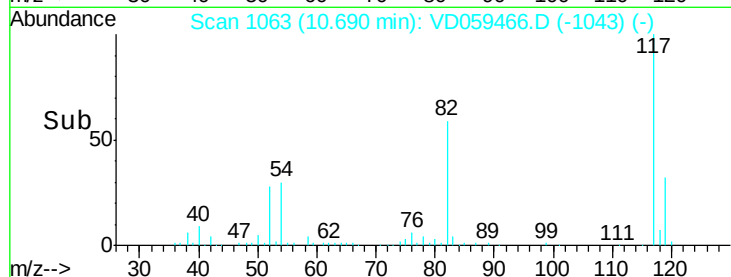
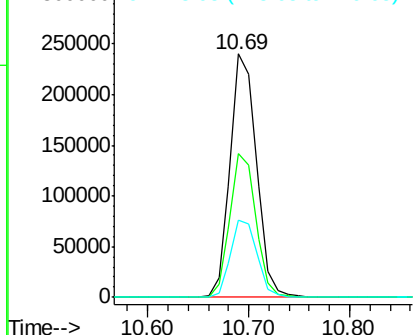
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.69 min Scan# 1063  
Delta R.T. -0.00 min  
Lab File: VD059466.D  
Acq: 28 Jun 2018 16:52

Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion:117 Resp: 437156  
Ion Ratio Lower Upper  
117 100  
82 59.2 49.0 73.6  
119 31.5 26.2 39.4

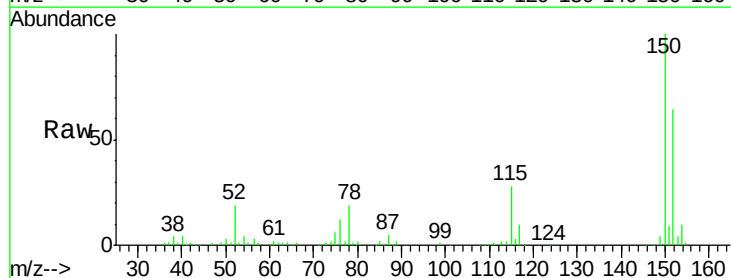


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

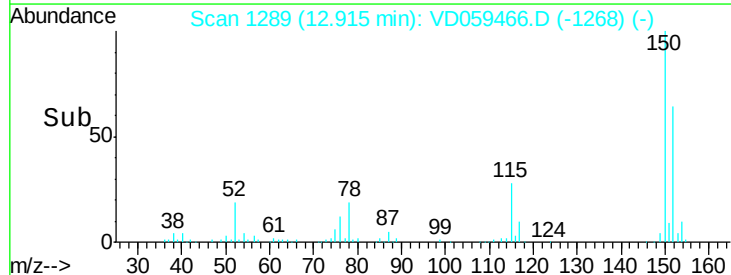
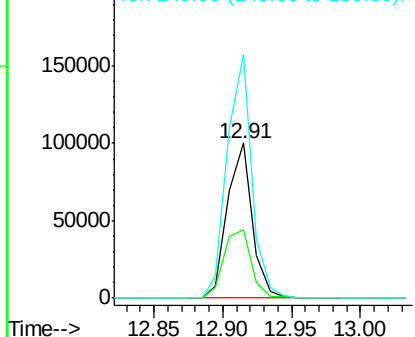


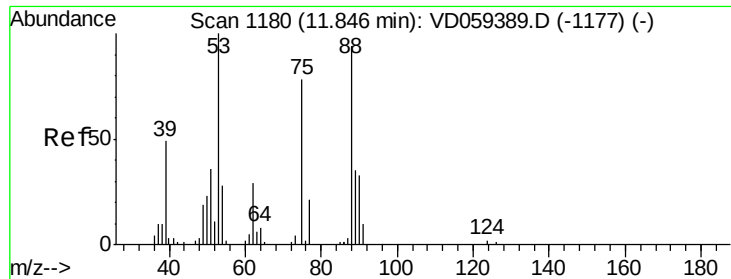
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.91 min Scan# 1289  
Delta R.T. 0.01 min  
Lab File: VD059466.D  
Acq: 28 Jun 2018 16:52

Tgt Ion:152 Resp: 124944  
Ion Ratio Lower Upper  
152 100  
115 44.2 29.4 88.3  
150 157.4 0.0 308.2



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





#81

trans-1,4-Dichloro-2-butene

Concen: 237.167 ug/l

RT: 11.93 min Scan# 1189

Delta R.T. 0.08 min

Lab File: VD059466.D

Acq: 28 Jun 2018 16:52

Instrument :

MSVOA\_D

ClientSampleId :

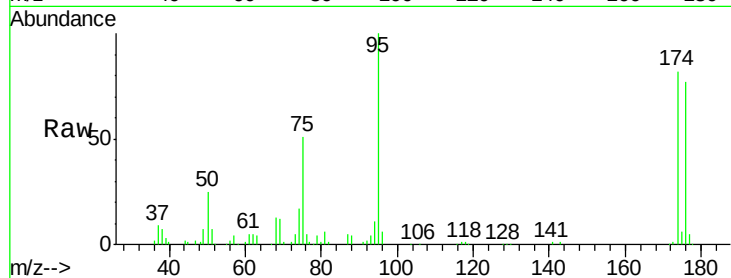
Tot Ion: 75 Resp: 92902

Ion Ratio Lower Upper

75 100

53 0.0 102.6 154.0#

89 0.0 35.9 53.9#



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

