

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062018\  
 Data File : VD058230.D  
 Acq On : 21 Jun 2018 2:41  
 Operator : VA/AP  
 Sample : J3245-11  
 Misc : 5.82g/5ml/MSVOA D/SOIL  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 CL-02-061918-B

Quant Time: Jun 21 05:18:18 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      | 5.65  | 168  | 629104   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 6.70  | 114  | 860932   | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 10.70 | 117  | 599546   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 12.92 | 152  | 274903   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.03  | 65   | 380541   | 59.89 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 119.78% |          |
| 35) Dibromofluoromethane    | 5.56  | 113  | 368827   | 52.64 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 105.28% |          |
| 50) Toluene-d8              | 8.72  | 98   | 756308   | 44.61 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 89.22%  |          |
| 62) 4-Bromofluorobenzene    | 11.94 | 95   | 294040   | 42.46 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 84.92%  |          |

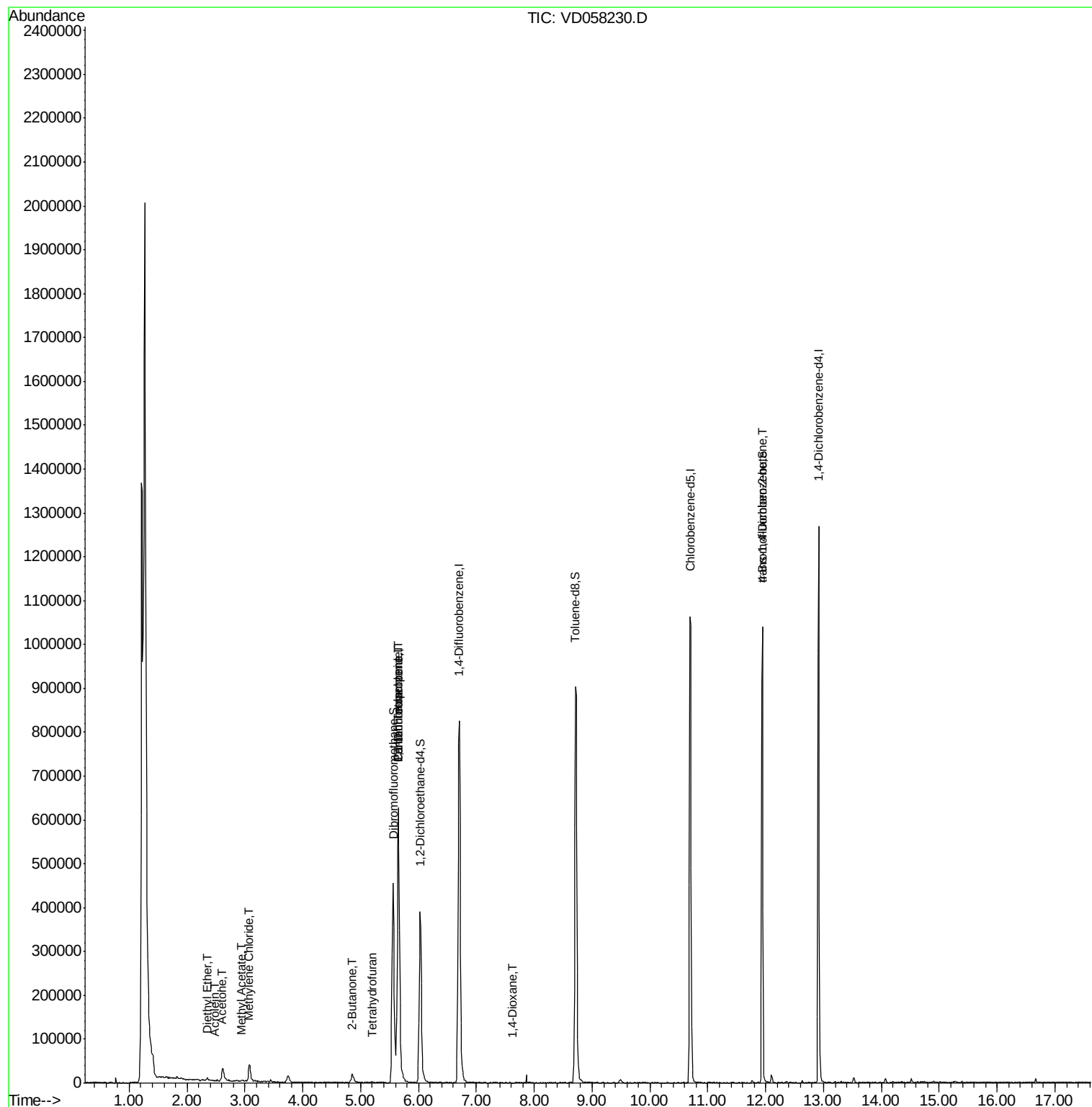
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 8) Diethyl Ether               | 2.34  | 74   | 1048     | 1.097     | ug/l   | 92     |
| 13) Acrolein                   | 2.47  | 56   | 269      | 2.248     | ug/l # | 11     |
| 16) Acetone                    | 2.61  | 43   | 58526    | 67.347    | ug/l # | 86     |
| 18) Methyl Acetate             | 2.94  | 43   | 4186     | 2.259     | ug/l # | 65     |
| 20) Methylene Chloride         | 3.07  | 84   | 19731    | 4.346     | ug/l   | 91     |
| 25) 2-Butanone                 | 4.86  | 43   | 5600     | 2.957     | ug/l # | 60     |
| 29) Tetrahydrofuran            | 5.21  | 42   | 2364     | 2.345     | ug/l # | 46     |
| 31) Cyclohexane                | 5.65  | 56   | 13879    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 50732    | 5.957     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 50627    | 5.983     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.61  | 88   | 183      | 5.156     | ug/l # | 26     |
| 81) trans-1,4-Dichloro-2-buten | 11.93 | 75   | 142200   | 145.264   | ug/l # | 1      |
| 82) 4-Chlorotoluene            | 12.33 | 91   | 751      | Below Cal | #      | 68     |

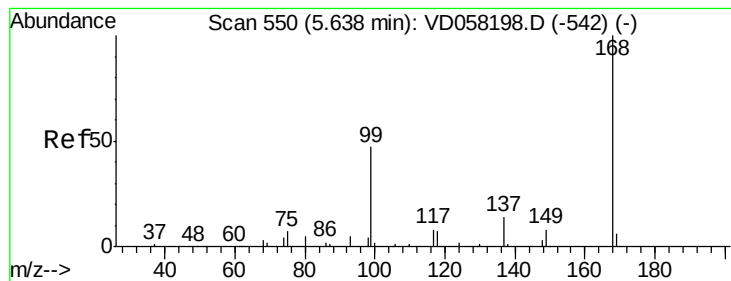
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD062018\  
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Sample : J3245-11  
Misc : 5.82g/5ml/MSVOA D/SOIL  
ALS Vial : 32 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-02-061918-B

Quant Time: Jun 21 05:18:18 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: 5.65 min Scan# 551

Delta R.T. 0.01 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

Instrument :

MSVOA\_D

ClientSampleId :

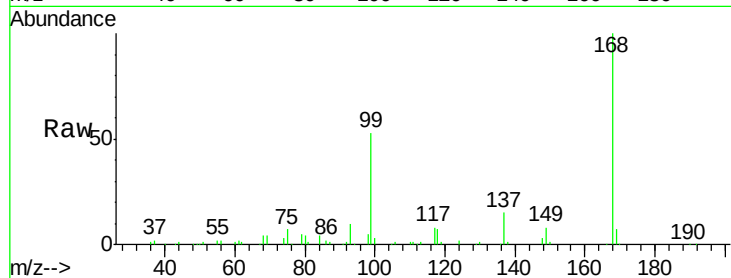
CL-02-061918-B

Tot Ion:168 Resp: 629104

Ion Ratio Lower Upper

168 100

99 53.1 41.1 61.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

5.65

250000

200000

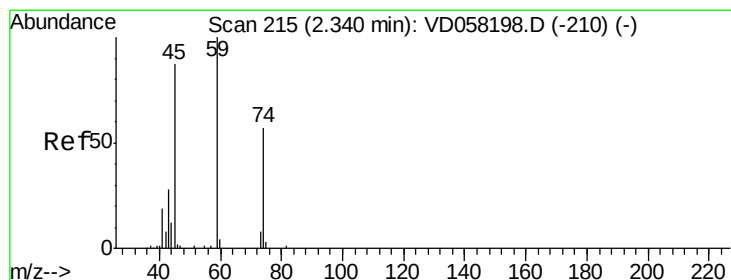
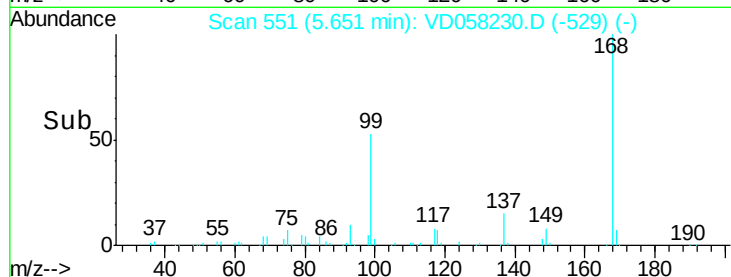
150000

100000

50000

0

Time-->



#8

Diethyl Ether

Concen: 1.097 ug/l

RT: 2.34 min Scan# 215

Delta R.T. 0.00 min

Lab File: VD058230.D

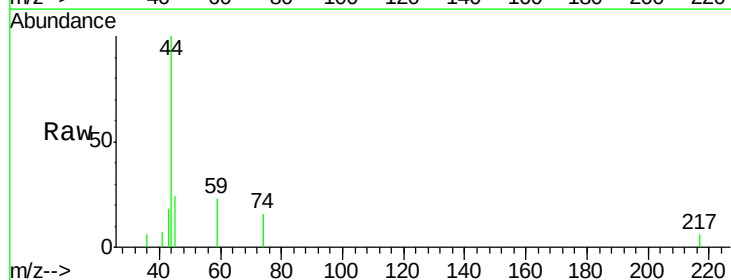
Acq: 21 Jun 2018 2:41

Tgt Ion: 74 Resp: 1048

Ion Ratio Lower Upper

74 100

45 144.8 77.5 232.6



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.05 (44.75 to 45.75): VDC

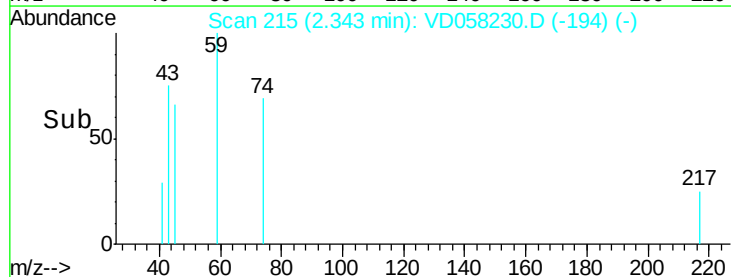
1500

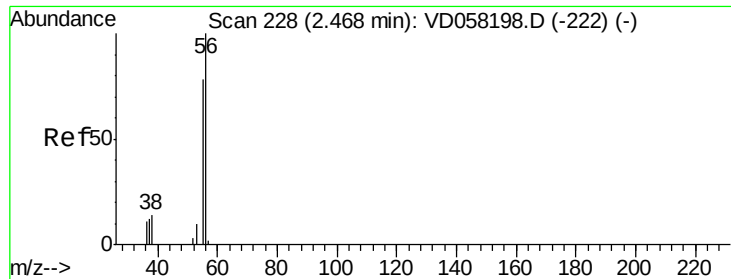
1000

500

0

Time-->





#13

Acrolein

Concen: 2.248 ug/l

RT: 2.47 min Scan# 228

Delta R.T. 0.00 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

Instrument :

MSVOA\_D

ClientSampleId :

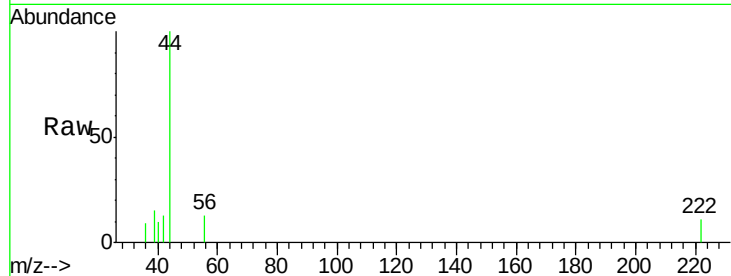
CL-02-061918-B

Tot Ion: 56 Resp: 269

Ion Ratio Lower Upper

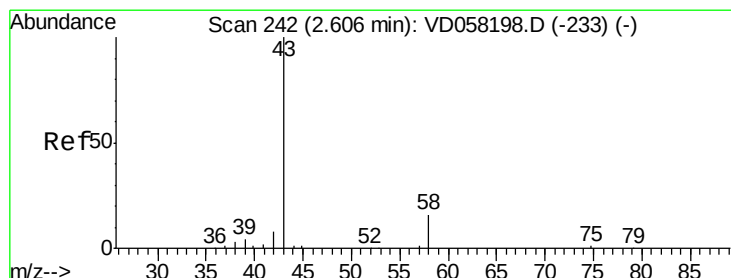
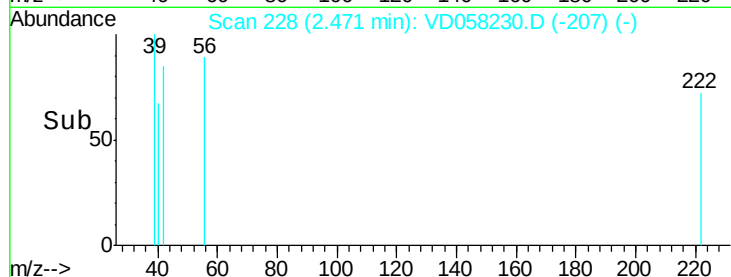
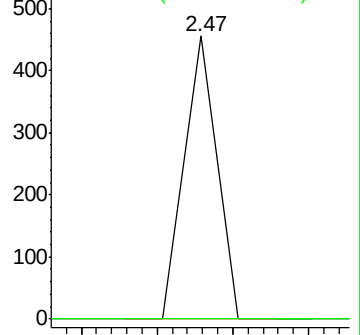
56 100

55 0.0 62.1 93.1#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



#16

Acetone

Concen: 67.347 ug/l

RT: 2.61 min Scan# 242

Delta R.T. 0.00 min

Lab File: VD058230.D

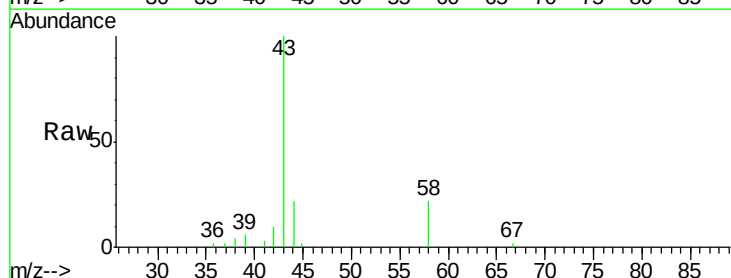
Acq: 21 Jun 2018 2:41

Tgt Ion: 43 Resp: 58526

Ion Ratio Lower Upper

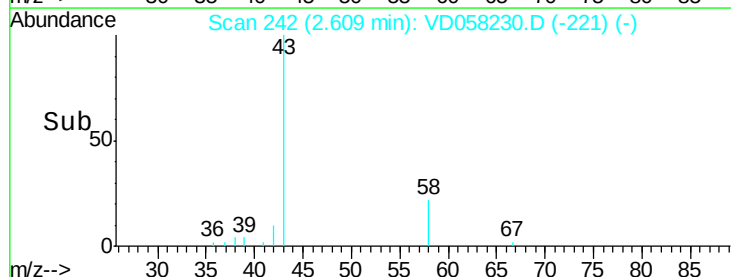
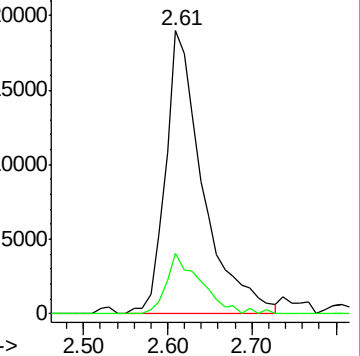
43 100

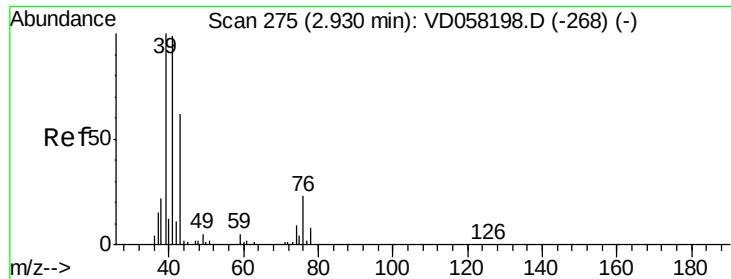
58 21.6 12.7 19.1#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

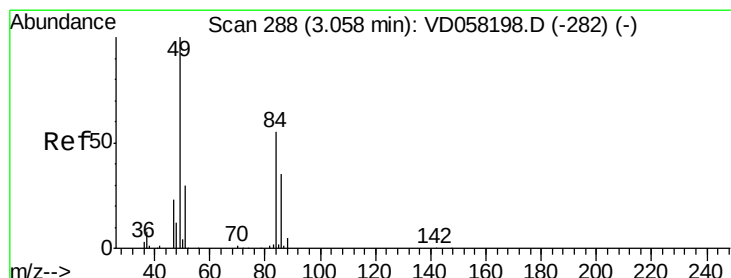
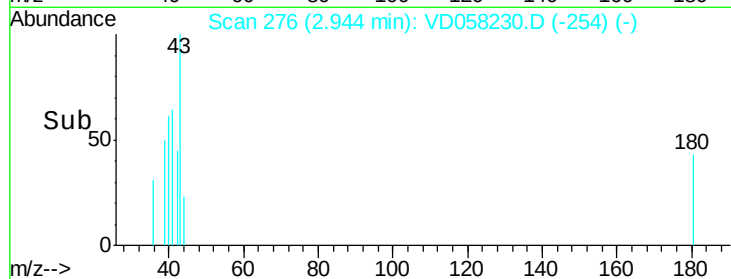
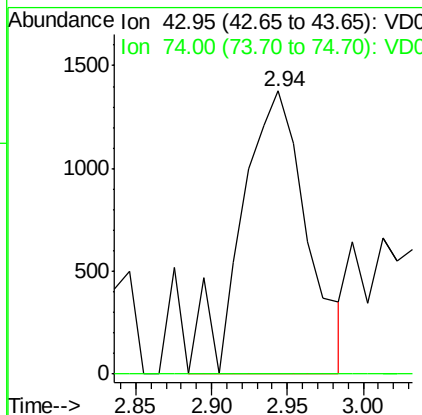
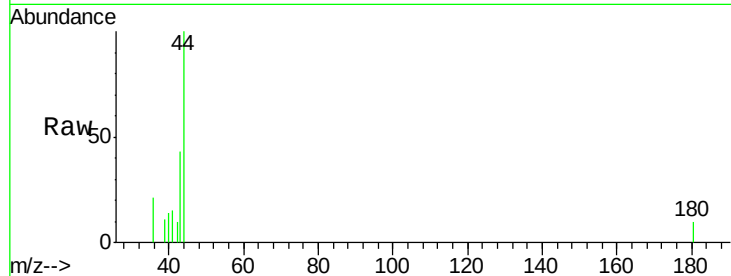




#18  
Methyl Acetate  
Concen: 2.259 ug/l  
RT: 2.94 min Scan# 276  
Delta R.T. 0.01 min  
Lab File: VD058230.D  
Acq: 21 Jun 2018 2:41

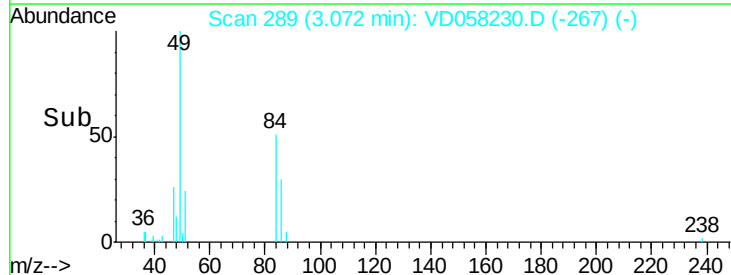
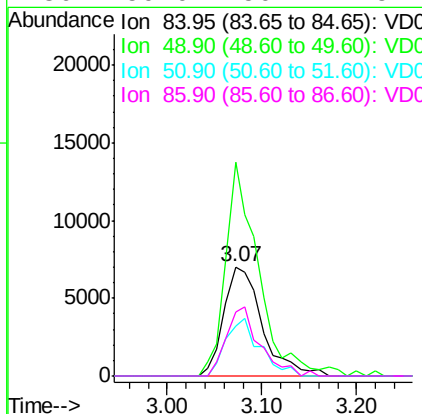
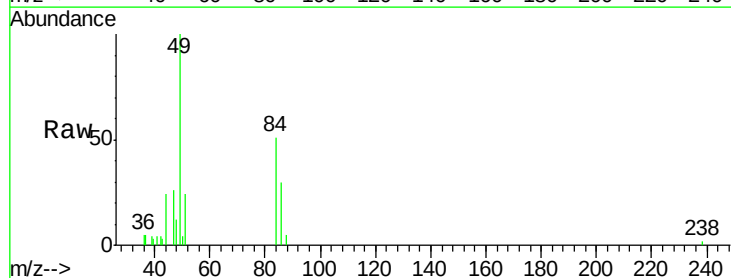
Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-02-061918-B

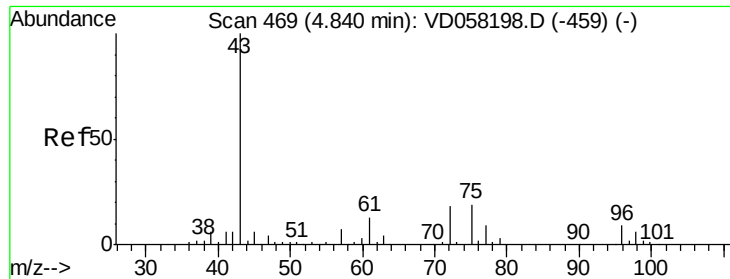
Tot Ion: 43 Resp: 4186  
Ion Ratio Lower Upper  
43 100  
74 0.0 11.7 17.5#



#20  
Methylene Chloride  
Concen: 4.346 ug/l  
RT: 3.07 min Scan# 289  
Delta R.T. 0.01 min  
Lab File: VD058230.D  
Acq: 21 Jun 2018 2:41

Tgt Ion: 84 Resp: 19731  
Ion Ratio Lower Upper  
84 100  
49 195.9 145.0 217.6  
51 46.1 42.9 64.3  
86 59.0 50.1 75.1





#25

2-Butanone

Concen: 2.957 ug/l

RT: 4.86 min Scan# 471

Delta R.T. 0.02 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

Instrument :

MSVOA\_D

ClientSampleId :

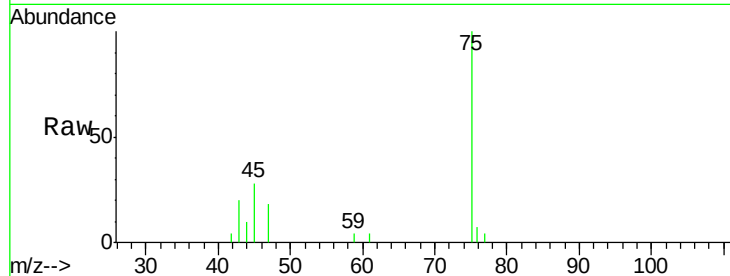
CL-02-061918-B

Tot Ion: 43 Resp: 5600

Ion Ratio Lower Upper

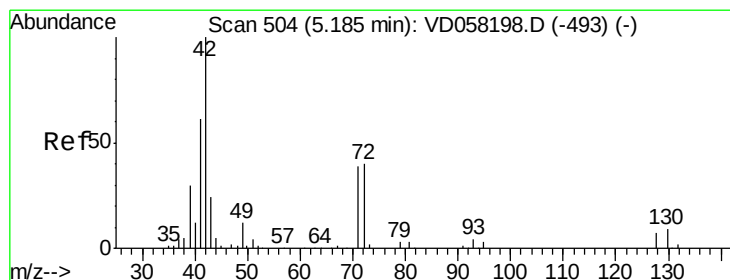
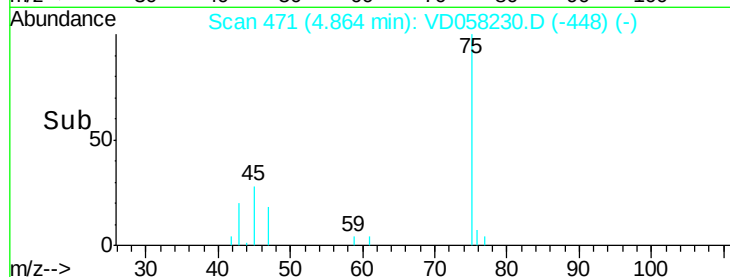
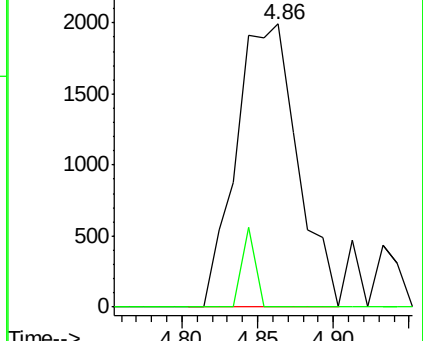
43 100

72 0.0 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: 2.345 ug/l

RT: 5.21 min Scan# 506

Delta R.T. 0.02 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

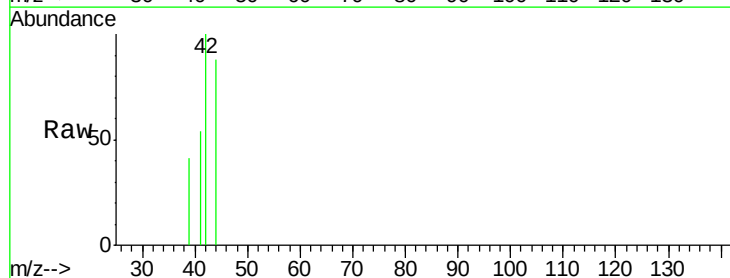
Tgt Ion: 42 Resp: 2364

Ion Ratio Lower Upper

42 100

72 0.0 30.2 45.2#

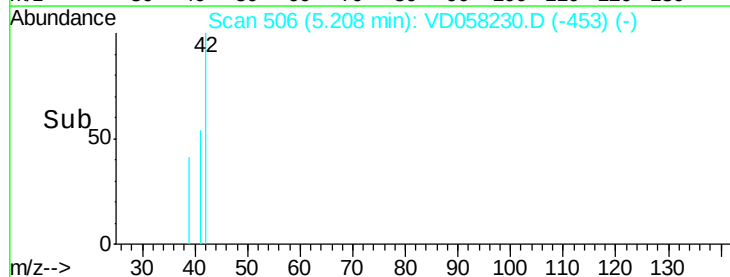
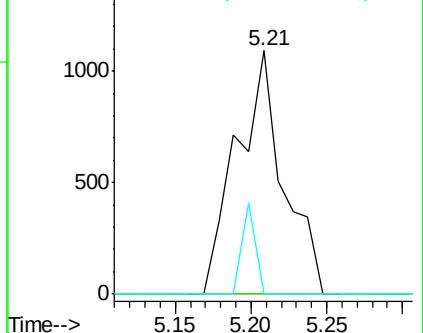
71 10.2 30.1 45.1#

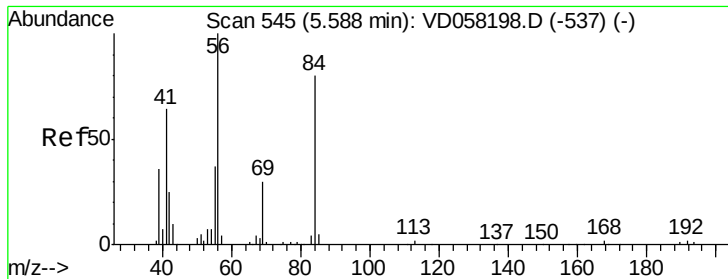


Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC

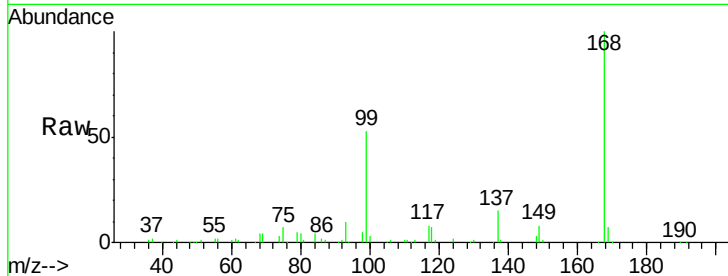




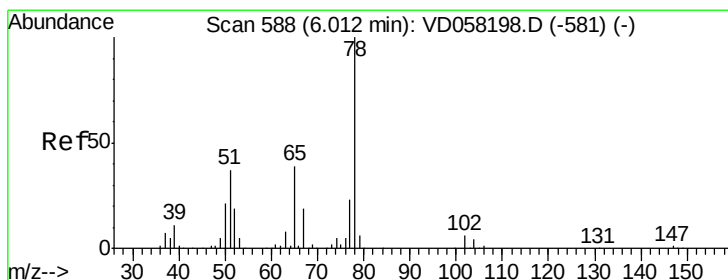
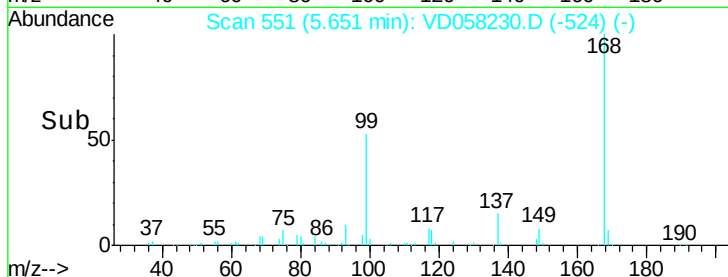
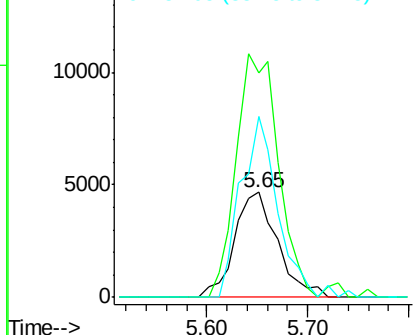
#31  
Cyclohexane  
Concen: Below Cal  
RT: 5.65 min Scan# 551  
Delta R.T. 0.06 min  
Lab File: VD058230.D  
Acq: 21 Jun 2018 2:41

Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-02-061918-B

Tot Ion: 56 Resp: 13879  
Ion Ratio Lower Upper  
56 100  
69 213.7 23.6 35.4#  
84 172.9 65.2 97.8#

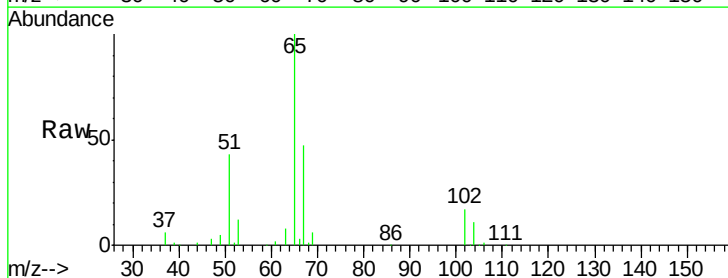


Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.05 (83.75 to 84.75): VDC

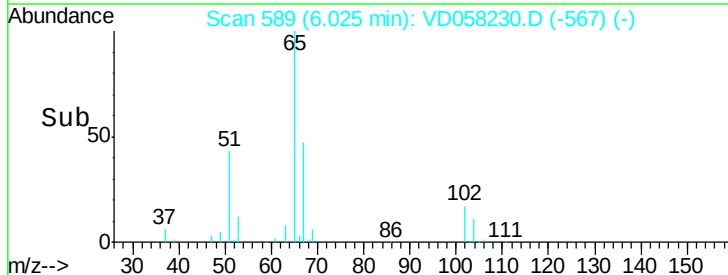
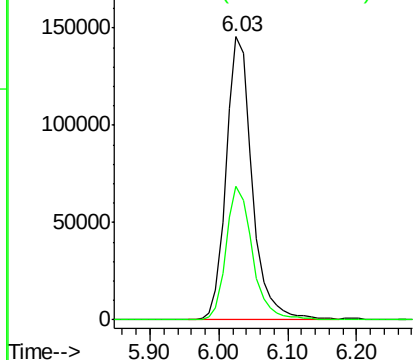


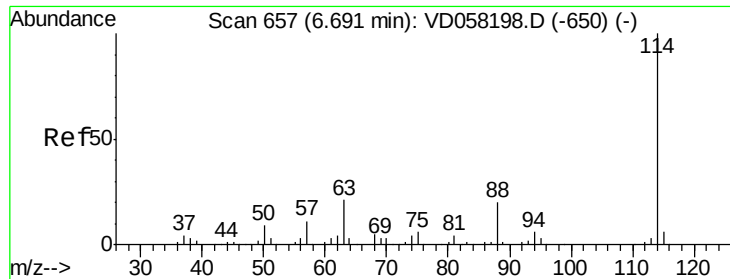
#33  
1,2-Dichloroethane-d4  
Concen: N.D. ug/l  
RT: 6.03 min Scan# 589  
Delta R.T. 0.01 min  
Lab File: VD058230.D  
Acq: 21 Jun 2018 2:41

Tgt Ion: 65 Resp: 380541  
Ion Ratio Lower Upper  
65 100  
67 47.3 0.0 97.8



Abundance Ion 64.95 (64.65 to 65.65): VDC  
Ion 66.90 (66.60 to 67.60): VDC

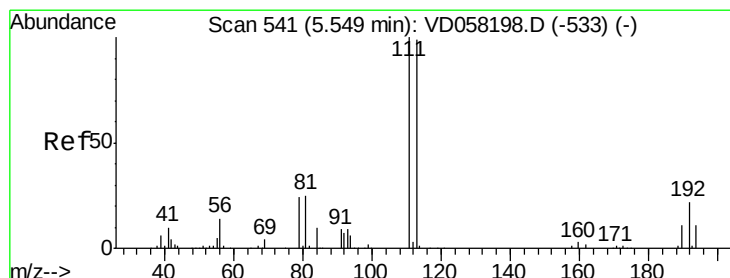
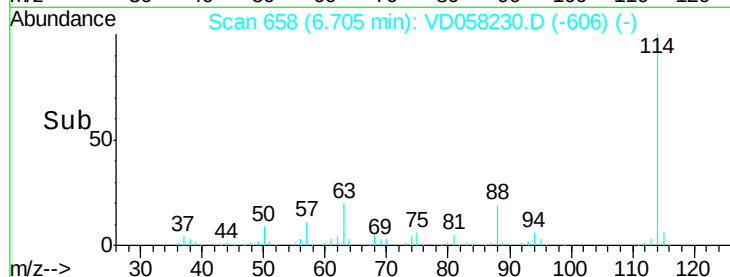
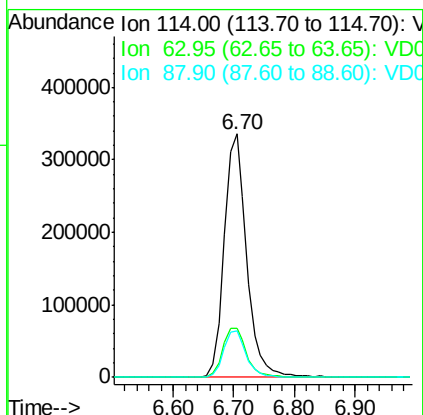
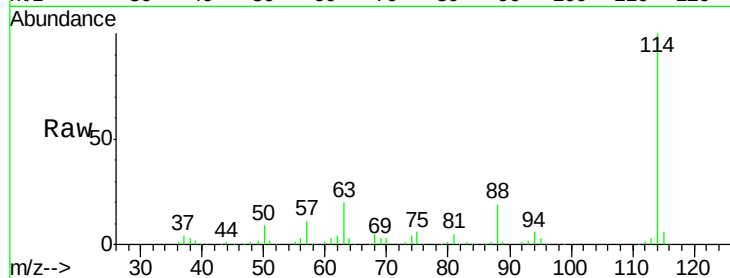




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.70 min Scan# 658  
 Delta R.T. 0.01 min  
 Lab File: VD058230.D  
 Acq: 21 Jun 2018 2:41

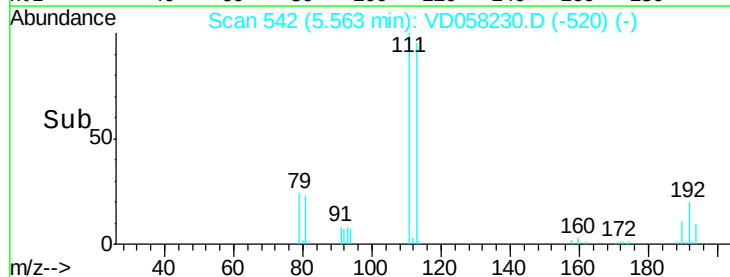
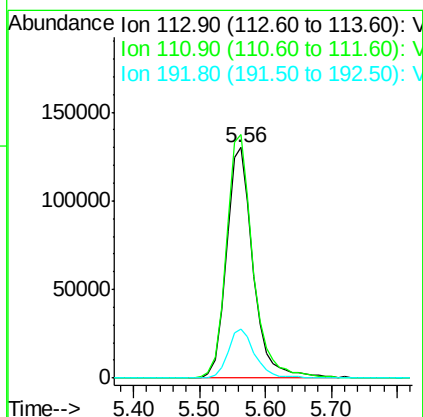
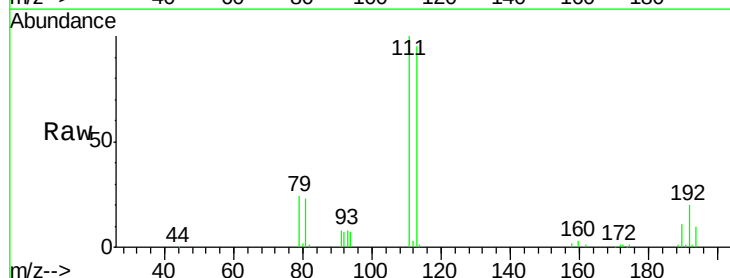
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 CL-02-061918-B

Tot Ion:114 Resp: 860932  
 Ion Ratio Lower Upper  
 114 100  
 63 20.2 0.0 42.6  
 88 19.2 0.0 40.6

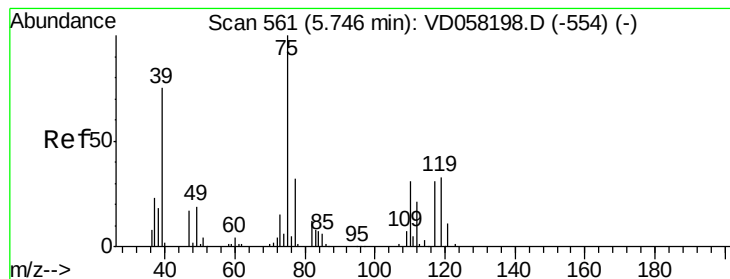


#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 5.56 min Scan# 542  
 Delta R.T. 0.01 min  
 Lab File: VD058230.D  
 Acq: 21 Jun 2018 2:41

Tgt Ion:113 Resp: 368827  
 Ion Ratio Lower Upper  
 113 100  
 111 105.8 80.6 121.0  
 192 21.1 17.8 26.6







#36

1,1-Dichloropropene

Concen: 5.957 ug/l

RT: 5.65 min Scan# 551

Delta R.T. -0.09 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

Instrument :

MSVOA\_D

ClientSampleId :

CL-02-061918-B

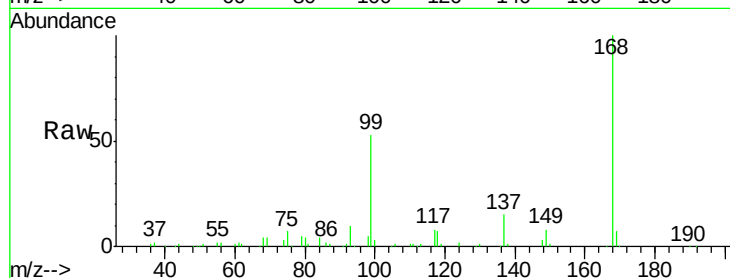
Tot Ion: 75 Resp: 50732

Ion Ratio Lower Upper

75 100

110 7.5 15.4 46.4#

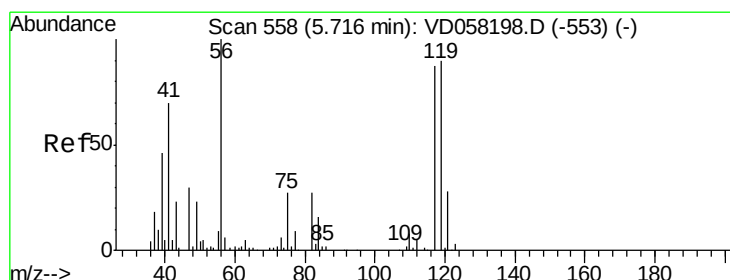
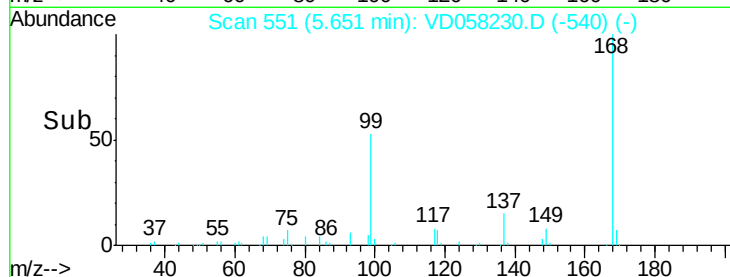
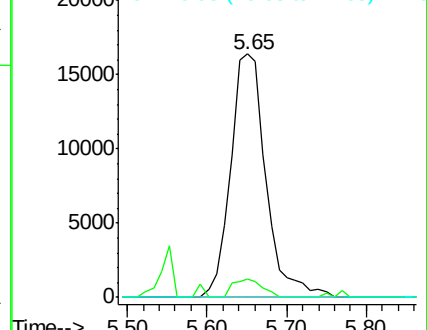
77 0.0 25.4 38.2#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 109.90 (109.60 to 110.60): VDC

Ion 76.95 (76.65 to 77.65): VDC



#38

Carbon Tetrachloride

Concen: 5.983 ug/l

RT: 5.65 min Scan# 551

Delta R.T. -0.07 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

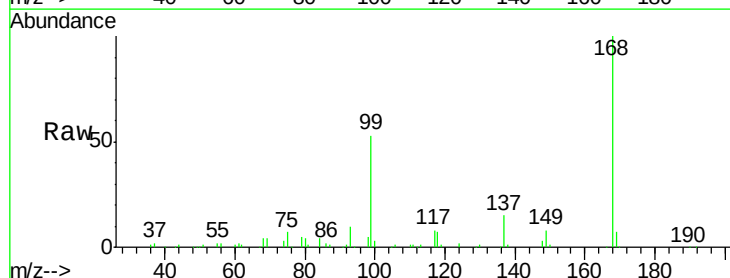
Tgt Ion: 117 Resp: 50627

Ion Ratio Lower Upper

117 100

119 7.3 78.8 118.2#

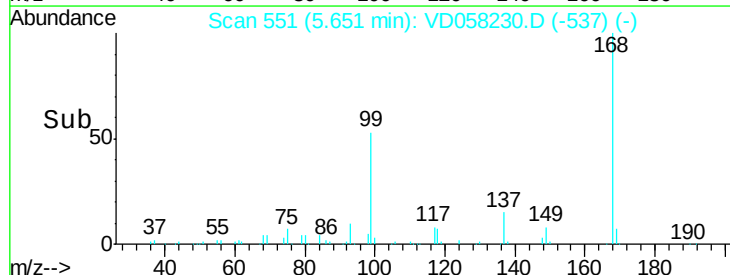
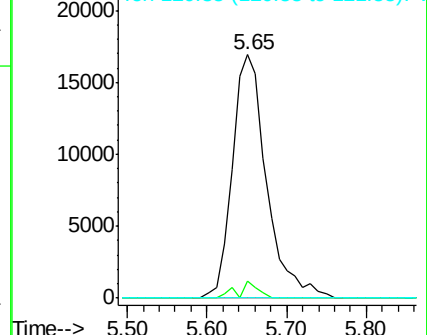
121 0.0 25.0 37.6#

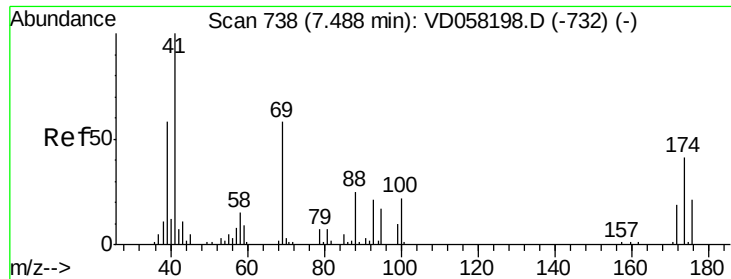


Abundance Ion 116.85 (116.55 to 117.55): VDC

Ion 118.85 (118.55 to 119.55): VDC

Ion 120.85 (120.55 to 121.55): VDC





#49

1,4-Dioxane

Concen: 5.156 ug/l

RT: 7.61 min Scan# 750

Delta R.T. 0.12 min

Lab File: VD058230.D

Acq: 21 Jun 2018 2:41

Instrument :

MSVOA\_D

ClientSampleId :

CL-02-061918-B

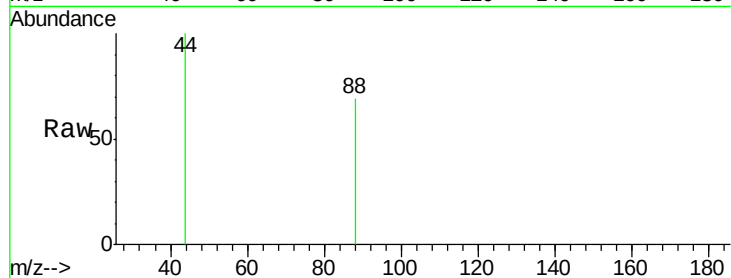
Tot Ion: 88 Resp: 183

Ion Ratio Lower Upper

88 100

43 0.0 34.2 51.2#

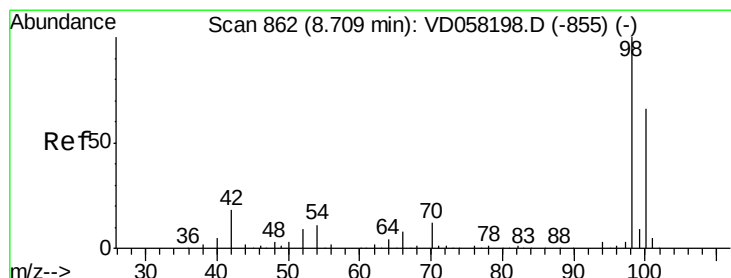
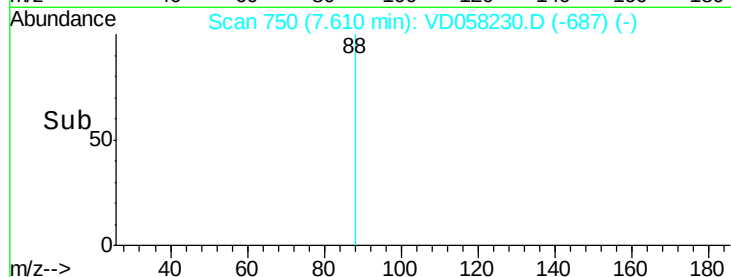
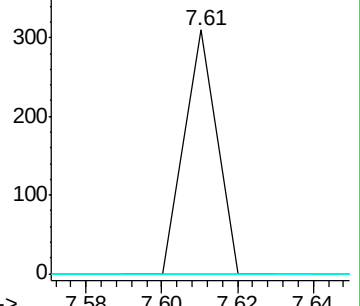
58 0.0 47.9 71.9#



Abundance Ion 88.00 (87.70 to 88.70): VDC

Ion 43.05 (42.75 to 43.75): VDC

Ion 57.95 (57.65 to 58.65): VDC



#50

Toluene-d8

Concen: 5.156 ug/l

RT: 8.72 min Scan# 863

Delta R.T. 0.01 min

Lab File: VD058230.D

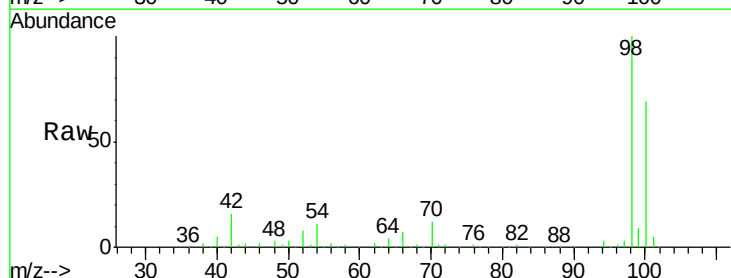
Acq: 21 Jun 2018 2:41

Tgt Ion: 98 Resp: 756308

Ion Ratio Lower Upper

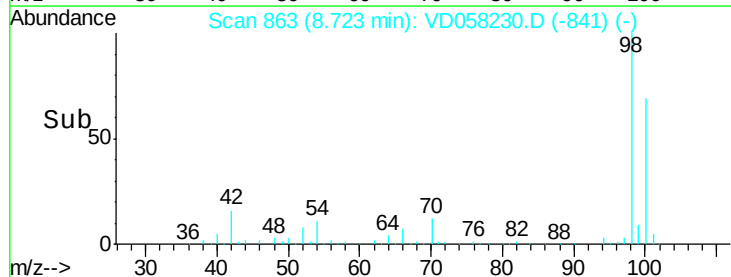
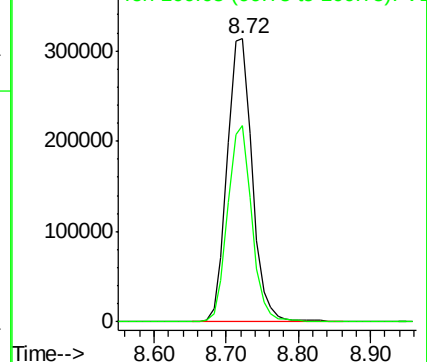
98 100

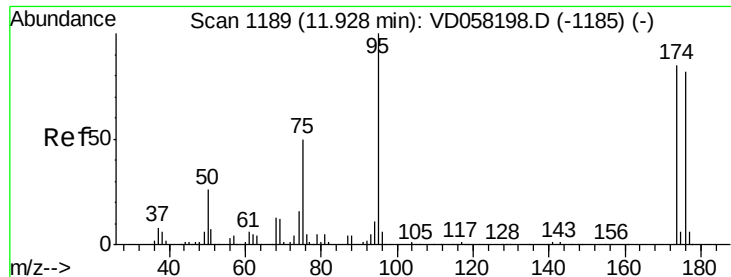
100 69.2 53.6 80.4



Abundance Ion 98.05 (97.75 to 98.75): VDC

Ion 100.05 (99.75 to 100.75): VDC

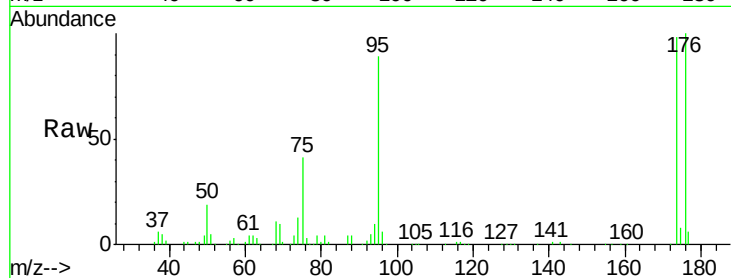




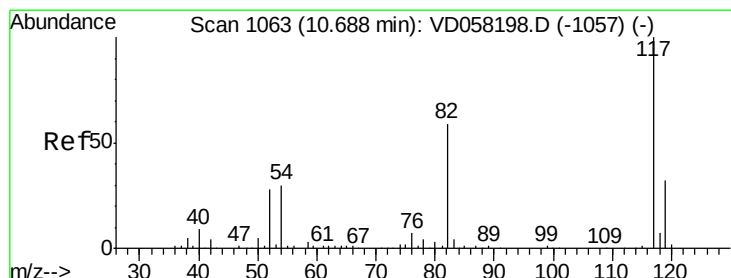
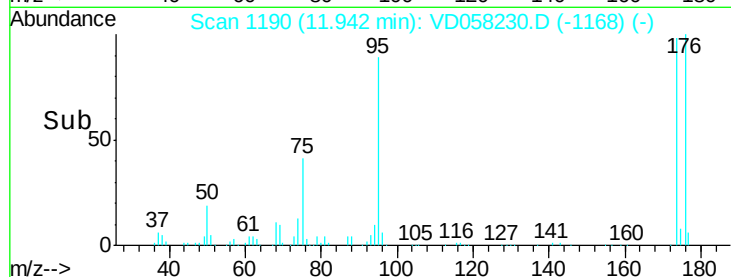
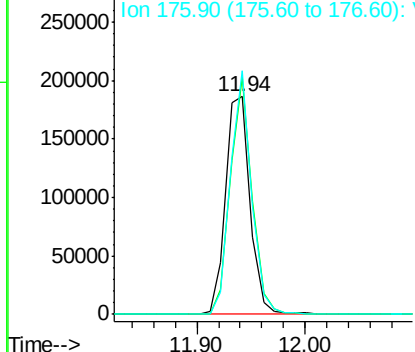
#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 11.94 min Scan# 1190  
Delta R.T. 0.01 min  
Lab File: VD058230.D  
Acq: 21 Jun 2018 2:41

Instrument :  
MSVOA\_D  
ClientSampleId :  
CL-02-061918-B

Tot Ion: 95 Resp: 294040  
Ion Ratio Lower Upper  
95 100  
174 109.0 0.0 170.2  
176 111.7 0.0 164.6

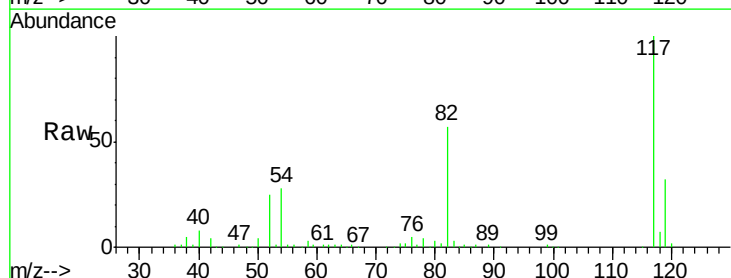


Abundance Ion 95.00 (94.70 to 95.70): V  
Ion 173.90 (173.60 to 174.60): V  
Ion 175.90 (175.60 to 176.60): V

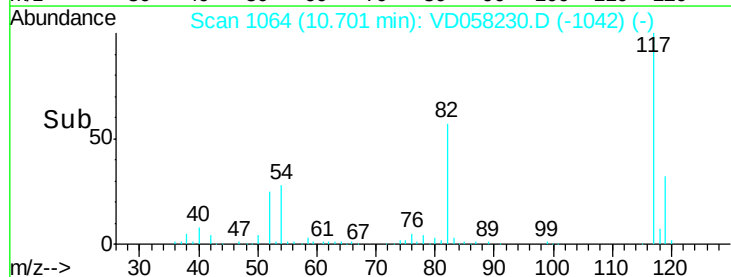
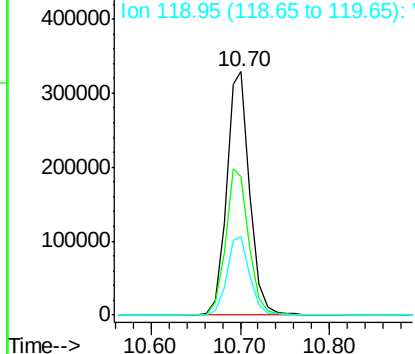


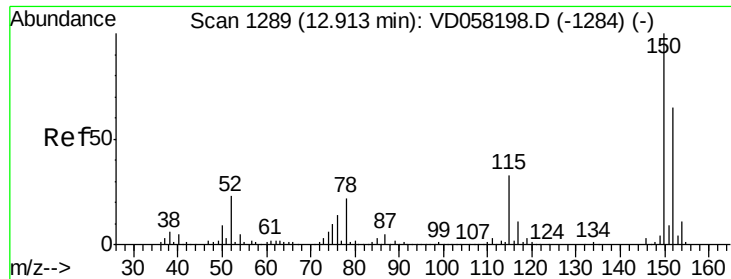
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.70 min Scan# 1064  
Delta R.T. 0.01 min  
Lab File: VD058230.D  
Acq: 21 Jun 2018 2:41

Tgt Ion: 117 Resp: 599546  
Ion Ratio Lower Upper  
117 100  
82 57.0 47.0 70.6  
119 32.1 25.3 37.9



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

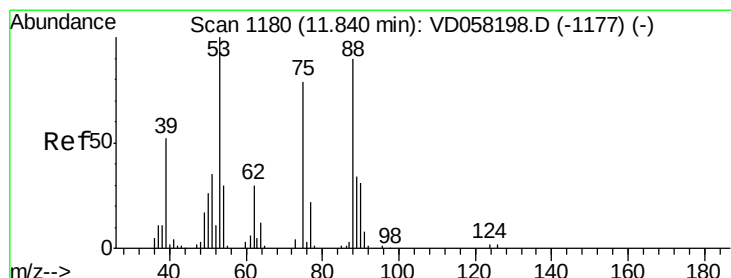
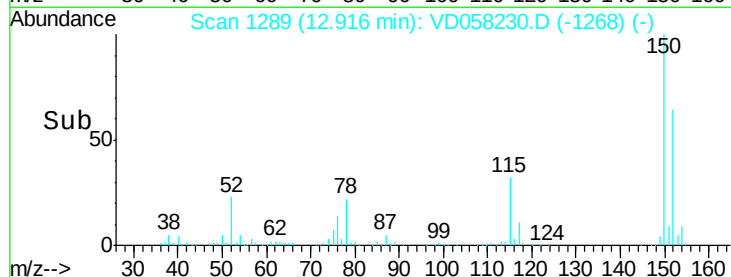
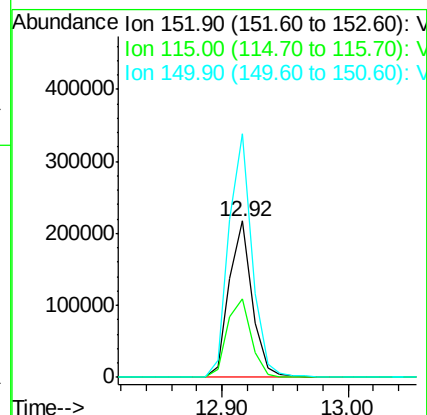
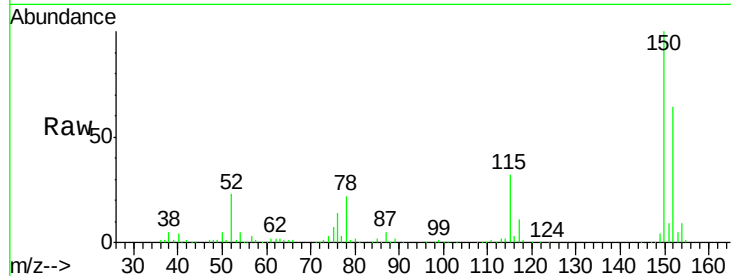




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 12.92 min Scan# 1289  
 Delta R.T. 0.00 min  
 Lab File: VD058230.D  
 Acq: 21 Jun 2018 2:41

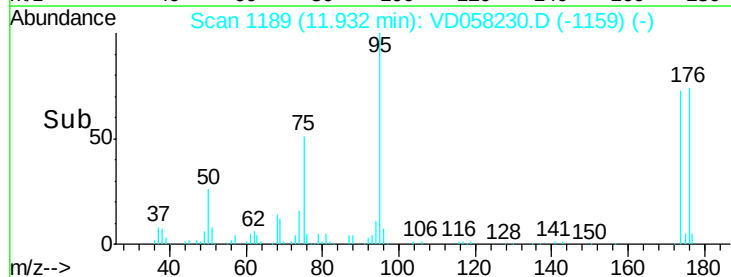
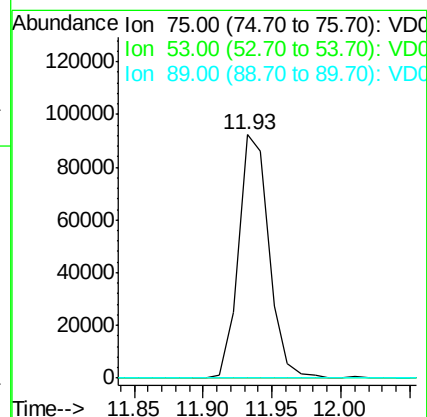
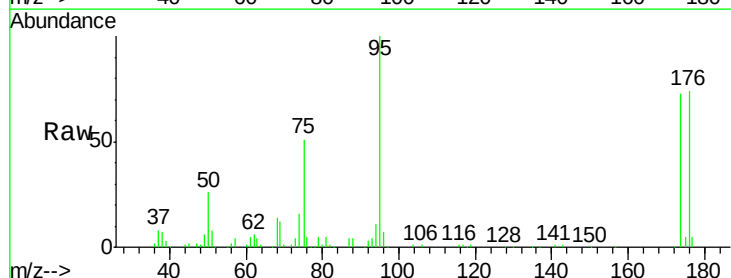
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 CL-02-061918-B

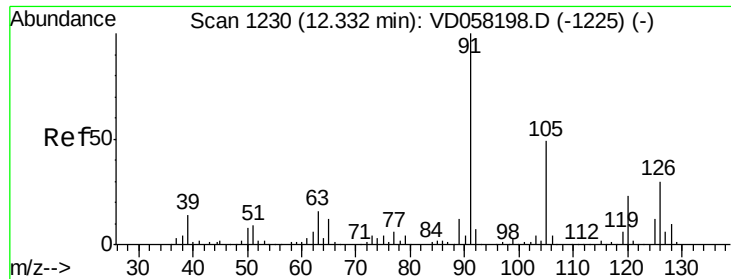
Tot Ion:152 Resp: 274903  
 Ion Ratio Lower Upper  
 152 100  
 115 50.5 25.1 75.3  
 150 156.1 0.0 308.8



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 145.264 ug/l  
 RT: 11.93 min Scan# 1189  
 Delta R.T. 0.09 min  
 Lab File: VD058230.D  
 Acq: 21 Jun 2018 2:41

Tgt Ion: 75 Resp: 142200  
 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: 12.33 min Scan# 1229  
 Delta R.T. -0.01 min  
 Lab File: VD058230.D  
 Acq: 21 Jun 2018 2:41

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 CL-02-061918-B

Tot Ion: 91 Resp: 751  
 Ion Ratio Lower Upper  
 91 100  
 126 47.1 14.9 44.9#

