

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062618\  
 Data File : VD059423.D  
 Acq On : 26 Jun 2018 14:16  
 Operator : VA/AP  
 Sample : J3706-01RE  
 Misc : 8.26g/5ml/MSVOA D/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Jun 26 14:38:19 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      | 5.63  | 168  | 220463   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 6.67  | 114  | 332401   | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 10.68 | 117  | 314868   | 50.00 | ug/l  | -0.01    |
| 72) 1,4-Dichlorobenzene-d4 | 12.89 | 152  | 176658   | 50.00 | ug/l  | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.00  | 65   | 139606   | 61.92 | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 123.84% |          |
| 35) Dibromofluoromethane    | 5.54  | 113  | 110231   | 40.71 | ug/l    | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 81.42%  |          |
| 50) Toluene-d8              | 8.69  | 98   | 229432   | 36.25 | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 72.50%  |          |
| 62) 4-Bromofluorobenzene    | 11.92 | 95   | 114224   | 43.39 | ug/l    | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 86.78%  |          |

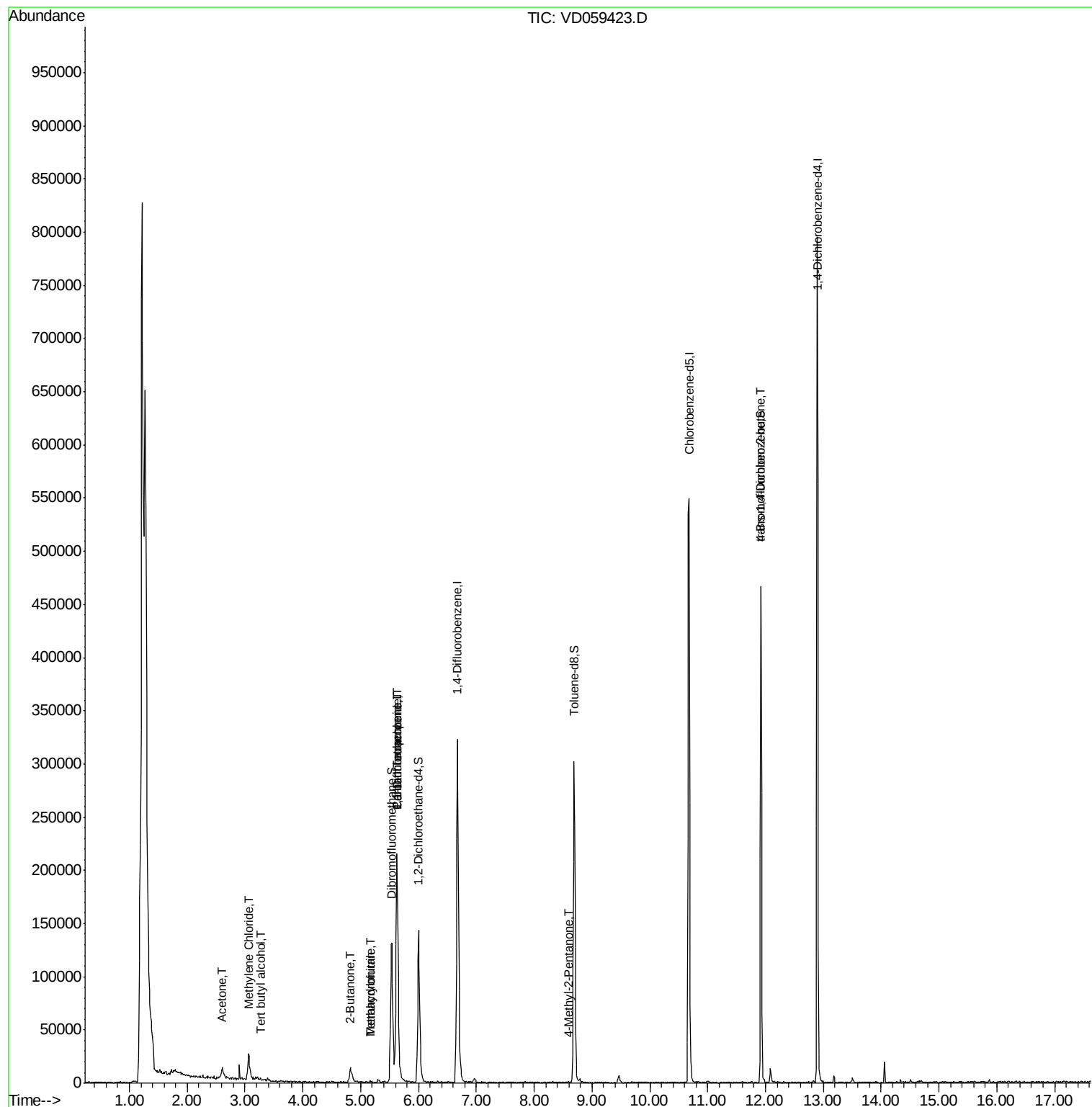
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.73  | 94   | 203      | Below Cal | #      | 4      |
| 11) Tert butyl alcohol         | 3.27  | 59   | 204      | 2.62      | ug/l # | 72     |
| 16) Acetone                    | 2.61  | 43   | 21353    | 75.04     | ug/l # | 82     |
| 18) Methyl Acetate             | 2.93  | 43   | 953      | Below Cal | #      | 66     |
| 20) Methylene Chloride         | 3.06  | 84   | 12852    | 14.52     | ug/l # | 89     |
| 25) 2-Butanone                 | 4.81  | 43   | 2703     | 4.53      | ug/l # | 57     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 588      | 1.80      | ug/l # | 66     |
| 31) Cyclohexane                | 5.63  | 56   | 5062     | Below Cal | #      | 30     |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 17951    | 5.95      | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.62  | 117  | 16738    | 5.38      | ug/l # | 16     |
| 41) Methacrylonitrile          | 5.18  | 41   | 974      | 1.10      | ug/l # | 32     |
| 51) 4-Methyl-2-Pentanone       | 8.60  | 43   | 1731     | 1.13      | ug/l # | 42     |
| 81) trans-1,4-Dichloro-2-buten | 11.92 | 75   | 54153    | 97.78     | ug/l # | 1      |

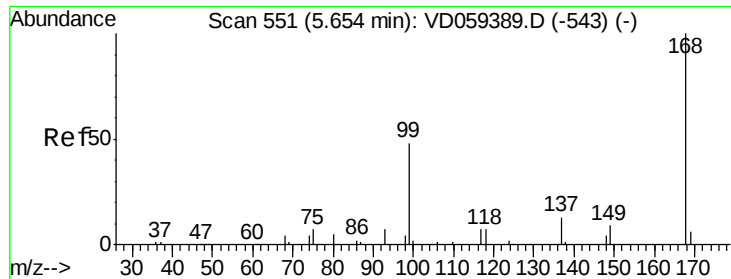
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD062618\  
Data File : VD059423.D  
Acq On : 26 Jun 2018 14:16  
Operator : VA/AP  
Sample : J3706-01RE  
Misc : 8.26g/5ml/MSVOA D/SOIL  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Jun 26 14:38:19 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

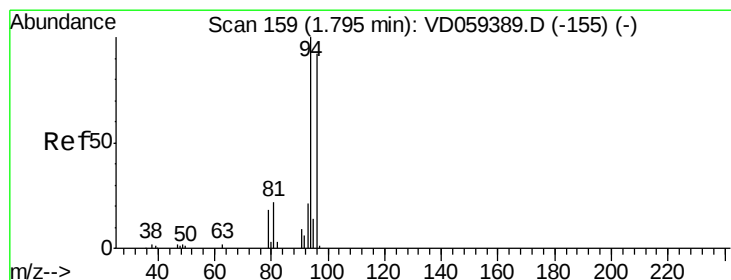
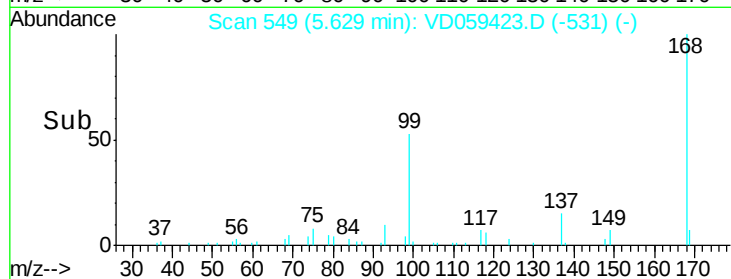
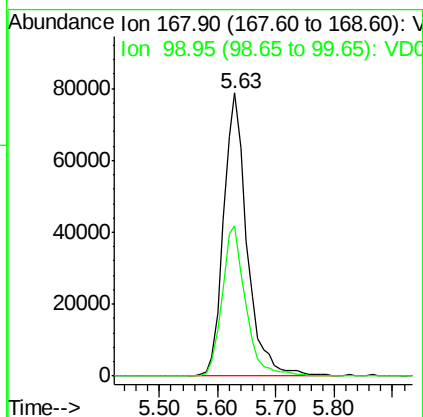
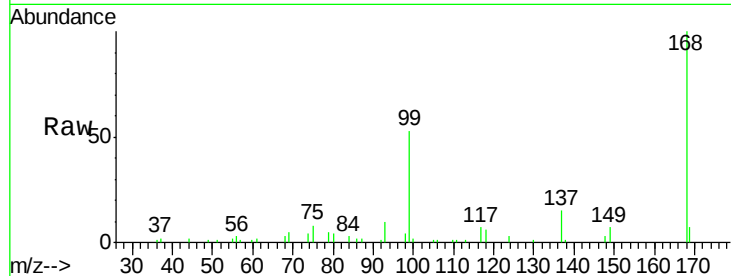




#1  
Pentafluorobenzene  
Concen: 50.00 ug/l  
RT: 5.63 min Scan# 549  
Delta R.T. -0.02 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

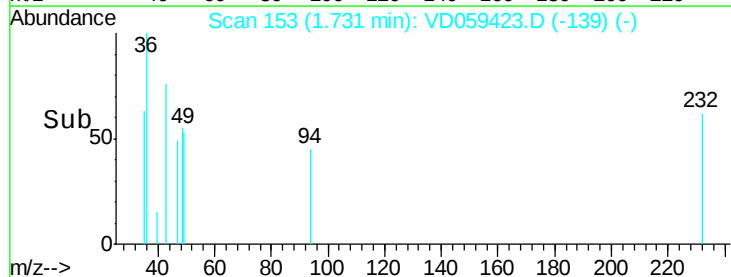
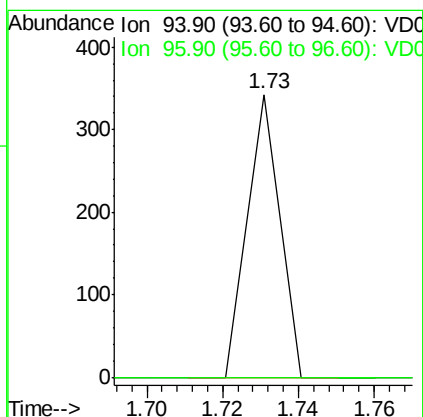
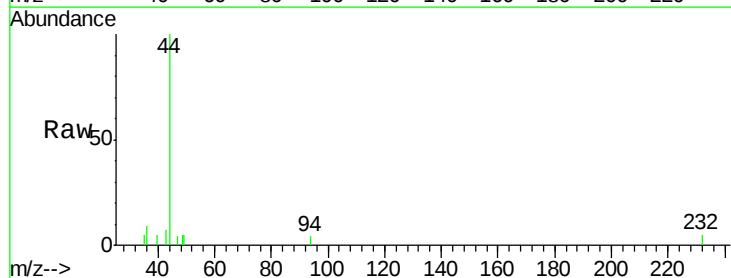
Instrument :  
MSVOA\_D  
ClientSampleId :

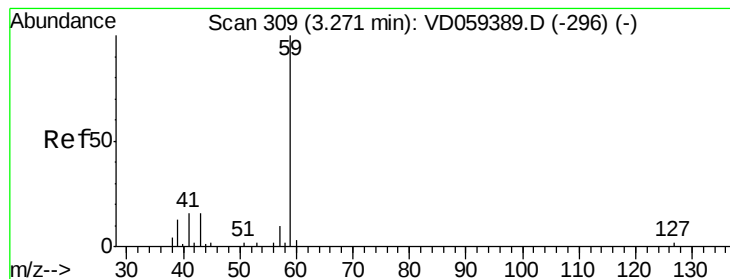
Tot Ion:168 Resp: 220463  
Ion Ratio Lower Upper  
168 100  
99 53.0 41.0 61.6



#5  
Bromomethane  
Concen: Below Cal  
RT: 1.73 min Scan# 153  
Delta R.T. -0.06 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Tgt Ion: 94 Resp: 203  
Ion Ratio Lower Upper  
94 100  
96 0.0 73.4 110.0#



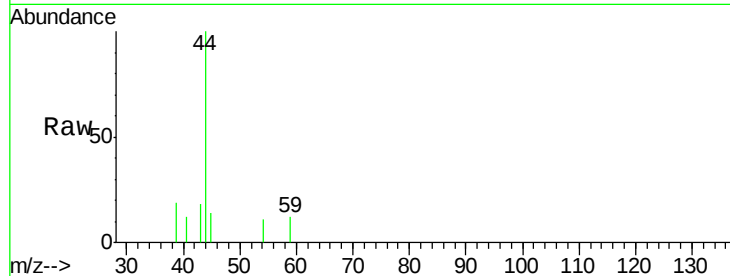


#11

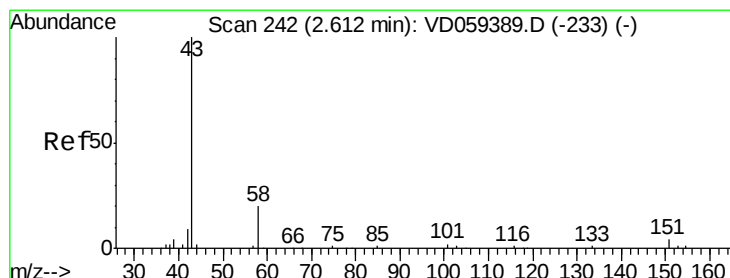
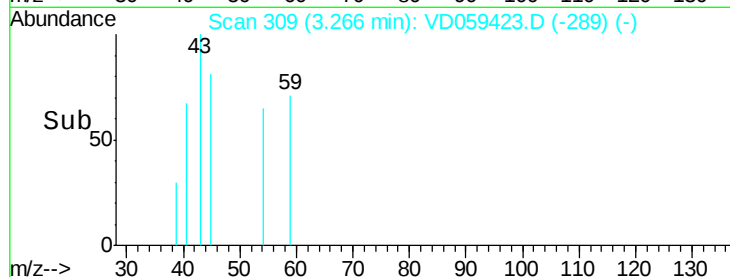
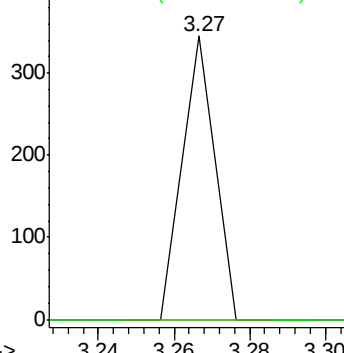
Tert butyl alcohol  
 Concen: 2.62 ug/l  
 RT: 3.27 min Scan# 309  
 Delta R.T. -0.00 min  
 Lab File: VD059423.D  
 Acq: 26 Jun 2018 14:16

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Tot Ion: 59 Resp: 204  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.3 12.5#



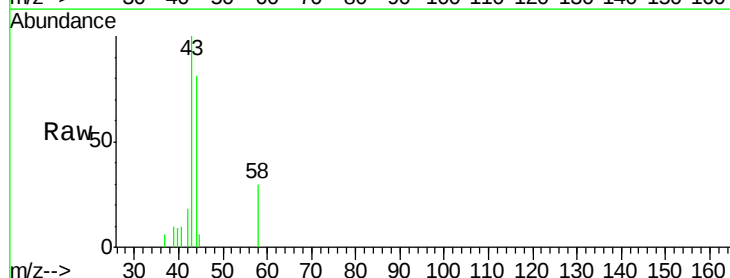
Abundance Ion 58.95 (58.65 to 59.65): VDC  
 Ion 56.95 (56.65 to 57.65): VDC



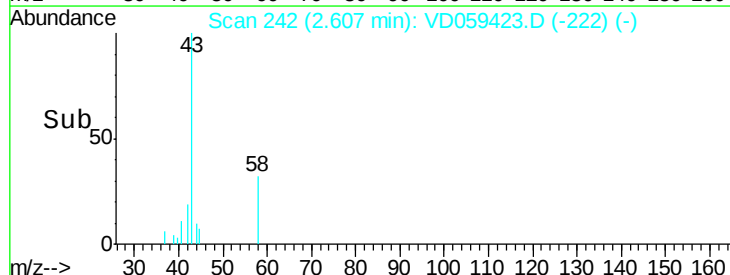
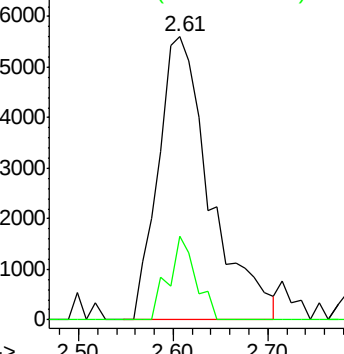
#16

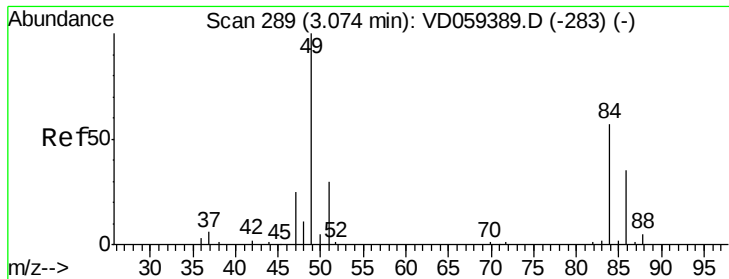
Acetone  
 Concen: 75.04 ug/l  
 RT: 2.61 min Scan# 242  
 Delta R.T. -0.00 min  
 Lab File: VD059423.D  
 Acq: 26 Jun 2018 14:16

Tgt Ion: 43 Resp: 21353  
 Ion Ratio Lower Upper  
 43 100  
 58 29.6 16.8 25.2#



Abundance Ion 42.95 (42.65 to 43.65): VDC  
 Ion 57.95 (57.65 to 58.65): VDC

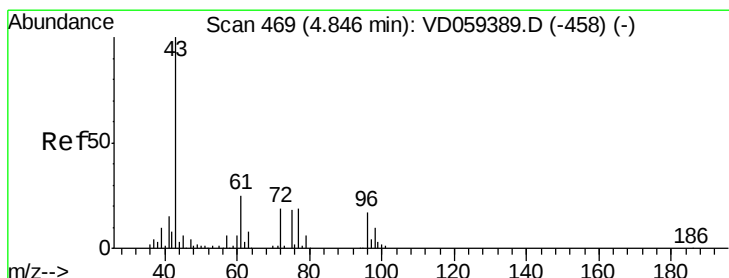
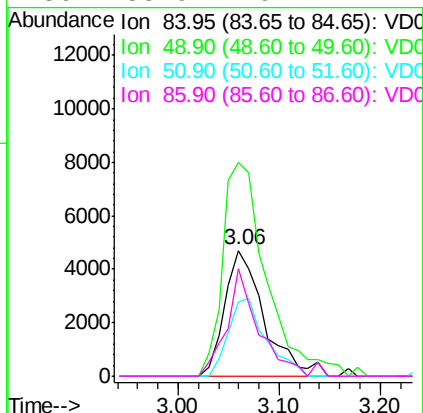
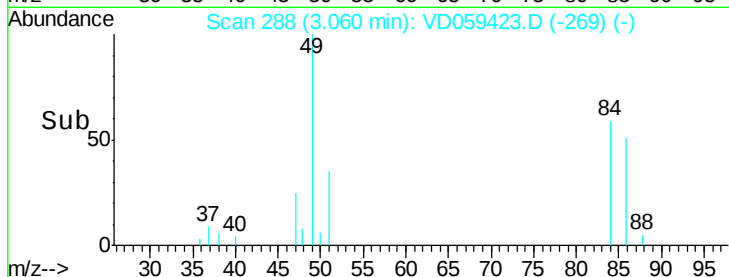
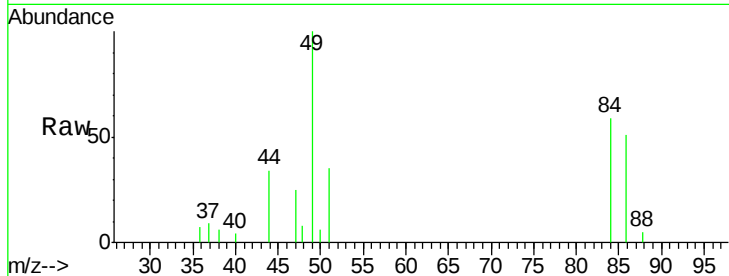




#20  
Methvlene Chloride  
Concen: 14.52 ug/l  
RT: 3.06 min Scan# 288  
Delta R.T. -0.01 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

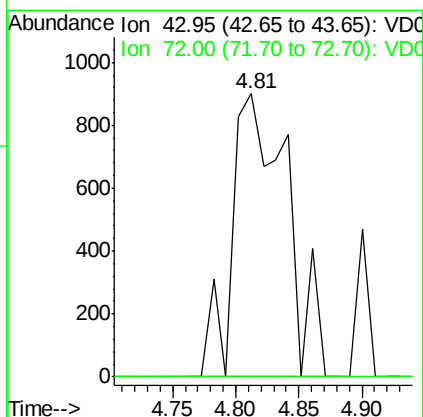
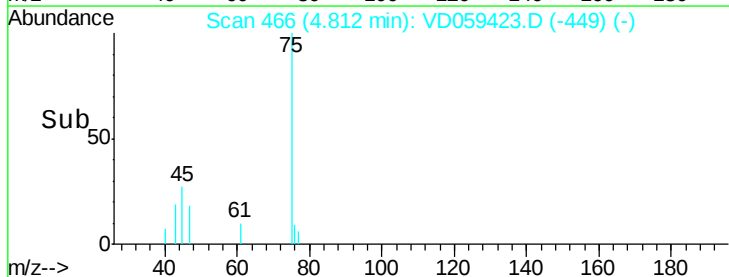
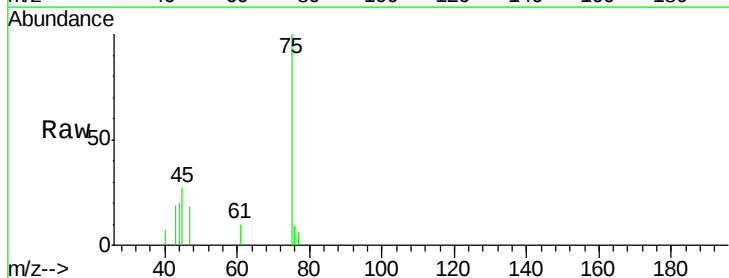
Instrument :  
MSVOA\_D  
ClientSampleId :

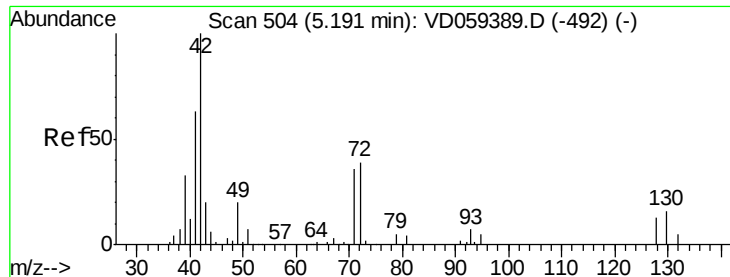
Tot Ion: 84 Resp: 12852  
Ion Ratio Lower Upper  
84 100  
49 169.9 140.3 210.5  
51 59.1 41.6 62.4  
86 85.9 49.4 74.2#



#25  
2-Butanone  
Concen: 4.53 ug/l  
RT: 4.81 min Scan# 466  
Delta R.T. -0.03 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Tgt Ion: 43 Resp: 2703  
Ion Ratio Lower Upper  
43 100  
72 0.0 15.4 23.2#

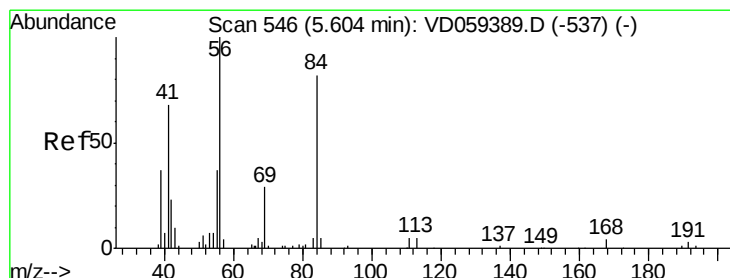
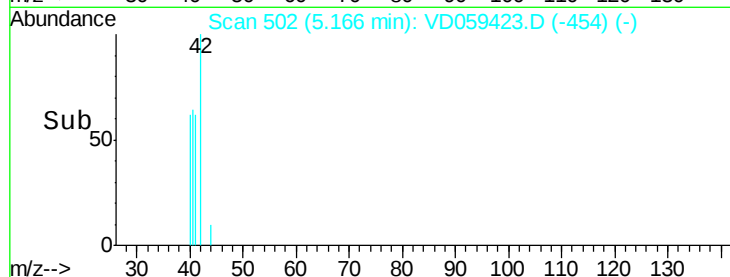
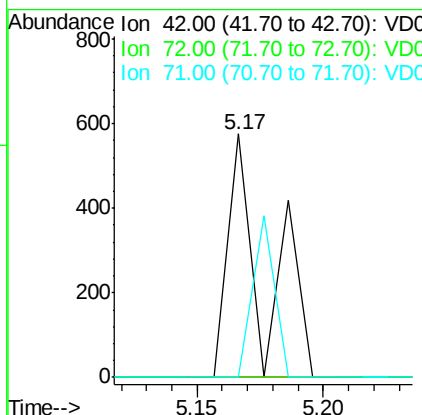
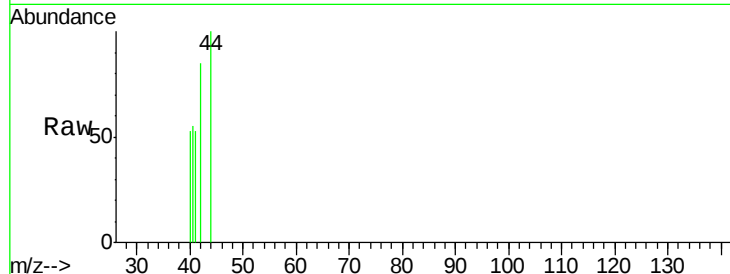




#29  
Tetrahydrofuran  
Concen: 1.80 ug/l  
RT: 5.17 min Scan# 502  
Delta R.T. -0.02 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

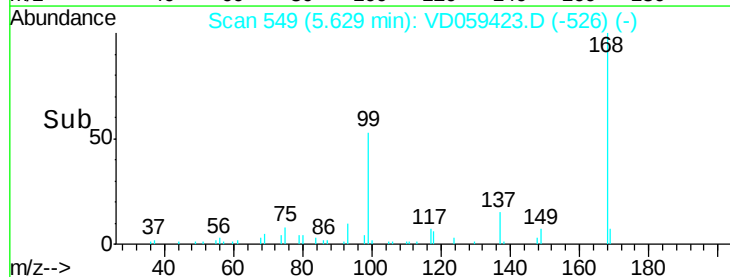
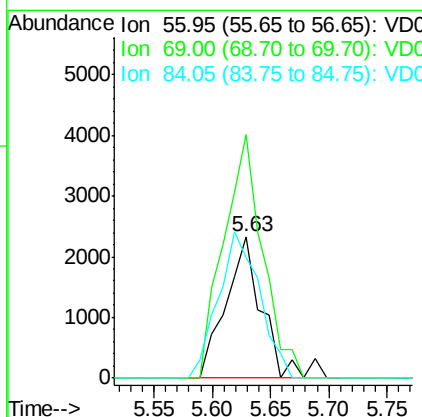
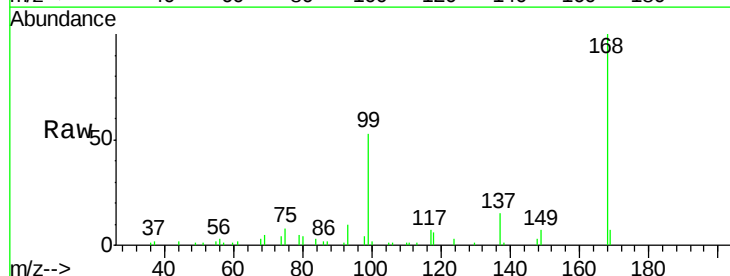
Instrument :  
MSVOA\_D  
ClientSampleId :

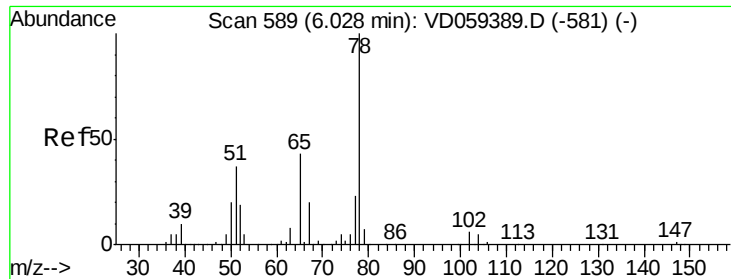
Tot Ion: 42 Resp: 588  
Ion Ratio Lower Upper  
42 100  
72 0.0 31.4 47.2#  
71 38.4 29.7 44.5



#31  
Cyclohexane  
Concen: Below Cal  
RT: 5.63 min Scan# 549  
Delta R.T. 0.03 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Tgt Ion: 56 Resp: 5062  
Ion Ratio Lower Upper  
56 100  
69 172.3 22.9 34.3#  
84 85.8 67.3 100.9





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 6.00 min Scan# 587

Delta R.T. -0.02 min

Lab File: VD059423.D

Acq: 26 Jun 2018 14:16

Instrument :

MSVOA\_D

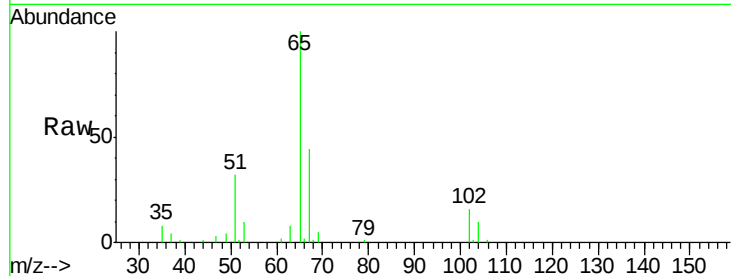
ClientSampleId :

Tot Ion: 65 Resp: 139606

Ion Ratio Lower Upper

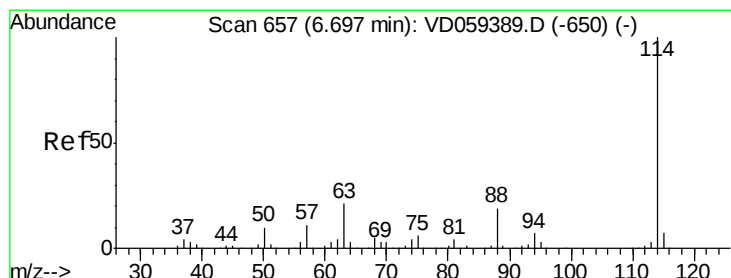
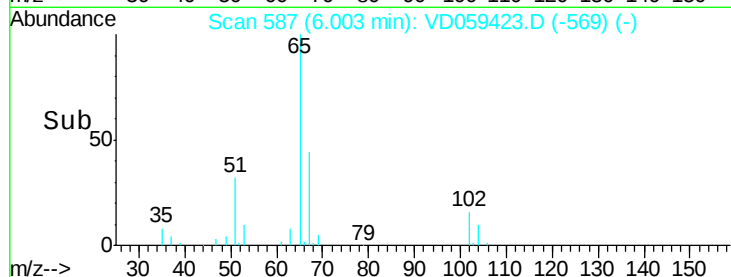
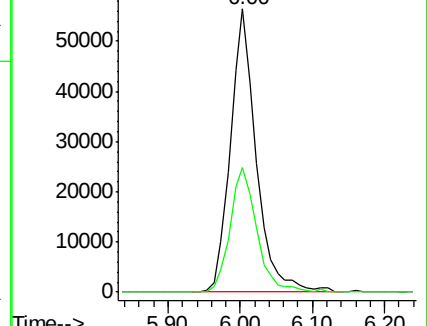
65 100

67 44.2 0.0 93.8



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.67 min Scan# 655

Delta R.T. -0.02 min

Lab File: VD059423.D

Acq: 26 Jun 2018 14:16

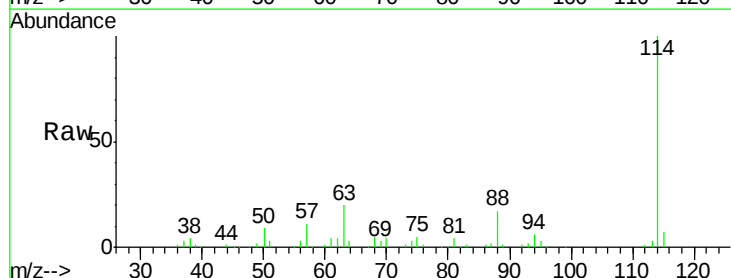
Tgt Ion: 114 Resp: 332401

Ion Ratio Lower Upper

114 100

63 20.1 0.0 42.4

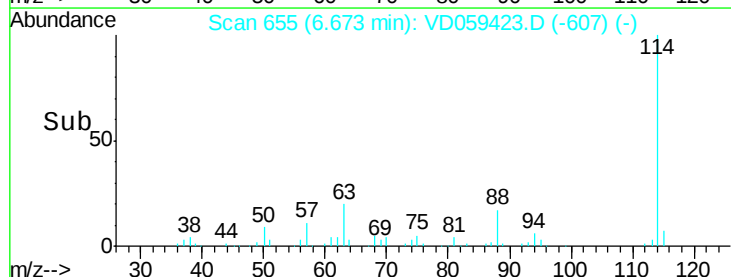
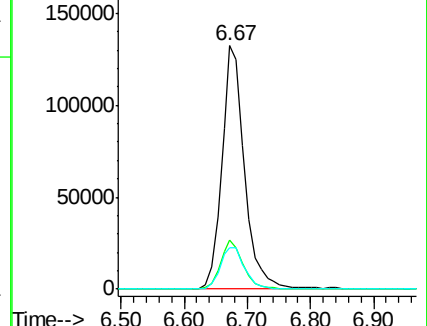
88 17.1 0.0 38.0

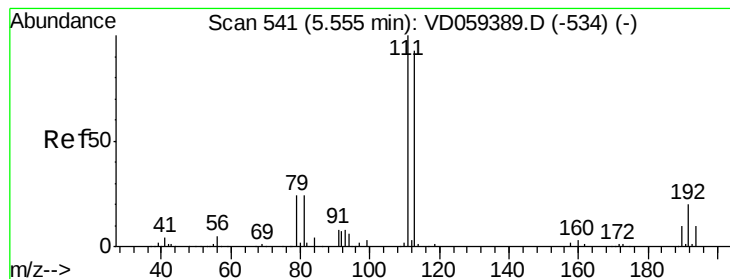


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC





#35

Dibromofluoromethane

Concen: 50.00 ug/l

RT: 5.54 min Scan# 540

Delta R.T. -0.01 min

Lab File: VD059423.D

Acq: 26 Jun 2018 14:16

Instrument :

MSVOA\_D

ClientSampled :

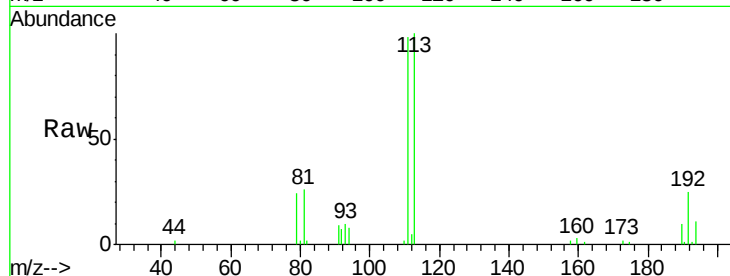
Tot Ion:113 Resp: 110231

Ion Ratio Lower Upper

113 100

111 98.3 85.7 128.5

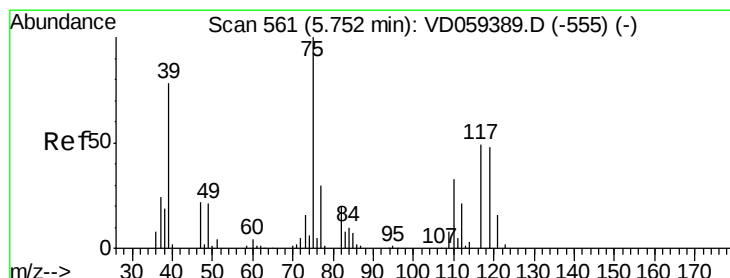
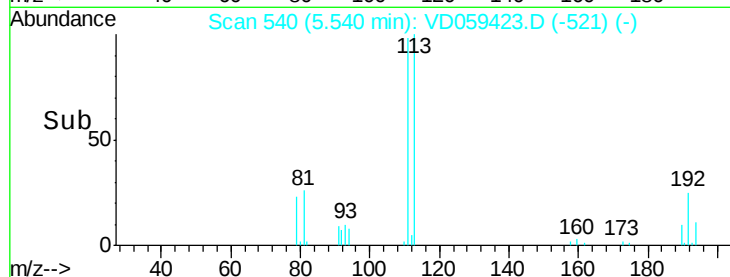
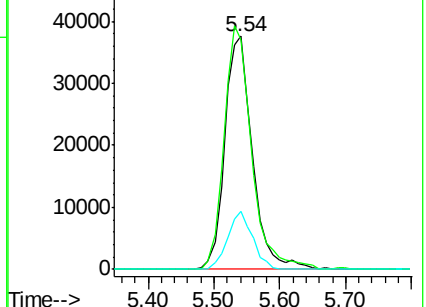
192 25.1 16.9 25.3



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: 5.95 ug/l

RT: 5.63 min Scan# 549

Delta R.T. -0.12 min

Lab File: VD059423.D

Acq: 26 Jun 2018 14:16

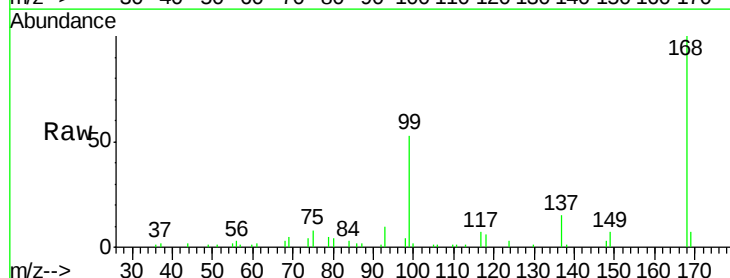
Tgt Ion: 75 Resp: 17951

Ion Ratio Lower Upper

75 100

110 7.5 16.1 48.2#

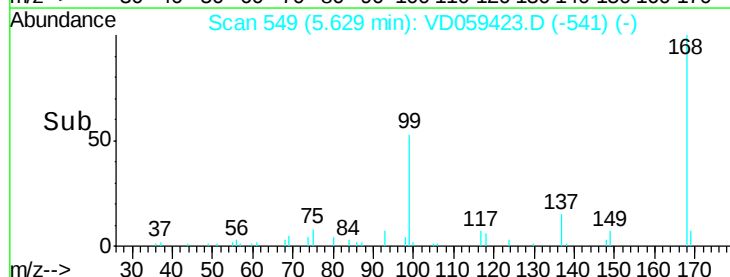
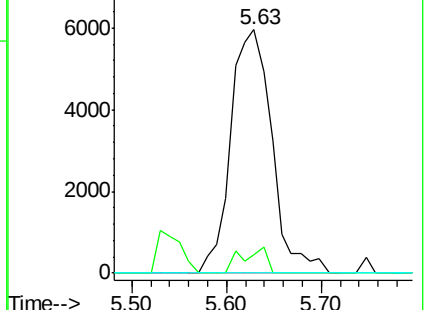
77 0.0 23.4 35.2#

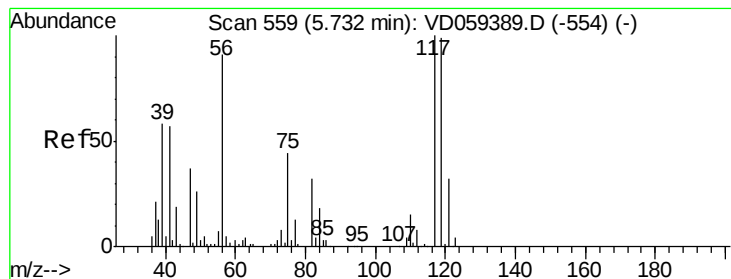


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): VDC





#38

Carbon Tetrachloride

Concen: 5.38 ug/l

RT: 5.62 min Scan# 548

Delta R.T. -0.11 min

Lab File: VD059423.D

Acq: 26 Jun 2018 14:16

Instrument :

MSVOA\_D

ClientSampled :

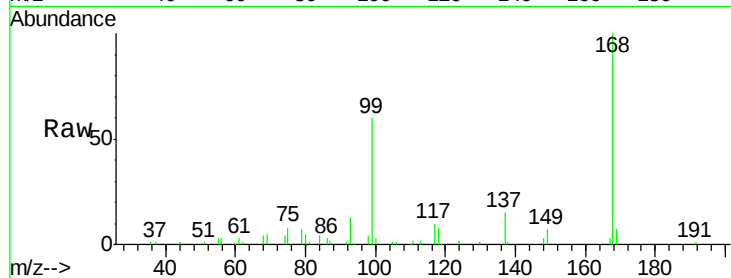
Tot Ion:117 Resp: 16738

Ion Ratio Lower Upper

117 100

119 4.9 76.6 115.0#

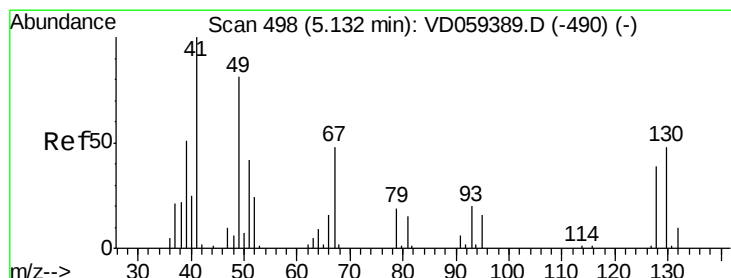
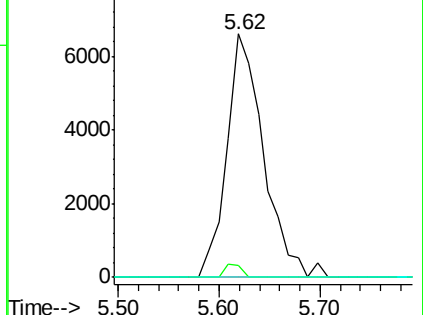
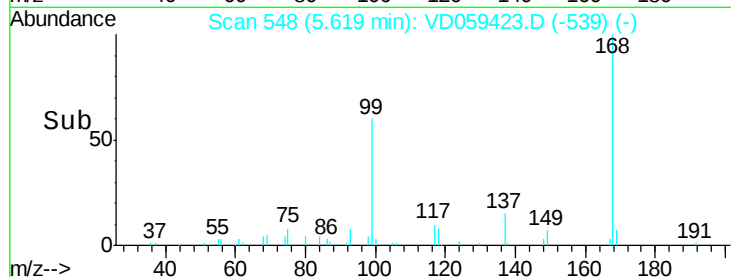
121 0.0 25.0 37.4#



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



#41

Methacrylonitrile

Concen: 1.10 ug/l

RT: 5.18 min Scan# 503

Delta R.T. 0.04 min

Lab File: VD059423.D

Acq: 26 Jun 2018 14:16

Tgt Ion: 41 Resp: 974

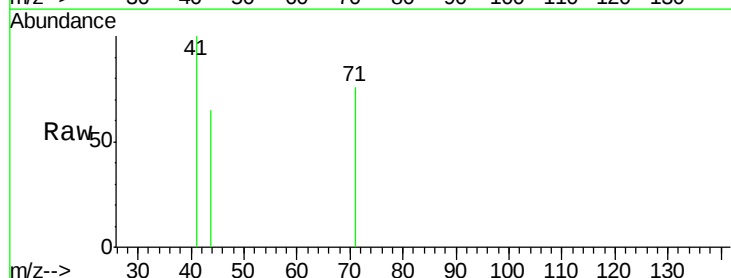
Ion Ratio Lower Upper

41 100

39 0.0 41.5 62.3#

67 0.0 38.7 58.1#

52 0.0 19.4 29.2#

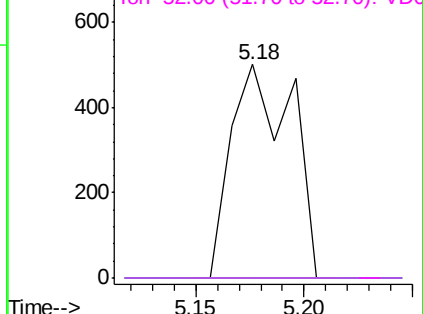
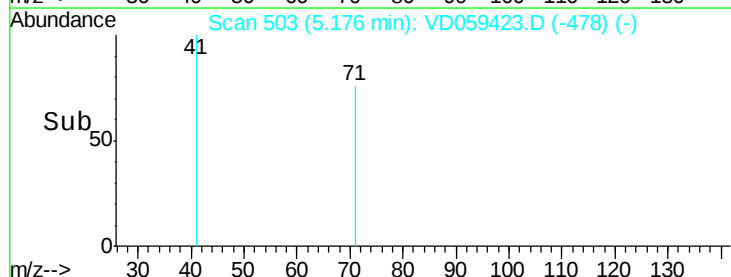


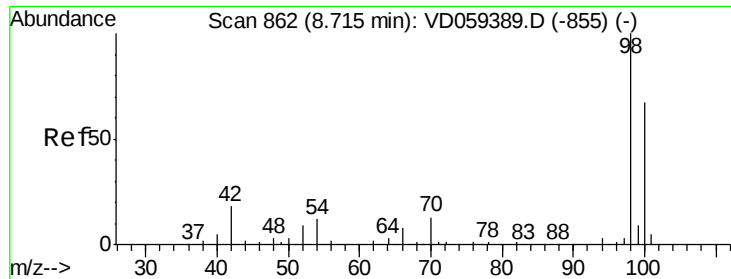
Abundance Ion 40.95 (40.65 to 41.65): VDC

Ion 38.95 (38.65 to 39.65): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC

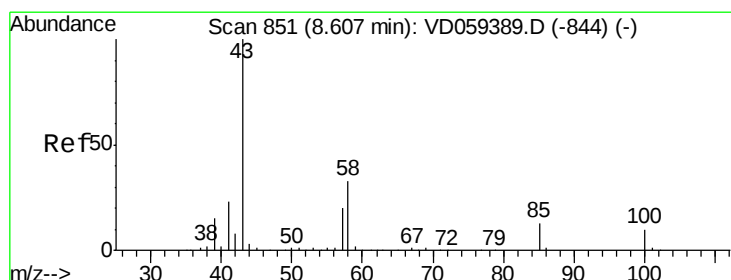
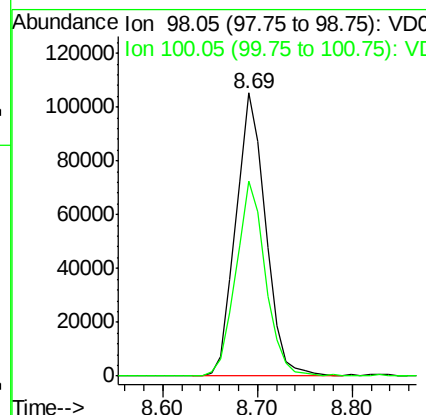
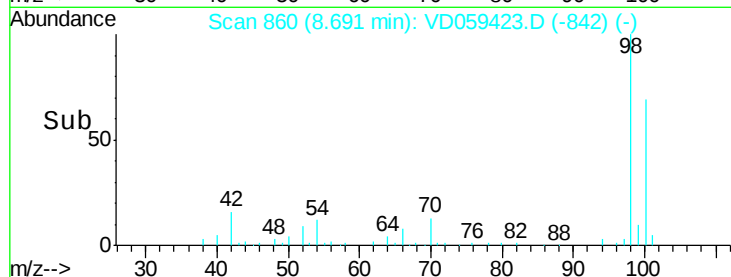
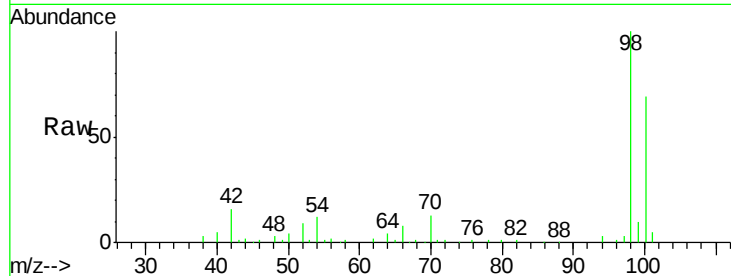




#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 8.69 min Scan# 860  
Delta R.T. -0.02 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

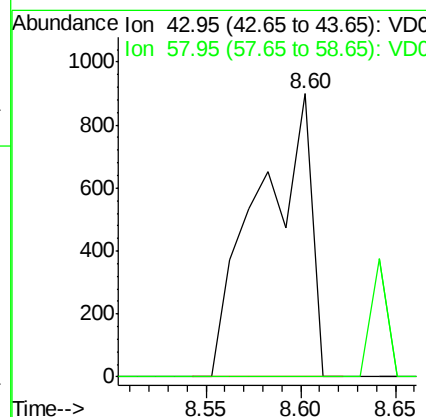
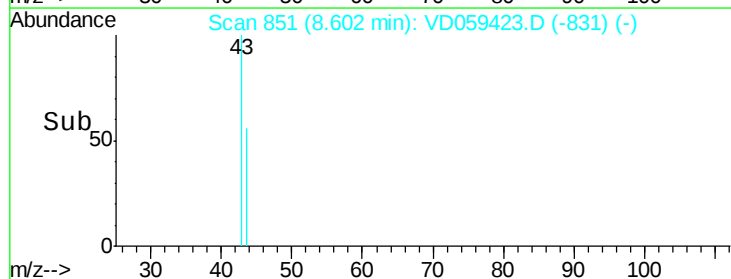
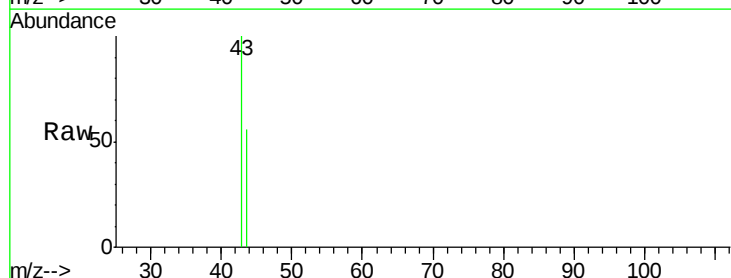
Instrument :  
MSVOA\_D  
ClientSampleId :

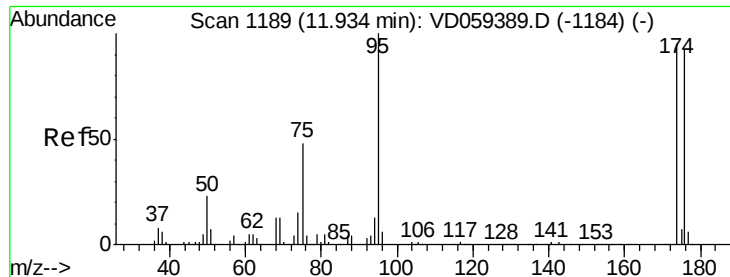
Tot Ion: 98 Resp: 229432  
Ion Ratio Lower Upper  
98 100  
100 68.9 54.4 81.6



#51  
4-Methyl-2-Pentanone  
Concen: 1.13 ug/l  
RT: 8.60 min Scan# 851  
Delta R.T. -0.00 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Tgt Ion: 43 Resp: 1731  
Ion Ratio Lower Upper  
43 100  
58 0.0 26.3 39.5#

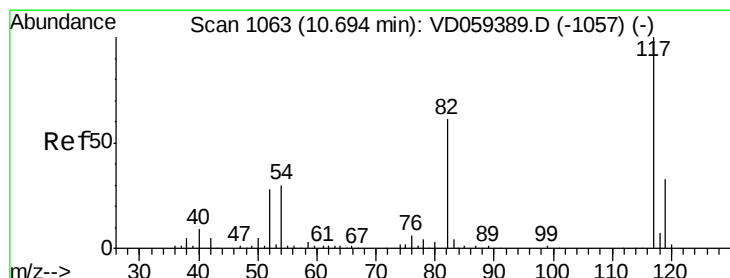
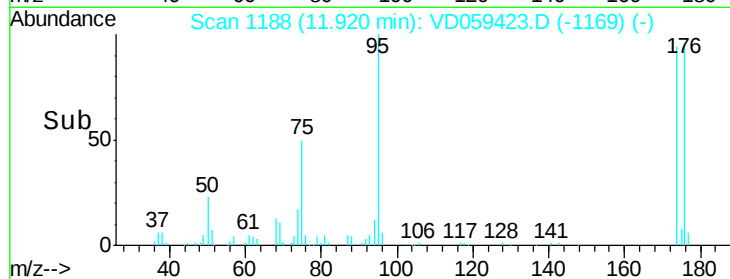
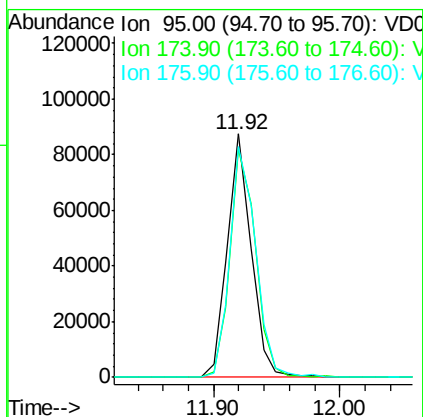
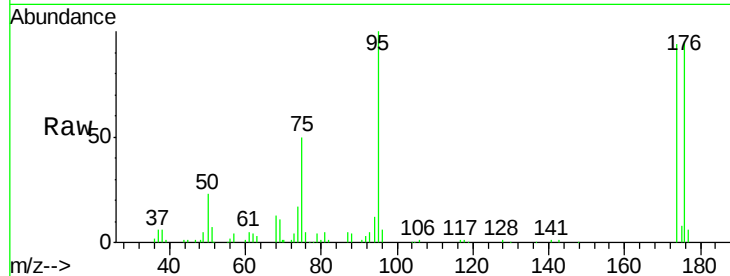




#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 11.92 min Scan# 1188  
Delta R.T. -0.01 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

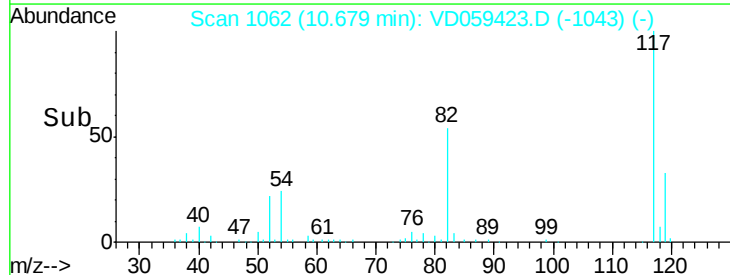
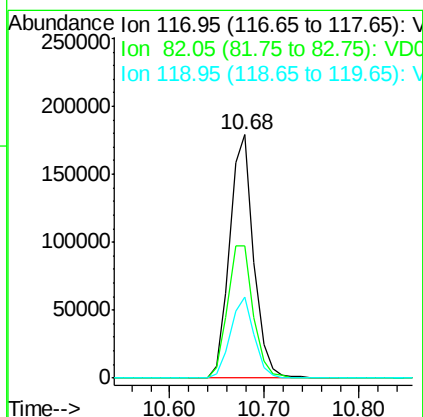
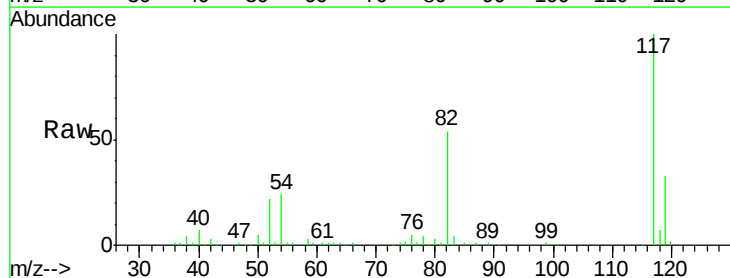
Instrument :  
MSVOA\_D  
ClientSampleId :

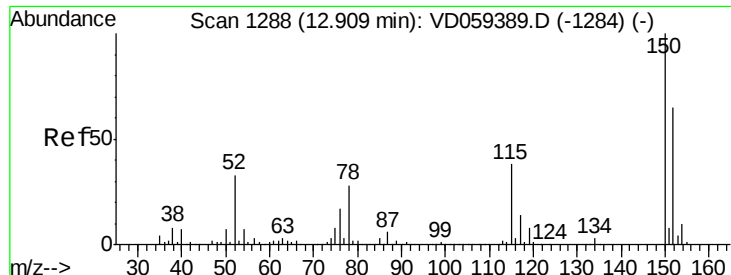
Tot Ion: 95 Resp: 114224  
Ion Ratio Lower Upper  
95 100  
174 93.6 0.0 190.4  
176 94.5 0.0 183.2



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.68 min Scan# 1062  
Delta R.T. -0.01 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Tgt Ion: 117 Resp: 314868  
Ion Ratio Lower Upper  
117 100  
82 54.1 49.0 73.6  
119 33.0 26.2 39.4



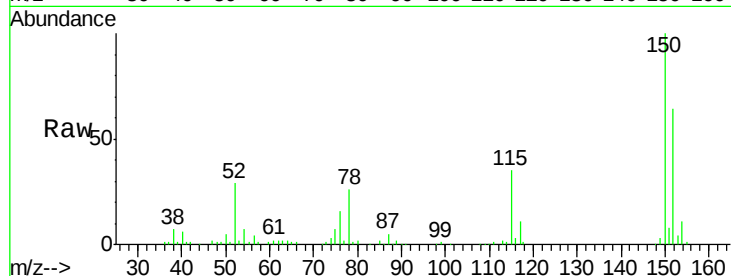


#72

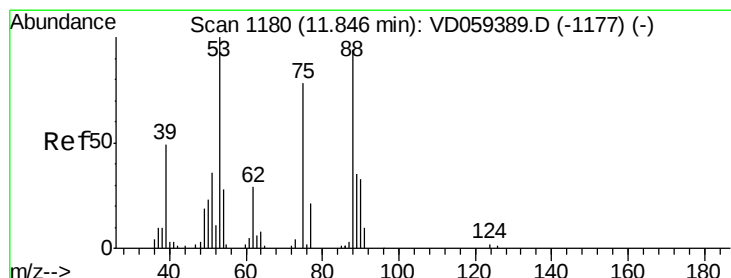
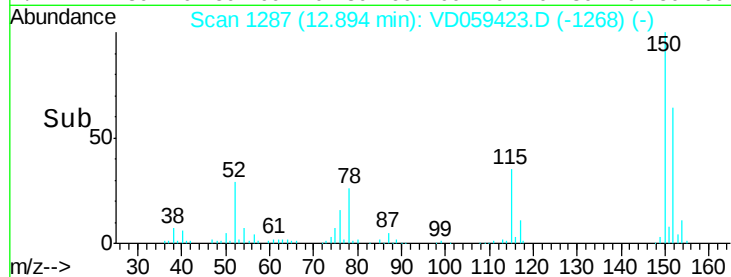
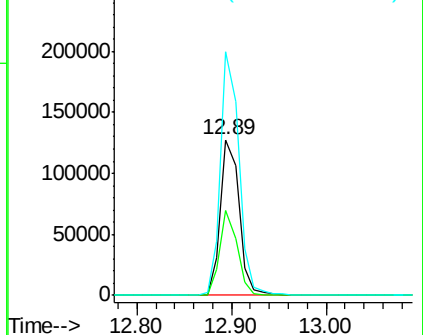
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.89 min Scan# 1287  
Delta R.T. -0.01 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:152 Resp: 176658  
Ion Ratio Lower Upper  
152 100  
115 54.5 29.4 88.3  
150 156.4 0.0 308.2



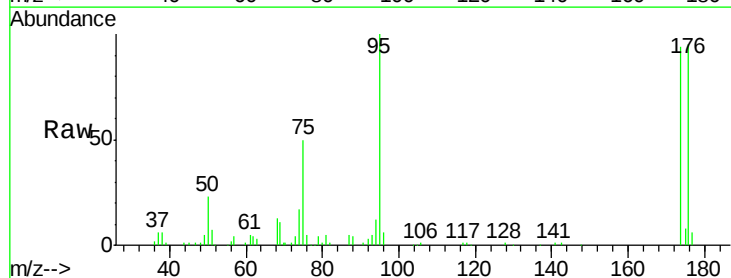
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 149.90 (149.60 to 150.60): V



#81

trans-1,4-Dichloro-2-butene  
Concen: 97.78 ug/l  
RT: 11.92 min Scan# 1188  
Delta R.T. 0.07 min  
Lab File: VD059423.D  
Acq: 26 Jun 2018 14:16

Tgt Ion: 75 Resp: 54153  
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

