

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD062518\  
 Data File : VD059397.D  
 Acq On : 25 Jun 2018 14:14  
 Operator : VA/AP  
 Sample : VD0625SBL01  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Jun 26 06:45:22 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      | 5.64  | 168  | 965109   | 50.00 | ug/l  | -0.01    |
| 34) 1,4-Difluorobenzene    | 6.68  | 114  | 1211361  | 50.00 | ug/l  | -0.01    |
| 63) Chlorobenzene-d5       | 10.69 | 117  | 1014265  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.91 | 152  | 561487   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.01  | 65   | 464679   | 47.08 | ug/l    | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 94.16%  |          |
| 35) Dibromofluoromethane    | 5.54  | 113  | 474353   | 48.08 | ug/l    | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 96.16%  |          |
| 50) Toluene-d8              | 8.70  | 98   | 1080598  | 46.85 | ug/l    | -0.01    |
| Spiked Amount 50.000        |       |      | Recovery | =     | 93.70%  |          |
| 62) 4-Bromofluorobenzene    | 11.93 | 95   | 485956   | 50.65 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 101.30% |          |

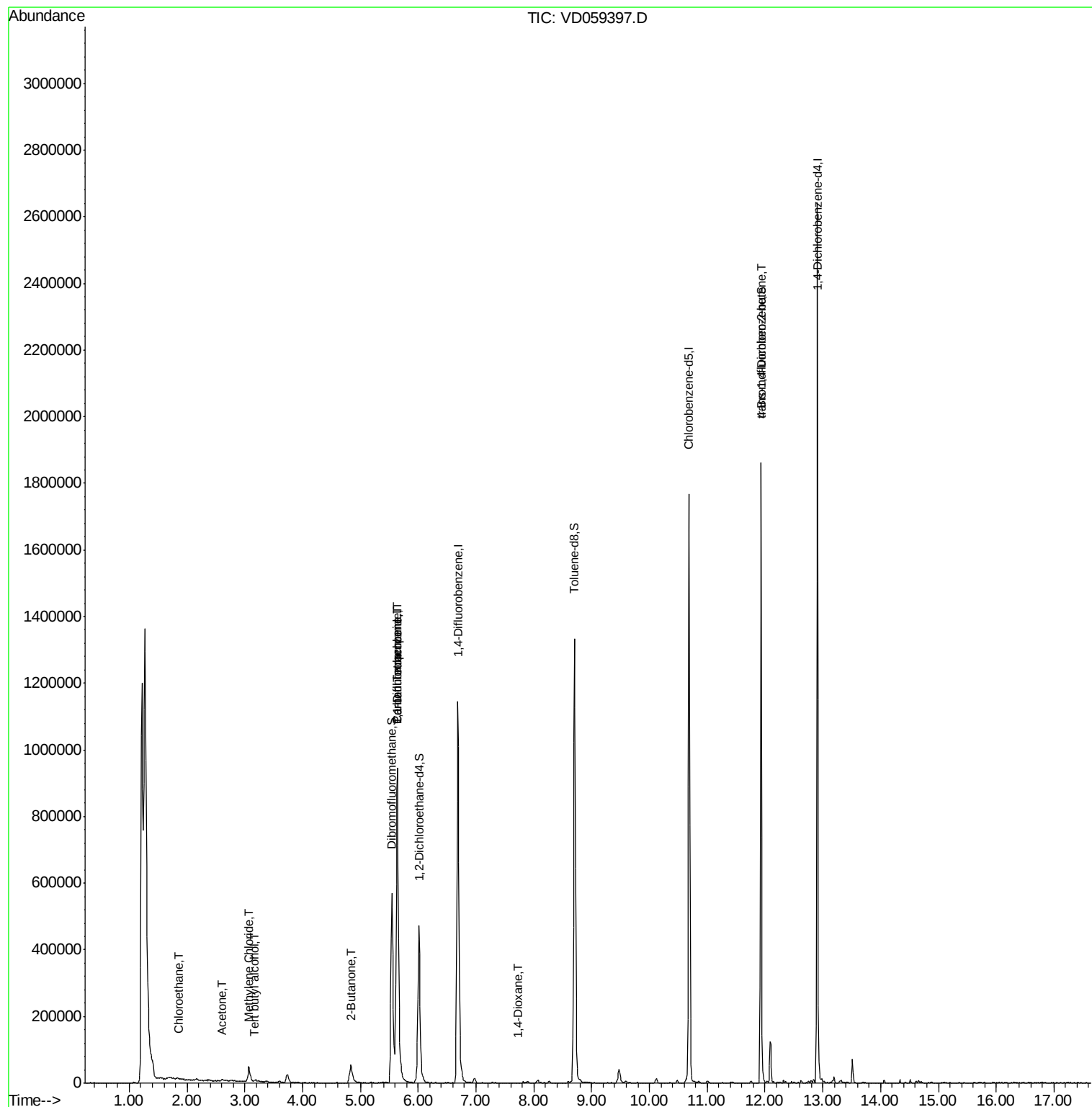
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.81  | 94   | 1037     | Below Cal | #      | 4      |
| 6) Chloroethane                | 1.85  | 64   | 448      | 2.099     | ug/l # | 41     |
| 11) Tert butyl alcohol         | 3.17  | 59   | 5060     | 14.820    | ug/l # | 72     |
| 16) Acetone                    | 2.62  | 43   | 9945     | 7.984     | ug/l # | 55     |
| 18) Methyl Acetate             | 2.93  | 43   | 374      | Below Cal | #      | 66     |
| 20) Methylene Chloride         | 3.07  | 84   | 20471    | 3.611     | ug/l   | 87     |
| 25) 2-Butanone                 | 4.82  | 43   | 5647     | 2.164     | ug/l # | 57     |
| 31) Cyclohexane                | 5.64  | 56   | 23997    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 5.63  | 75   | 73223    | 6.663     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.64  | 117  | 76658    | 6.766     | ug/l # | 17     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 186      | 3.622     | ug/l # | 21     |
| 81) trans-1,4-Dichloro-2-buten | 11.93 | 75   | 233174   | 132.460   | ug/l # | 1      |

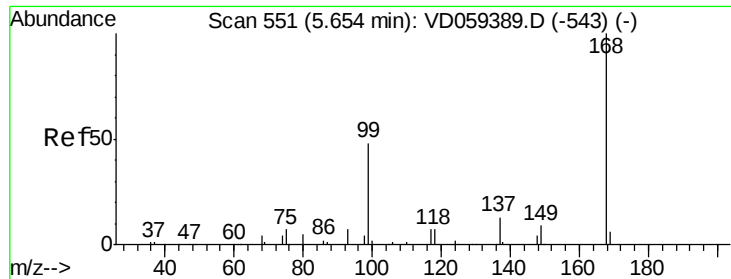
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD062518\  
Data File : VD059397.D  
Acq On : 25 Jun 2018 14:14  
Operator : VA/AP  
Sample : VD0625SBL01  
Misc : 5.00µl/5ml/MSVOA D/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Jun 26 06:45:22 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: 5.64 min Scan# 550

Delta R.T. -0.01 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

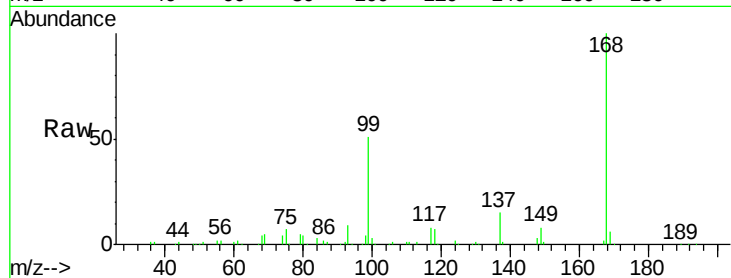
Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:168 Resp: 965109

Ion Ratio Lower Upper

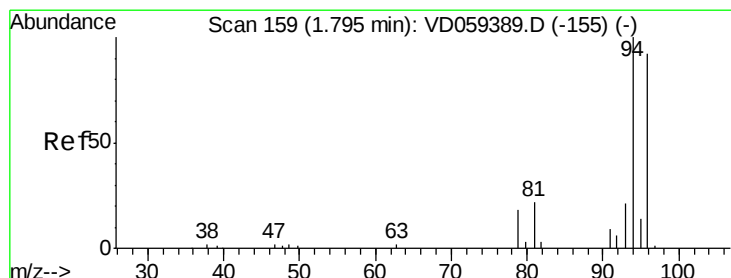
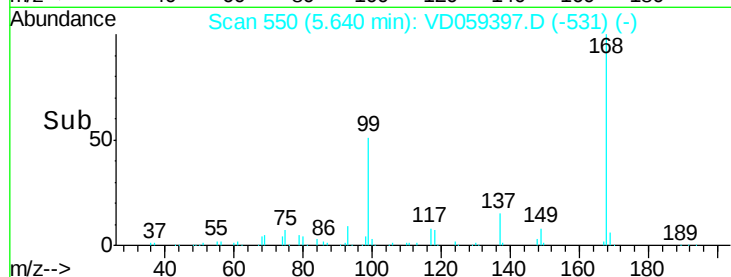
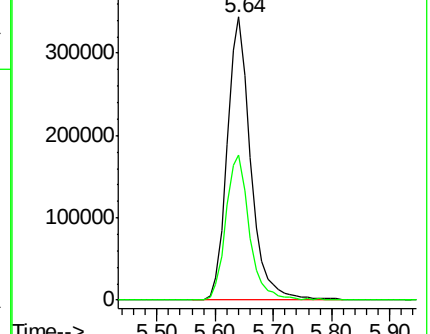
168 100

99 51.3 41.0 61.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#5

Bromomethane

Concen: Below Cal

RT: 1.81 min Scan# 161

Delta R.T. 0.02 min

Lab File: VD059397.D

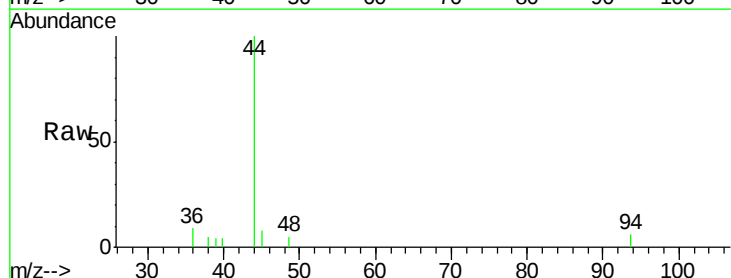
Acq: 25 Jun 2018 14:14

Tgt Ion: 94 Resp: 1037

Ion Ratio Lower Upper

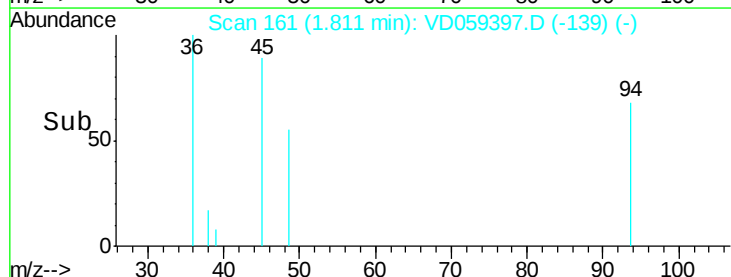
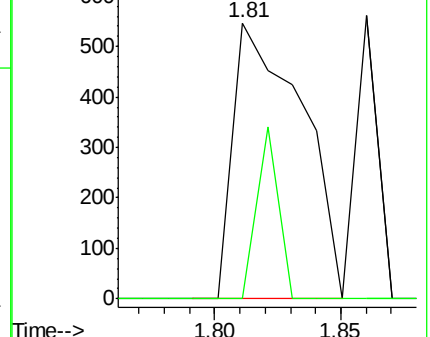
94 100

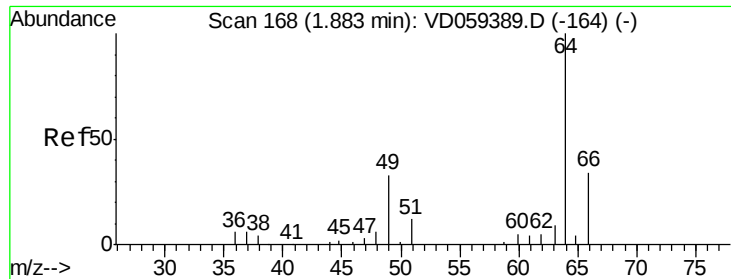
96 0.0 73.4 110.0#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC





#6

Chloroethane

Concen: 2.099 ug/l

RT: 1.85 min Scan# 165

Delta R.T. -0.03 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

Instrument :

MSVOA\_D

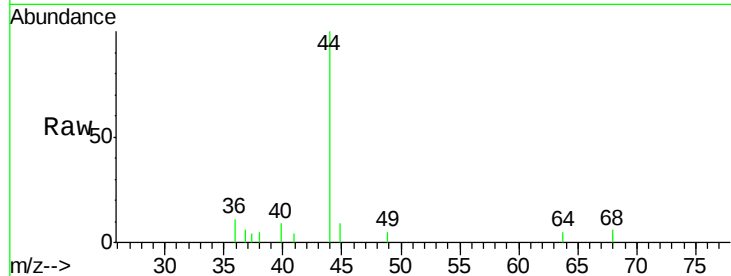
ClientSampled :

Tot Ion: 64 Resp: 448

Ion Ratio Lower Upper

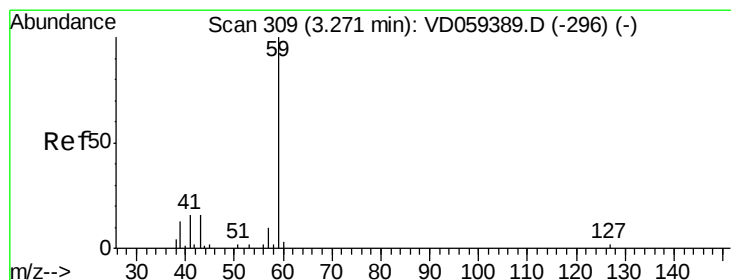
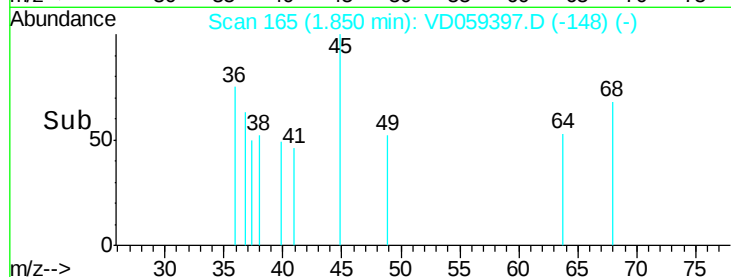
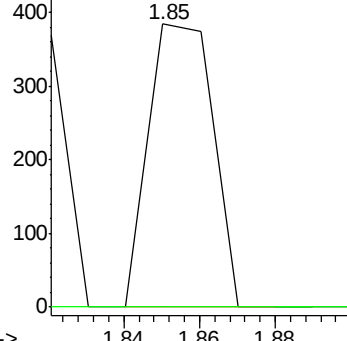
64 100

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: 14.820 ug/l

RT: 3.17 min Scan# 299

Delta R.T. -0.10 min

Lab File: VD059397.D

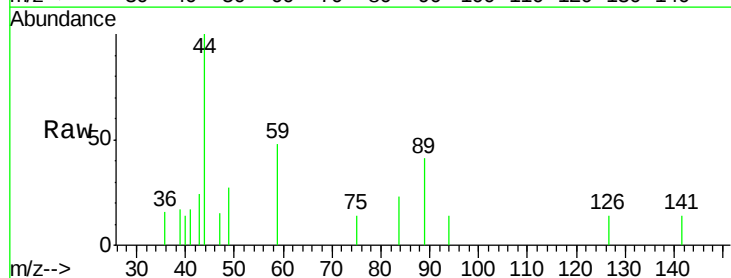
Acq: 25 Jun 2018 14:14

Tgt Ion: 59 Resp: 5060

Ion Ratio Lower Upper

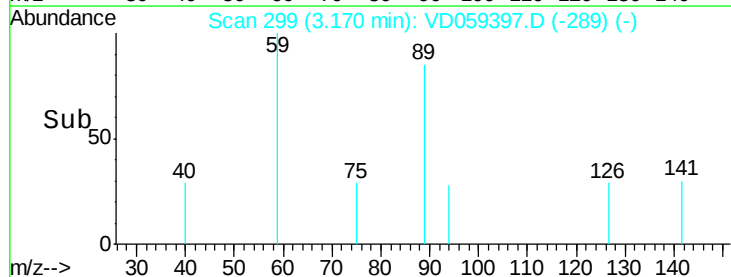
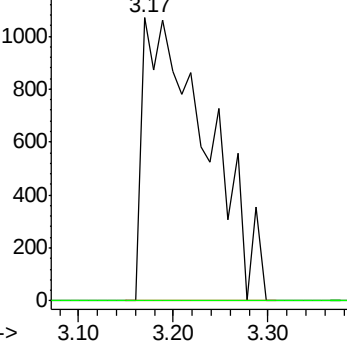
59 100

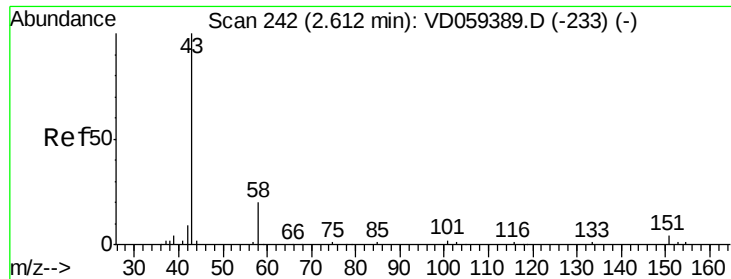
57 0.0 8.3 12.5#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#16

Acetone

Concen: 7.984 ug/l

RT: 2.62 min Scan# 243

Delta R.T. 0.01 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

Instrument :

MSVOA\_D

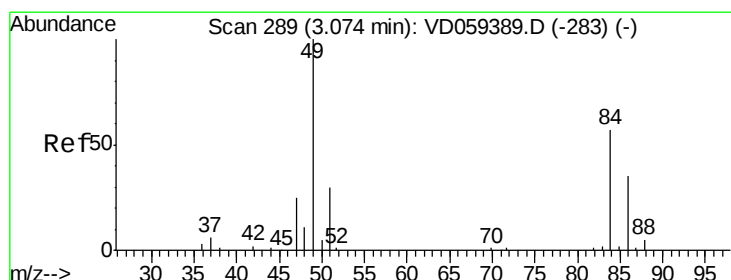
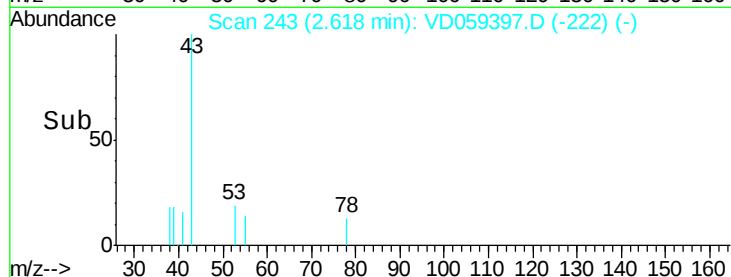
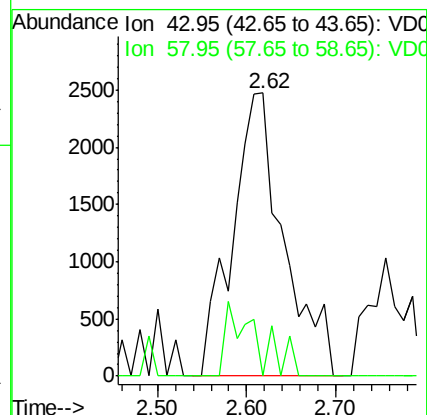
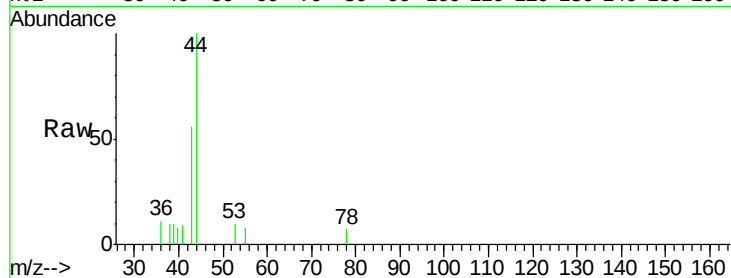
ClientSampled :

Tot Ion: 43 Resp: 9945

Ion Ratio Lower Upper

43 100

58 0.0 16.8 25.2#



#20

Methylene Chloride

Concen: 3.611 ug/l

RT: 3.07 min Scan# 289

Delta R.T. -0.00 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

Tgt Ion: 84 Resp: 20471

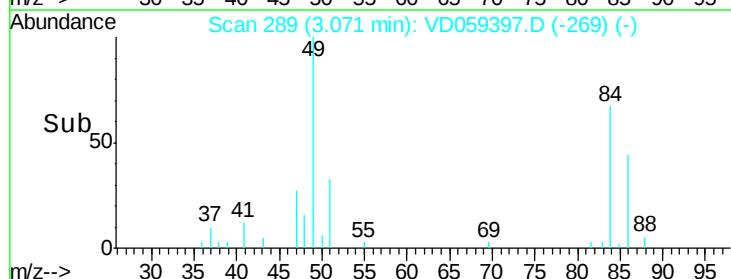
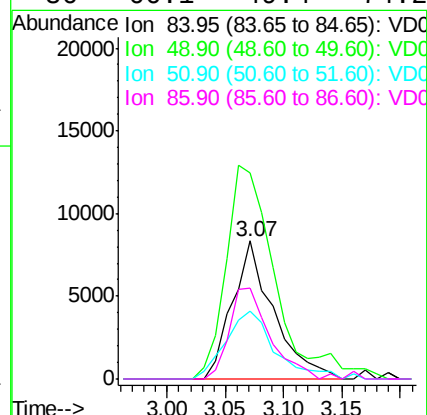
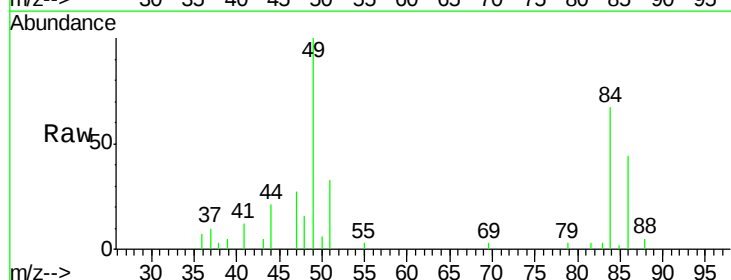
Ion Ratio Lower Upper

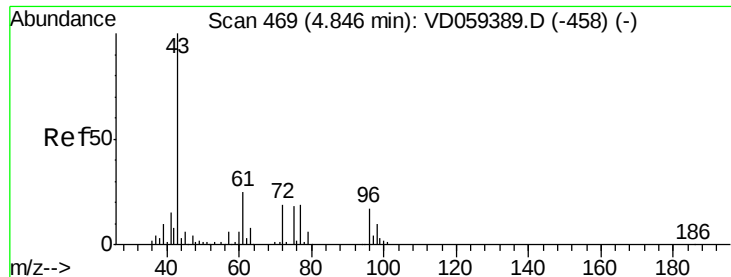
84 100

49 149.8 140.3 210.5

51 49.2 41.6 62.4

86 66.1 49.4 74.2





#25

2-Butanone

Concen: 2.164 ug/l

RT: 4.82 min Scan# 467

Delta R.T. -0.02 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

Instrument :

MSVOA\_D

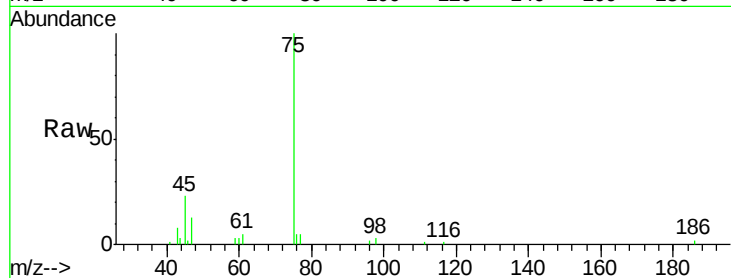
ClientSampled :

Tot Ion: 43 Resp: 5647

Ion Ratio Lower Upper

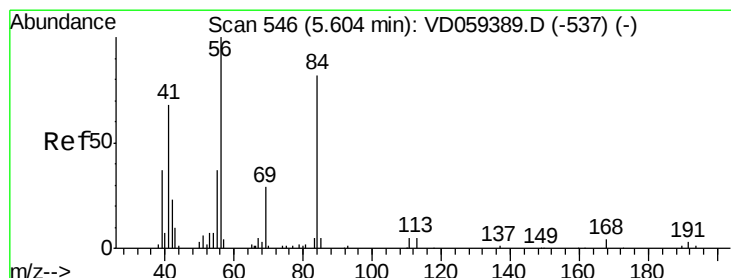
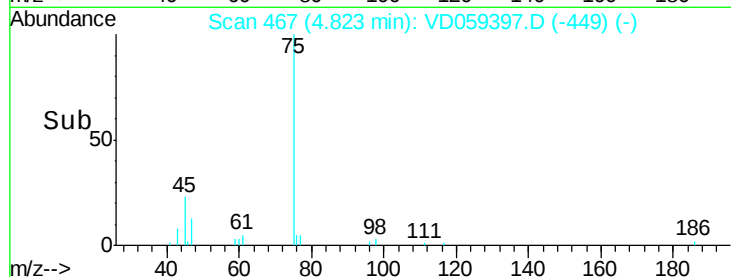
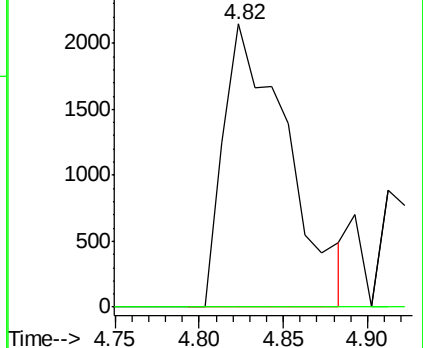
43 100

72 0.0 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: VD059397.D

Acq: 25 Jun 2018 14:14

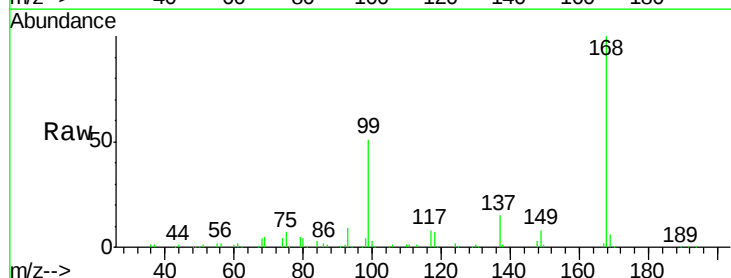
Tgt Ion: 56 Resp: 23997

Ion Ratio Lower Upper

56 100

69 205.0 22.9 34.3#

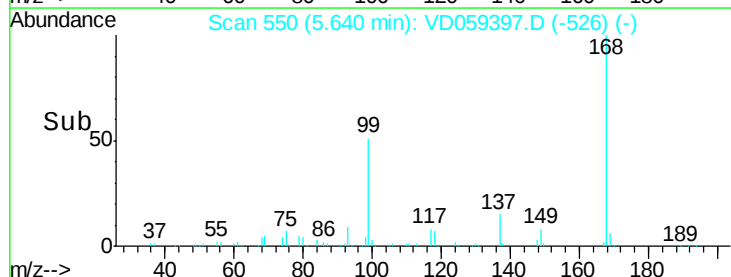
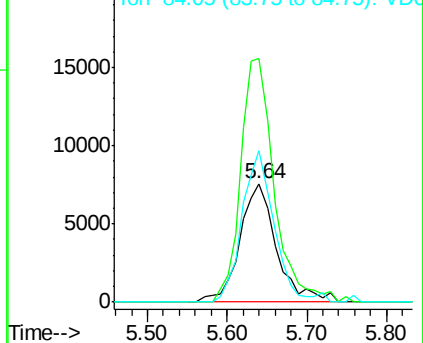
84 127.7 67.3 100.9#

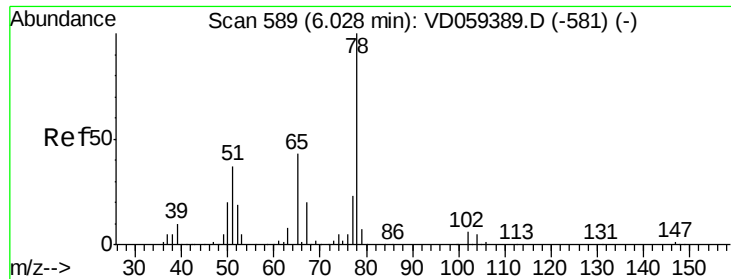


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.05 (83.75 to 84.75): VDC





#33

1,2-Dichloroethane-d4

Concen: Below ug/l

RT: 6.01 min Scan# 588

Delta R.T. -0.01 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

Instrument :

MSVOA\_D

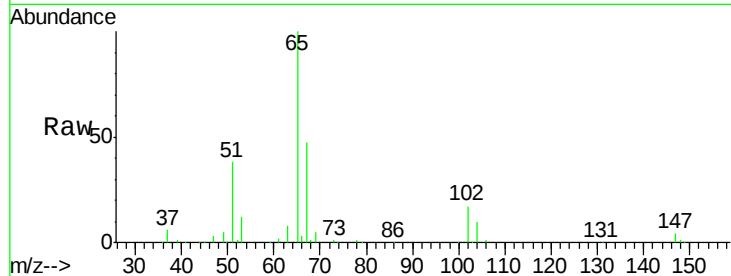
ClientSampleId :

Tot Ion: 65 Resp: 464679

Ion Ratio Lower Upper

65 100

67 46.8 0.0 93.8



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

6.01

150000

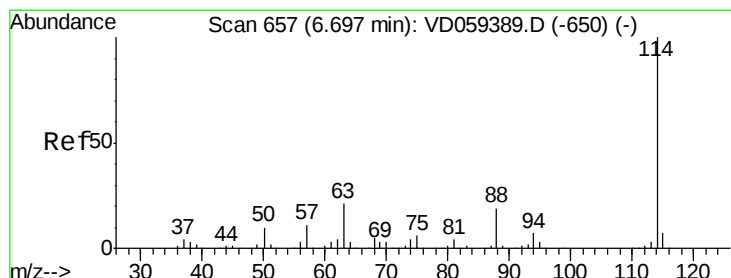
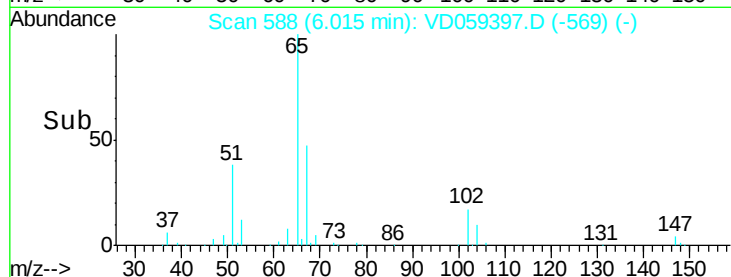
100000

50000

0

Time-->

5.90 6.00 6.10 6.20



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.68 min Scan# 656

Delta R.T. -0.01 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

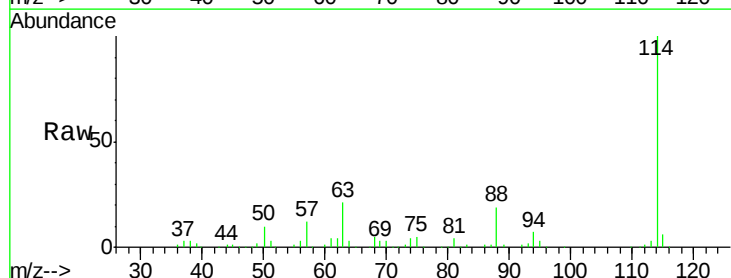
Tgt Ion: 114 Resp: 1211361

Ion Ratio Lower Upper

114 100

63 21.1 0.0 42.4

88 18.8 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

6.68

600000

500000

400000

300000

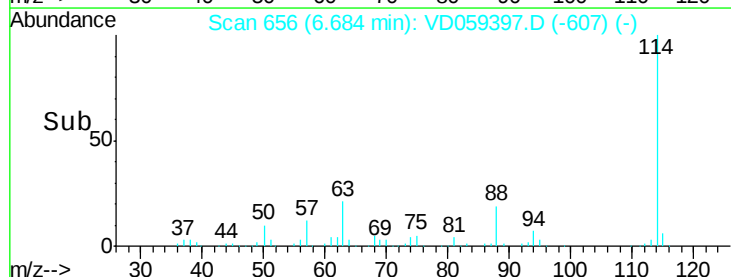
200000

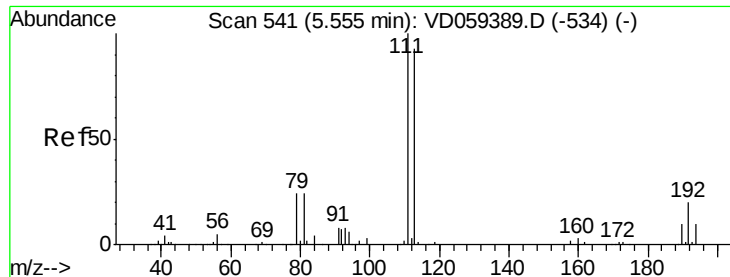
100000

0

Time-->

6.60 6.80 7.00

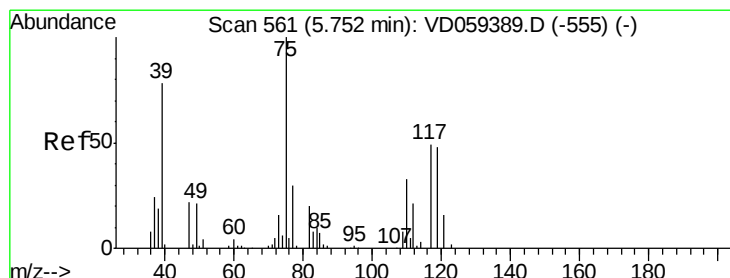
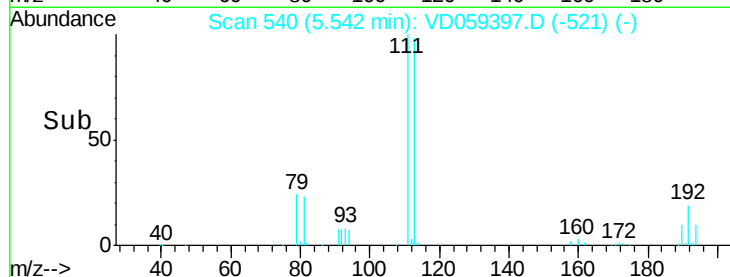
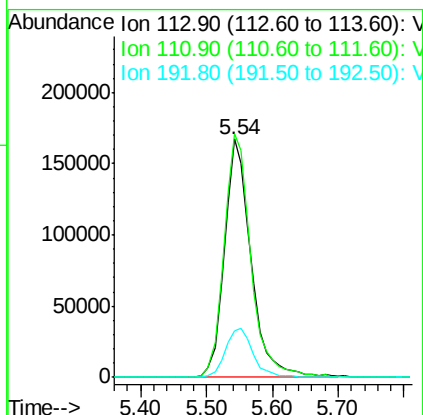
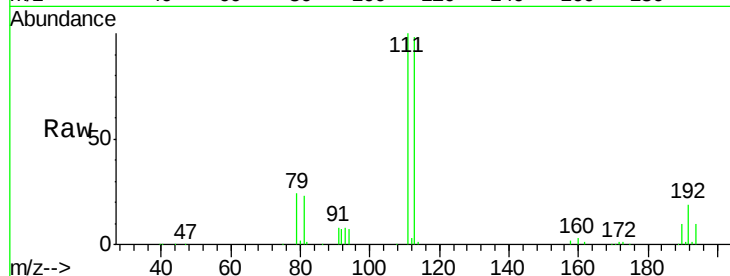




#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 5.54 min Scan# 540  
 Delta R.T. -0.01 min  
 Lab File: VD059397.D  
 Acq: 25 Jun 2018 14:14

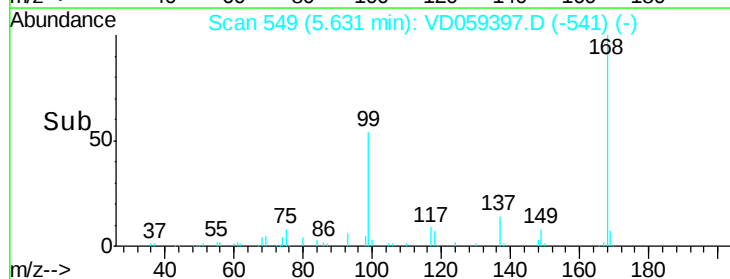
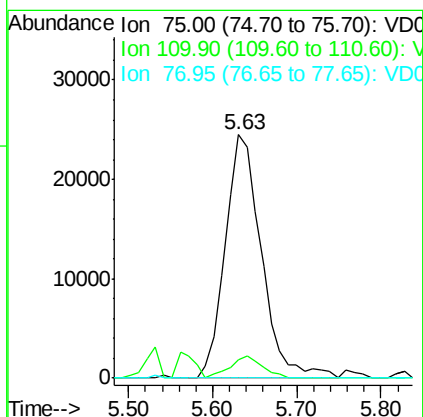
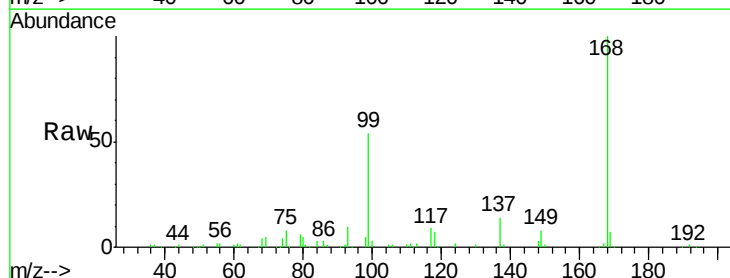
Instrument :  
 MSVOA\_D  
 ClientSampled :

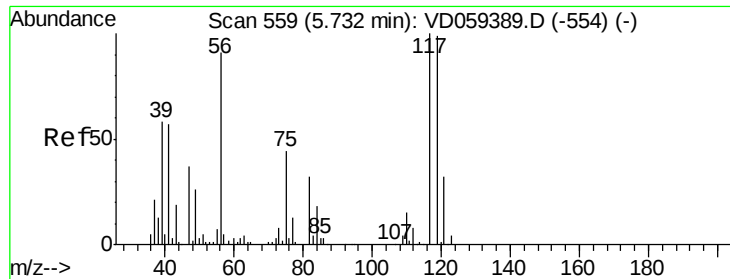
Tot Ion:113 Resp: 474353  
 Ion Ratio Lower Upper  
 113 100  
 111 102.3 85.7 128.5  
 192 19.5 16.9 25.3



#36  
 1,1-Dichloropropene  
 Concen: 6.663 ug/l  
 RT: 5.63 min Scan# 549  
 Delta R.T. -0.12 min  
 Lab File: VD059397.D  
 Acq: 25 Jun 2018 14:14

Tgt Ion: 75 Resp: 73223  
 Ion Ratio Lower Upper  
 75 100  
 110 7.4 16.1 48.2#  
 77 0.0 23.4 35.2#

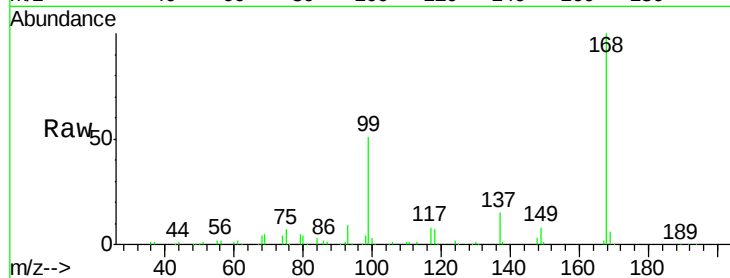




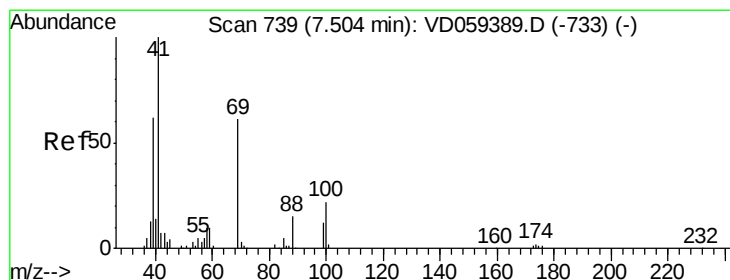
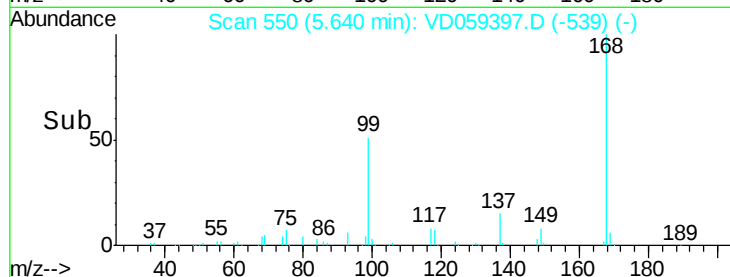
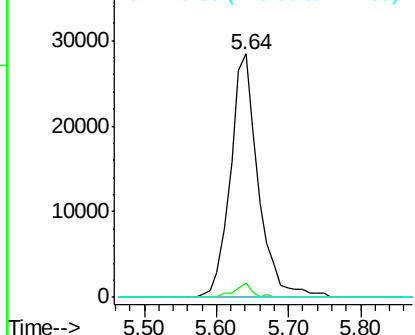
#38  
Carbon Tetrachloride  
Concen: 6.766 ug/l  
RT: 5.64 min Scan# 550  
Delta R.T. -0.09 min  
Lab File: VD059397.D  
Acq: 25 Jun 2018 14:14

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:117 Resp: 76658  
Ion Ratio Lower Upper  
117 100  
119 5.8 76.6 115.0#  
121 0.0 25.0 37.4#

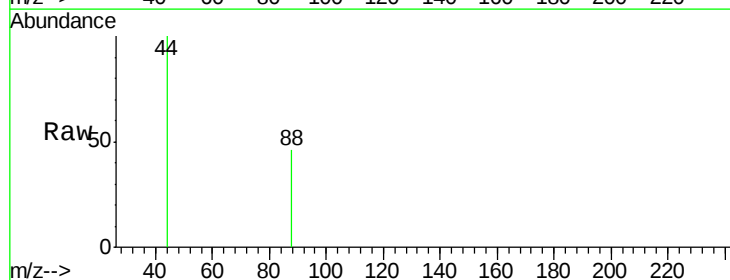


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

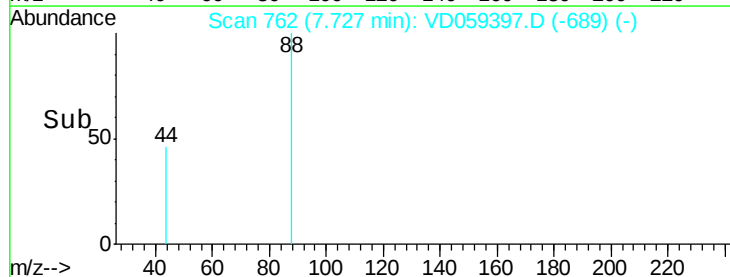
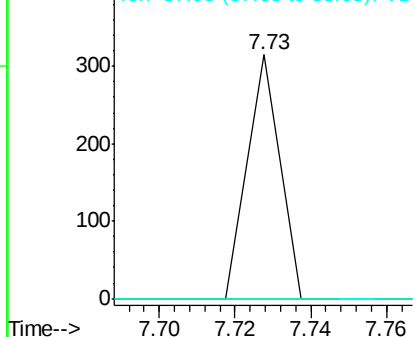


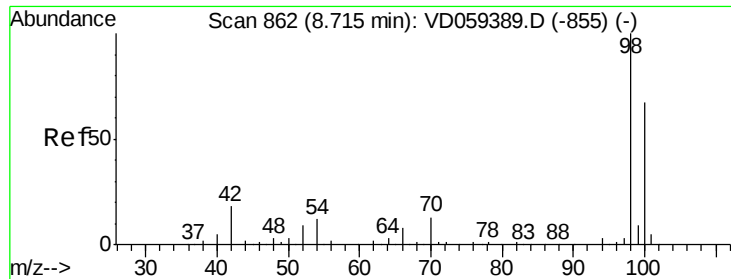
#49  
1,4-Dioxane  
Concen: 3.622 ug/l  
RT: 7.73 min Scan# 762  
Delta R.T. 0.22 min  
Lab File: VD059397.D  
Acq: 25 Jun 2018 14:14

Tgt Ion: 88 Resp: 186  
Ion Ratio Lower Upper  
88 100  
43 0.0 41.0 61.4#  
58 0.0 53.4 80.0#



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

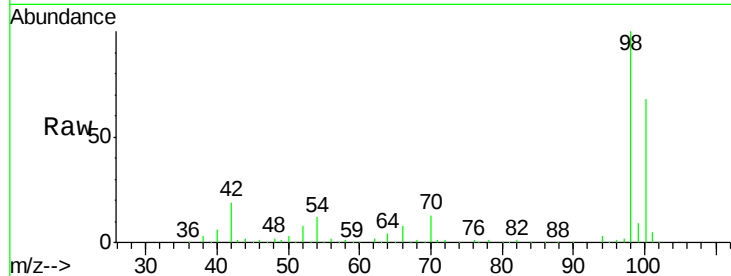




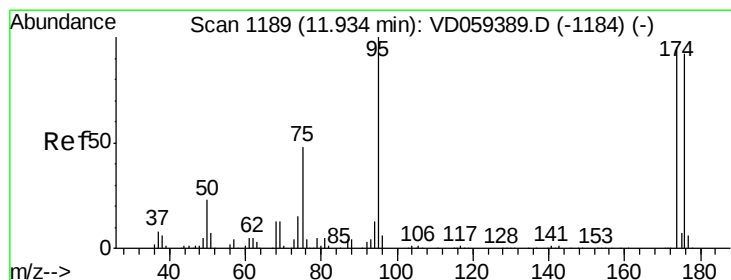
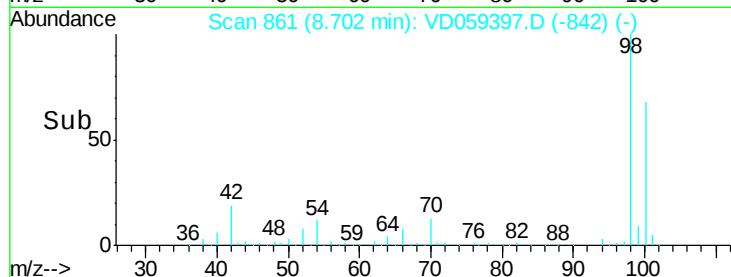
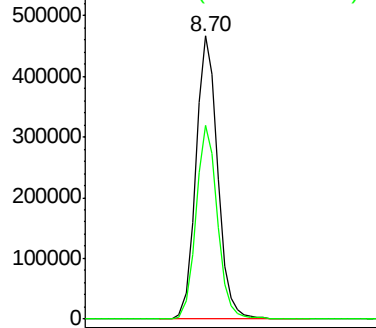
#50  
Toluene-d8  
Concen: 3.622 ug/l  
RT: 8.70 min Scan# 861  
Delta R.T. -0.01 min  
Lab File: VD059397.D  
Acq: 25 Jun 2018 14:14

Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion: 98 Resp: 1080598  
Ion Ratio Lower Upper  
98 100  
100 68.5 54.4 81.6

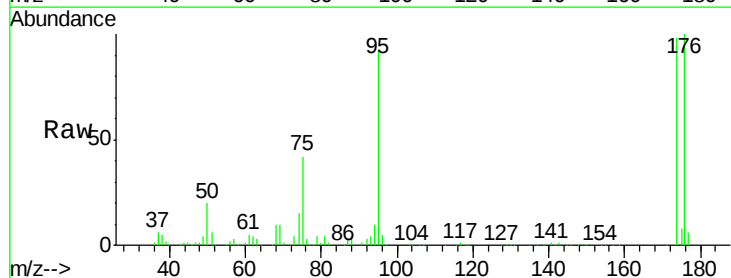


Abundance Ion 98.05 (97.75 to 98.75): VDC  
Ion 100.05 (99.75 to 100.75): VDC

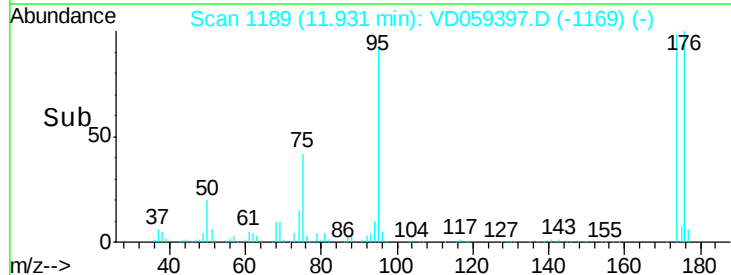
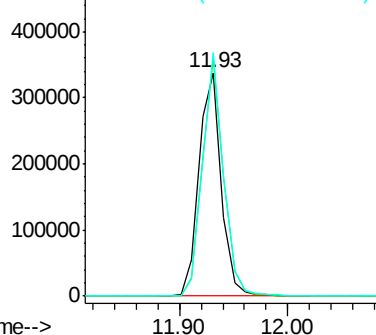


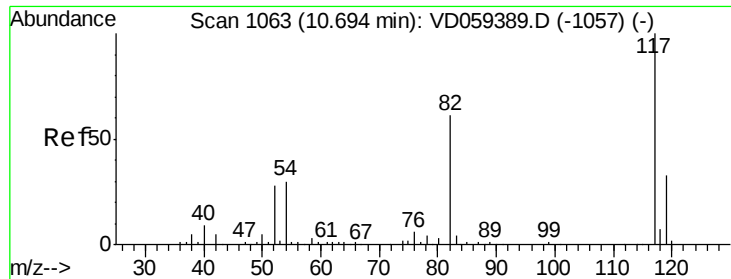
#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 11.93 min Scan# 1189  
Delta R.T. -0.00 min  
Lab File: VD059397.D  
Acq: 25 Jun 2018 14:14

Tgt Ion: 95 Resp: 485956  
Ion Ratio Lower Upper  
95 100  
174 107.0 0.0 190.4  
176 109.0 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

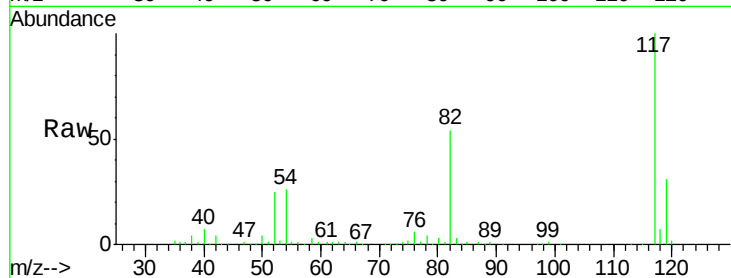




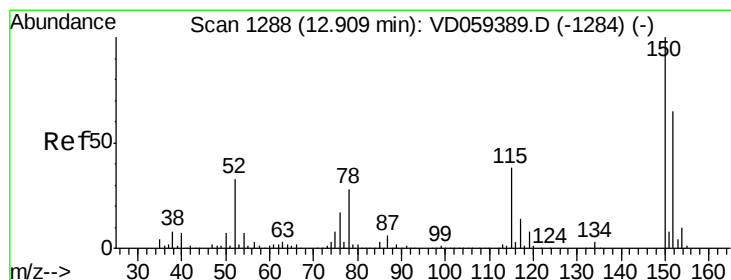
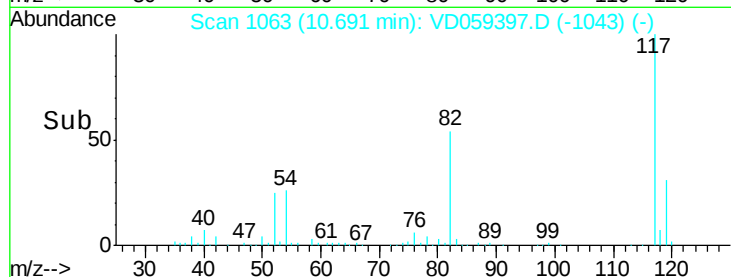
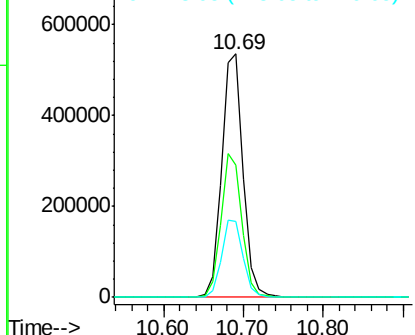
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.69 min Scan# 1063  
Delta R.T. -0.00 min  
Lab File: VD059397.D  
Acq: 25 Jun 2018 14:14

Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion:117 Resp: 1014265  
Ion Ratio Lower Upper  
117 100  
82 54.4 49.0 73.6  
119 31.4 26.2 39.4

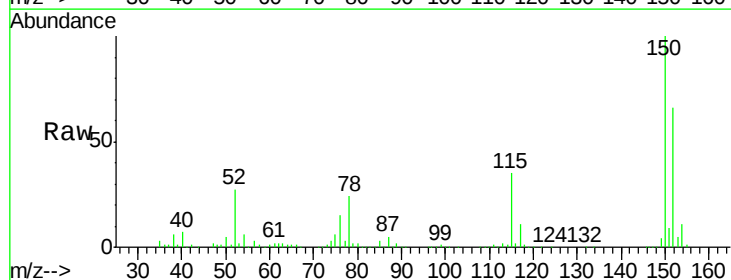


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

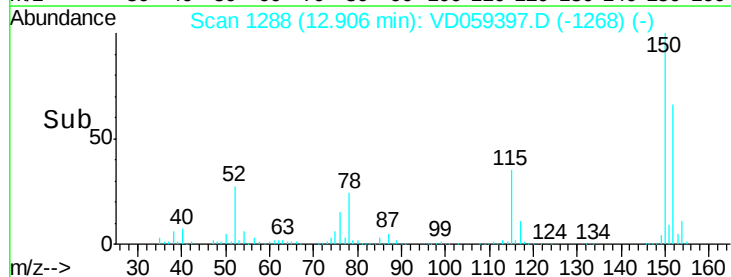
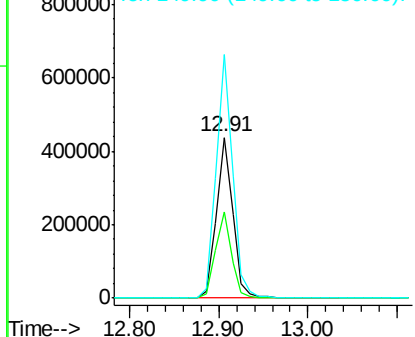


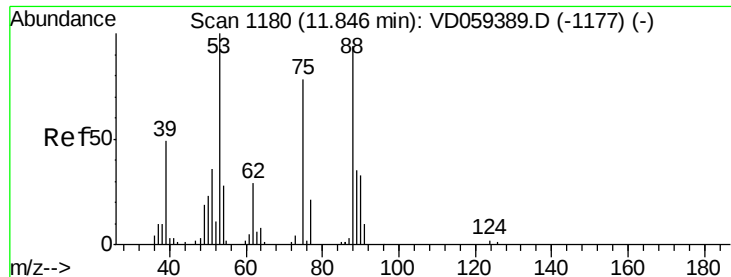
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.91 min Scan# 1288  
Delta R.T. -0.00 min  
Lab File: VD059397.D  
Acq: 25 Jun 2018 14:14

Tgt Ion:152 Resp: 561487  
Ion Ratio Lower Upper  
152 100  
115 53.6 29.4 88.3  
150 151.5 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: 132.460 ug/l

RT: 11.93 min Scan# 1189

Delta R.T. 0.09 min

Lab File: VD059397.D

Acq: 25 Jun 2018 14:14

Instrument :

MSVOA\_D

ClientSampleId :

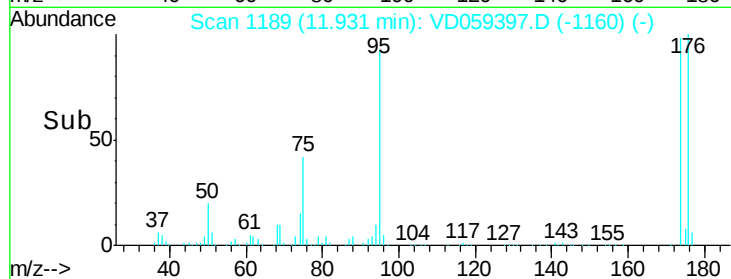
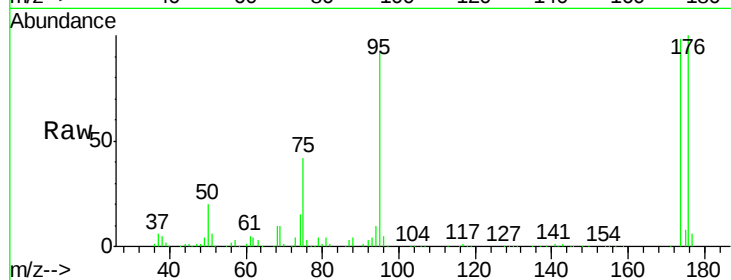
Tot Ion: 75 Resp: 233174

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

