

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD081319\  
 Data File : VD063558.D  
 Acq On : 14 Aug 2019 7:06  
 Operator : JC/SY  
 Sample : K4324-09  
 Misc : 5.72g/5ml/MSVOA D/SOIL  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Aug 14 08:35:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D080919S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Aug 10 06:42:47 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.05  | 168  | 1008459  | 50.00 | ug/l  | -0.01    |
| 34) 1,4-Difluorobenzene    | 8.22  | 114  | 1469414  | 50.00 | ug/l  | -0.01    |
| 63) Chlorobenzene-d5       | 12.38 | 117  | 1061320  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 376847   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.46  | 65   | 506644   | 47.00  | ug/l  | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |       |          |
| Recovery                    |       |      |          |        |       | 94.00%   |
| 35) Dibromofluoromethane    | 6.93  | 113  | 535654   | 43.28  | ug/l  | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |       |          |
| Recovery                    |       |      |          |        |       | 86.56%   |
| 50) Toluene-d8              | 10.42 | 98   | 968420   | 35.59  | ug/l  | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |       |          |
| Recovery                    |       |      |          |        |       | 71.18%   |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 344106   | 27.90  | ug/l  | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |       |          |
| Recovery                    |       |      |          |        |       | 55.80%   |

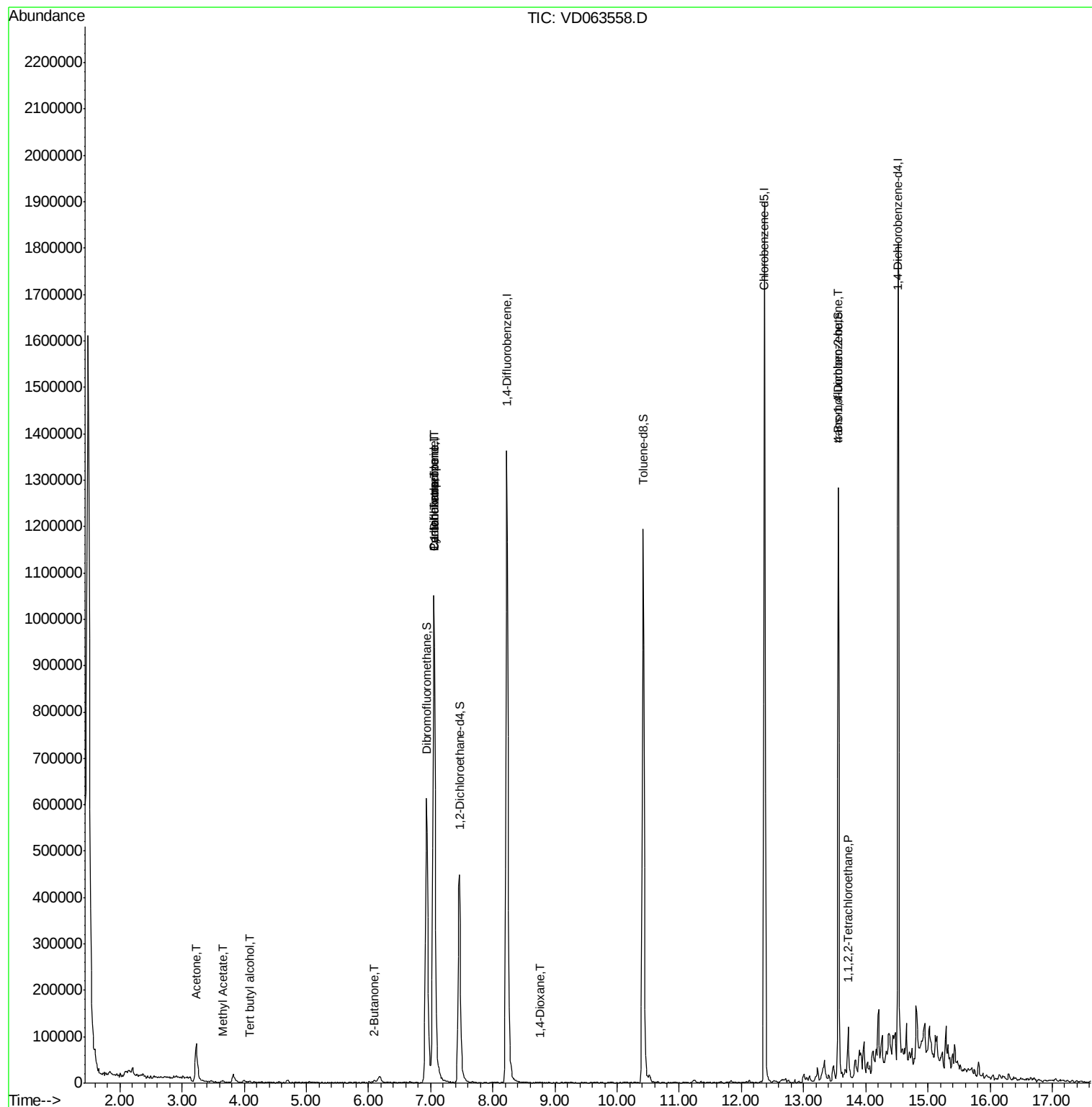
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 11) Tert butyl alcohol         | 4.08  | 59   | 1784     | 3.802   | ug/l # | 71     |
| 16) Acetone                    | 3.23  | 43   | 162970   | 74.372  | ug/l   | 94     |
| 18) Methyl Acetate             | 3.64  | 43   | 7442     | 1.793   | ug/l # | 57     |
| 25) 2-Butanone                 | 6.09  | 43   | 10092    | 4.663   | ug/l   | 100    |
| 31) Cyclohexane                | 7.05  | 56   | 19669    | 2.021   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 78465    | 6.040   | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.05  | 117  | 98026    | 5.007   | ug/l # | 16     |
| 49) 1,4-Dioxane                | 8.76  | 88   | 220      | 29.600  | ug/l # | 1      |
| 75) 1,1,2,2-Tetrachloroethane  | 13.72 | 83   | 4318     | 1.085   | ug/l # | 58     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 154307   | 132.745 | ug/l # | 1      |

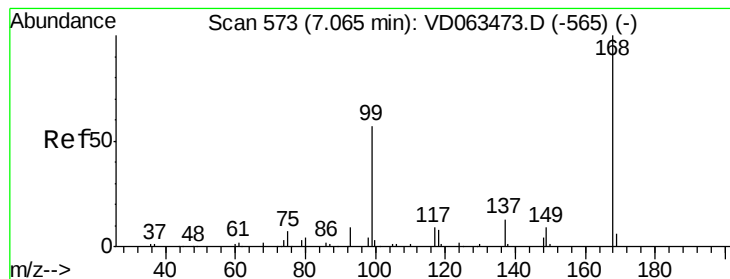
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD081319\  
Data File : VD063558.D  
Acq On : 14 Aug 2019 7:06  
Operator : JC/SY  
Sample : K4324-09  
Misc : 5.72g/5ml/MSVOA D/SOIL  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Aug 14 08:35:25 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D080919S.M  
Quant Title : SW846 8260  
QLast Update : Sat Aug 10 06:42:47 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 571

Delta R.T. -0.01 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

Instrument :

MSVOA\_D

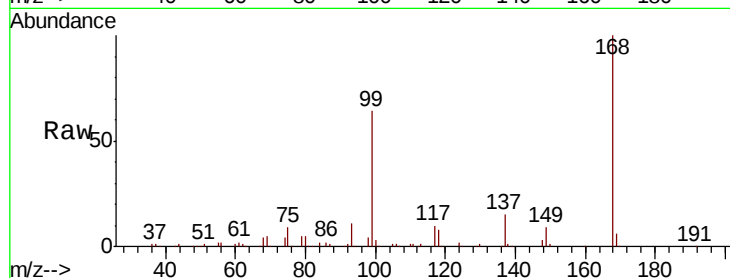
ClientSampleId :

Tot Ion:168 Resp: 1008459

Ion Ratio Lower Upper

168 100

99 63.5 46.7 70.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.05

400000

300000

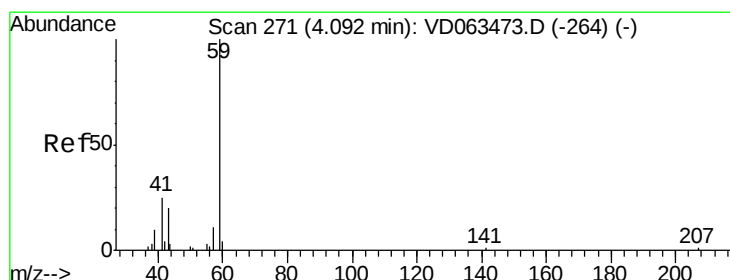
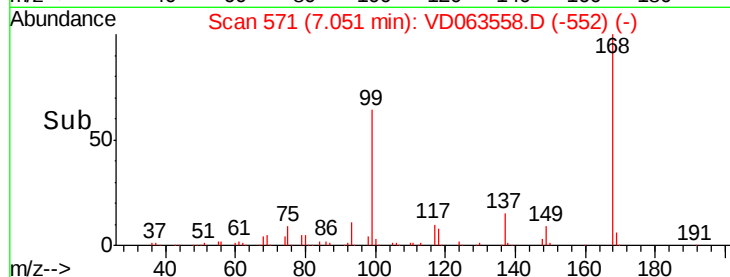
200000

100000

0

6.90 7.00 7.10 7.20 7.30

Time-->



#11

Tert butyl alcohol

Concen: 3.802 ug/l

RT: 4.08 min Scan# 269

Delta R.T. -0.01 min

Lab File: VD063558.D

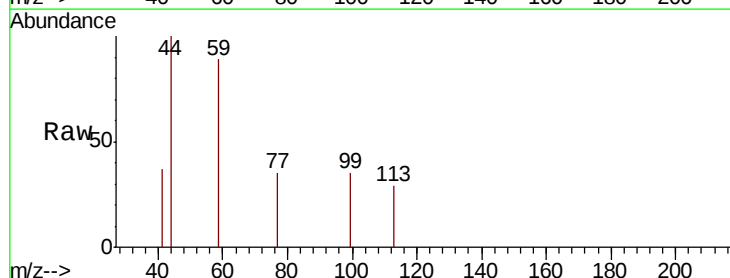
Acq: 14 Aug 2019 7:06

Tgt Ion: 59 Resp: 1784

Ion Ratio Lower Upper

59 100

57 0.0 8.7 13.1#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

4.08

1000

800

600

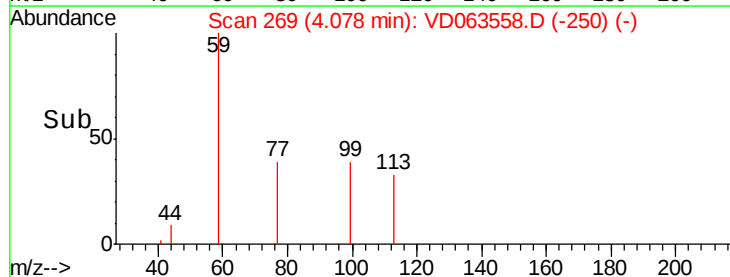
400

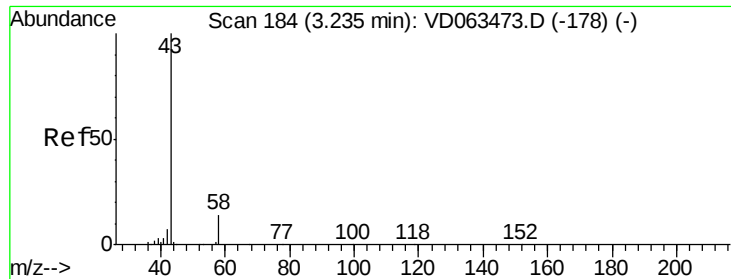
200

0

4.05 4.10

Time-->





#16

Acetone

Concen: 74.372 ug/l

RT: 3.23 min Scan# 183

Delta R.T. -0.00 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

Instrument :

MSVOA\_D

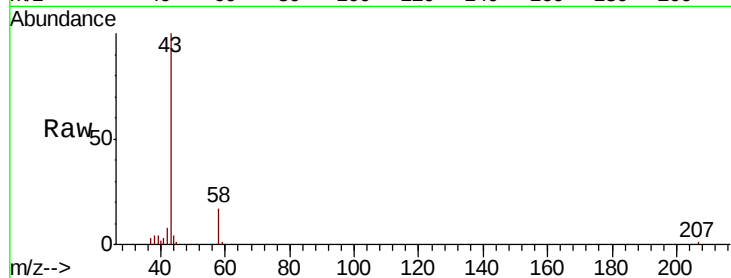
ClientSampleId :

Tot Ion: 43 Resp: 162970

Ion Ratio Lower Upper

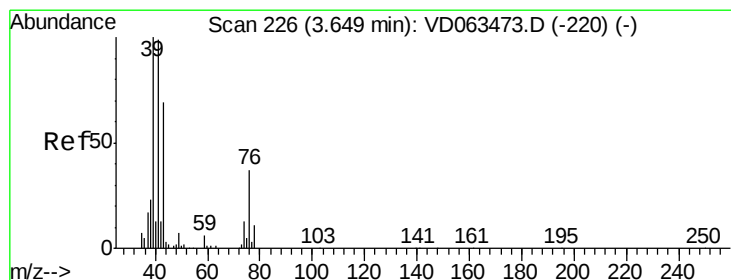
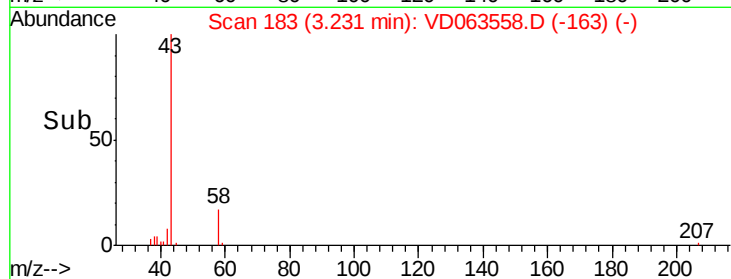
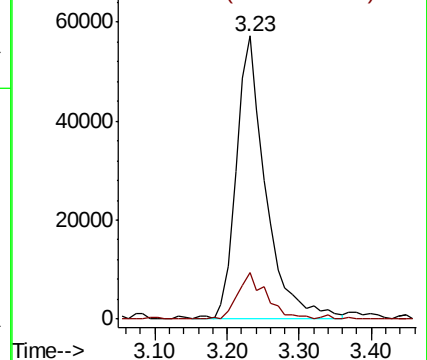
43 100

58 16.7 11.4 17.2



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#18

Methyl Acetate

Concen: 1.793 ug/l

RT: 3.64 min Scan# 225

Delta R.T. -0.00 min

Lab File: VD063558.D

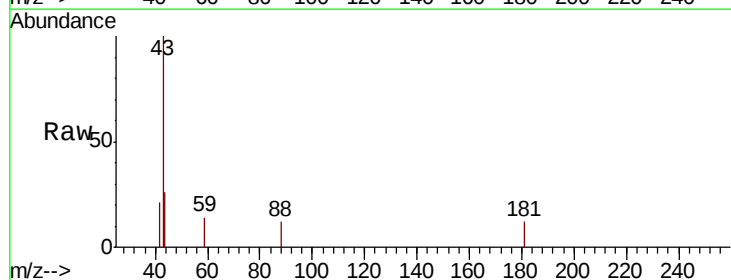
Acq: 14 Aug 2019 7:06

Tgt Ion: 43 Resp: 7442

Ion Ratio Lower Upper

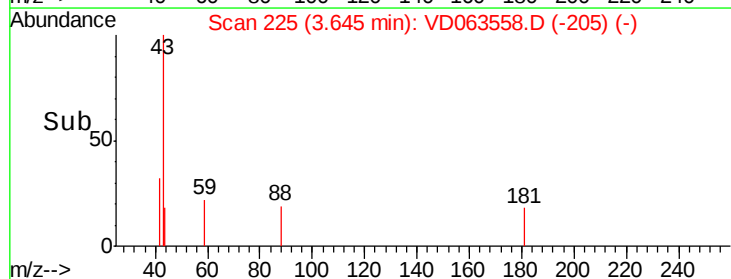
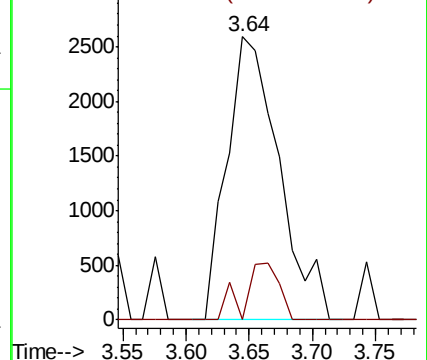
43 100

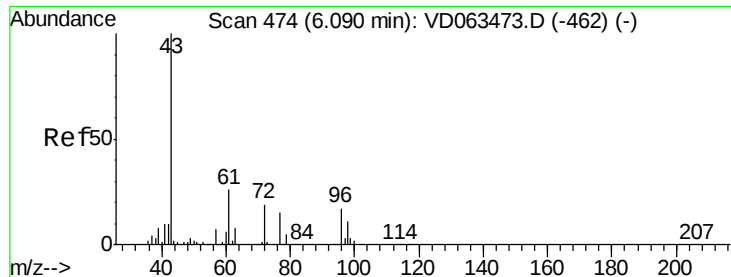
74 0.0 15.4 23.2#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 74.00 (73.70 to 74.70): VDC

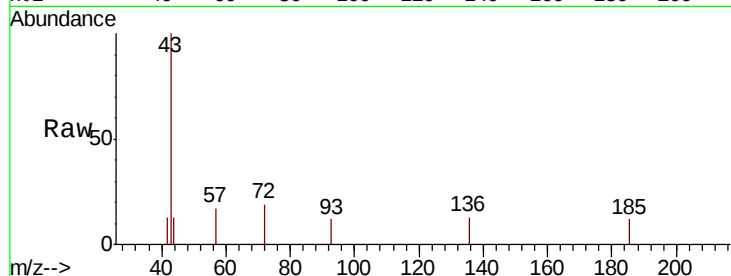




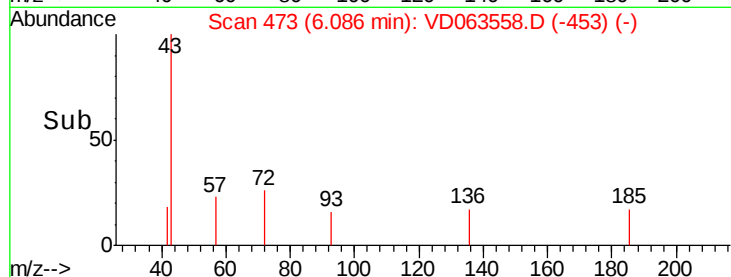
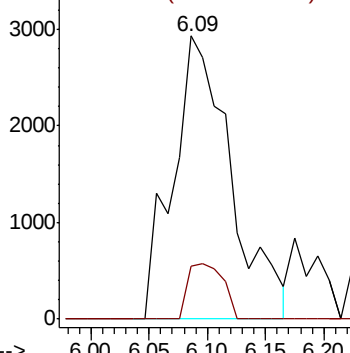
#25  
2-Butanone  
Concen: 4.663 ug/l  
RT: 6.09 min Scan# 473  
Delta R.T. -0.00 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

Instrument :  
MSVOA\_D  
ClientSampled :

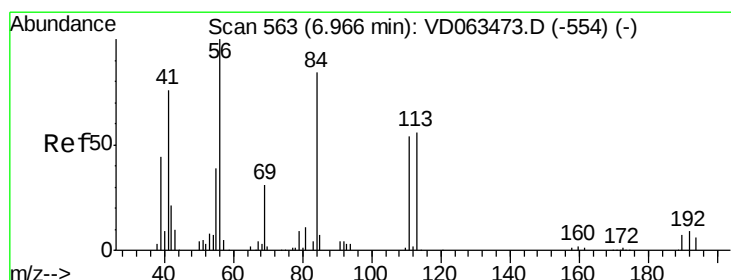
Tot Ion: 43 Resp: 10092  
Ion Ratio Lower Upper  
43 100  
72 18.7 15.1 22.7



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

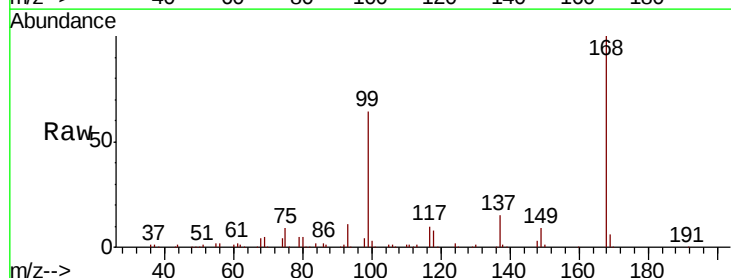


Time-->

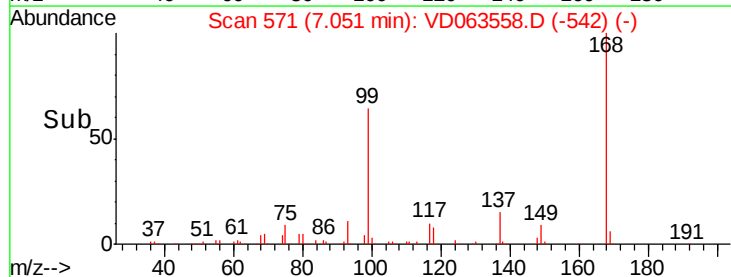
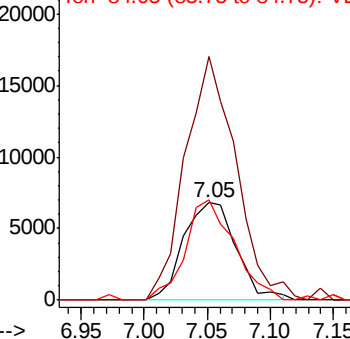


#31  
Cyclohexane  
Concen: 2.021 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. 0.08 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

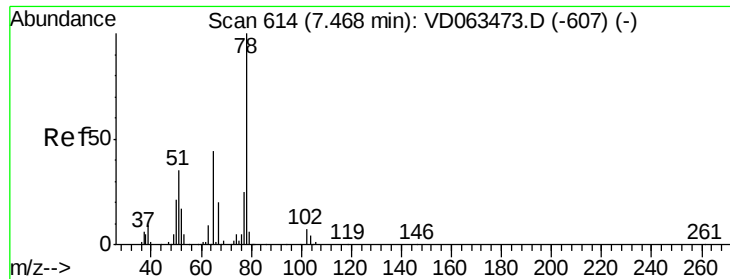
Tgt Ion: 56 Resp: 19669  
Ion Ratio Lower Upper  
56 100  
69 255.7 25.0 37.6#  
84 102.3 69.7 104.5



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



Time-->



#33

1,2-Dichloroethane-d4

Concen: 47.000 ug/l

RT: 7.46 min Scan# 613

Delta R.T. -0.00 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

Instrument :

MSVOA\_D

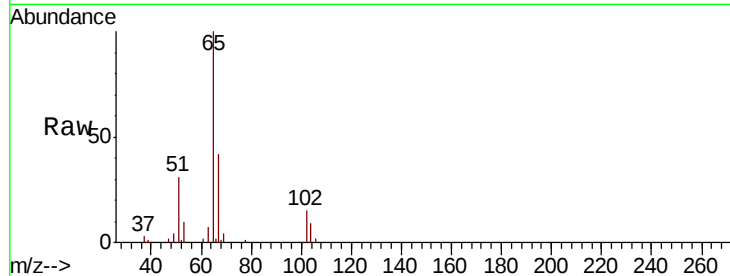
ClientSampleId :

Tot Ion: 65 Resp: 506644

Ion Ratio Lower Upper

65 100

67 42.1 0.0 89.2



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

7.46

200000

150000

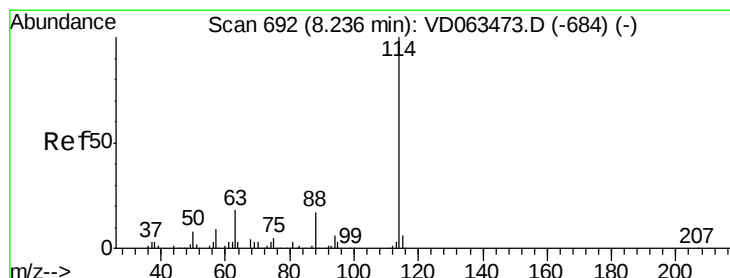
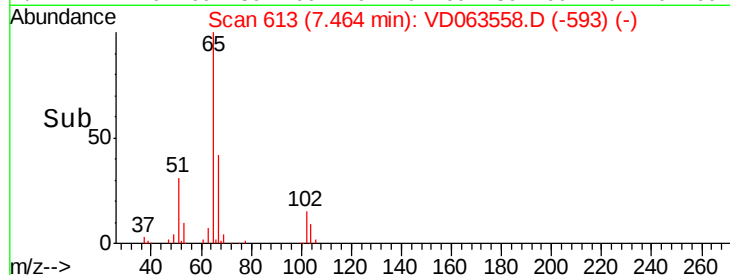
100000

50000

0

Time-->

7.30 7.40 7.50 7.60



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.22 min Scan# 690

Delta R.T. -0.01 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

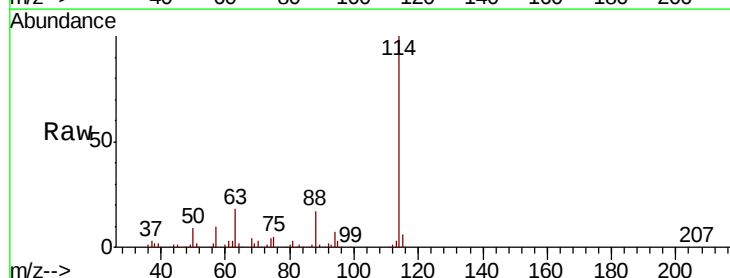
Tgt Ion: 114 Resp: 1469414

Ion Ratio Lower Upper

114 100

63 18.4 0.0 36.2

88 17.2 0.0 35.0



Abundance Ion 114.00 (113.70 to 114.70): VDC

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

8.22

800000

600000

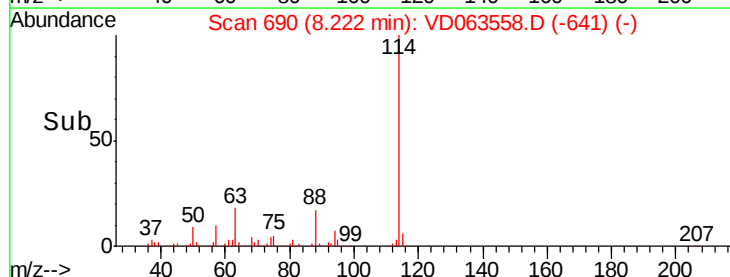
400000

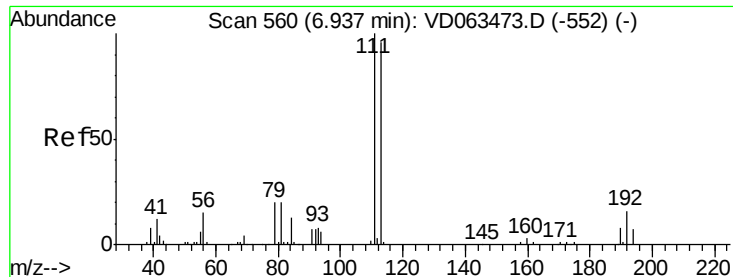
200000

0

Time-->

8.10 8.20 8.30 8.40





#35

Dibromofluoromethane

Concen: 43.283 ug/l

RT: 6.93 min Scan# 559

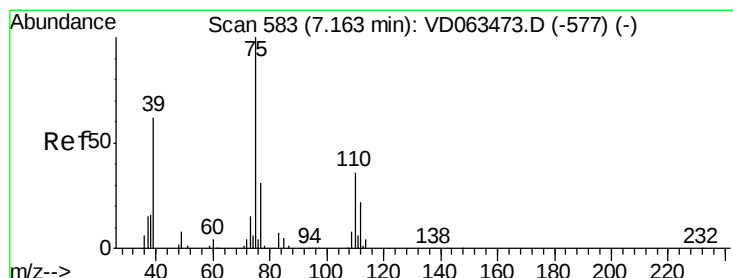
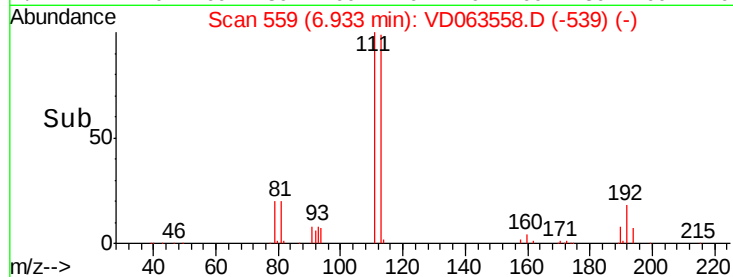
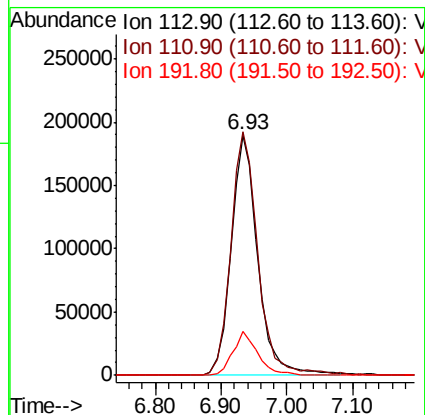
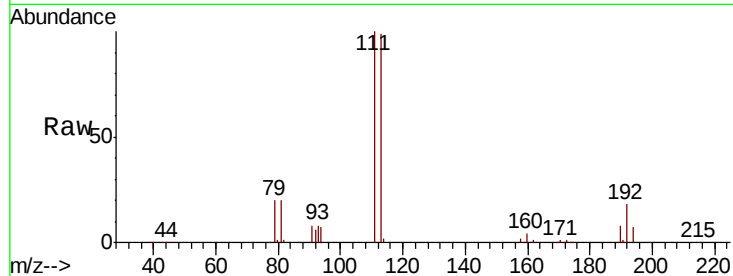
Delta R.T. -0.00 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

Instrument :  
MSVOA\_D  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 113   | Resp: | 535654 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 101.3 | 83.1  | 124.7  |
| 192      | 18.4  | 13.1  | 19.7   |



#36

1,1-Dichloropropene

Concen: 6.040 ug/l

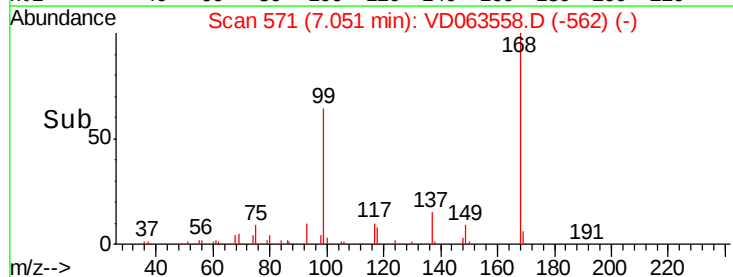
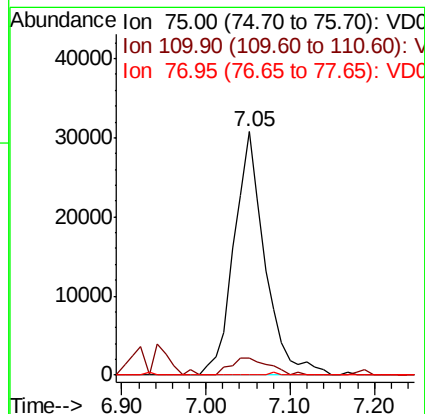
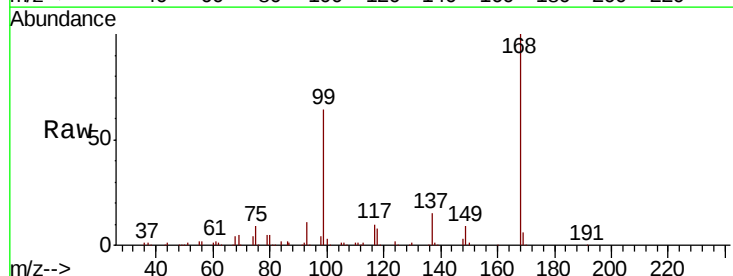
RT: 7.05 min Scan# 571

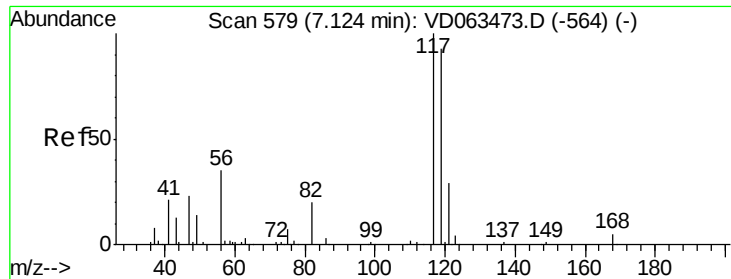
Delta R.T. -0.11 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 78465 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 110      | 7.1   | 17.6  | 52.8# |
| 77       | 0.0   | 24.3  | 36.5# |

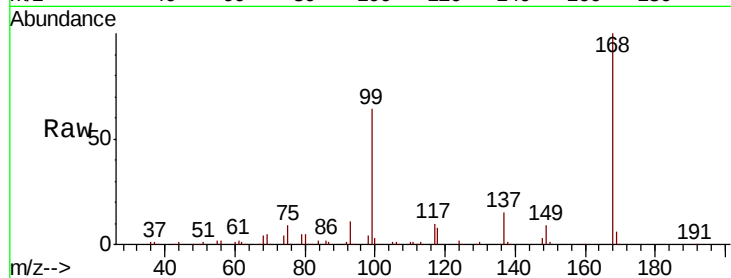




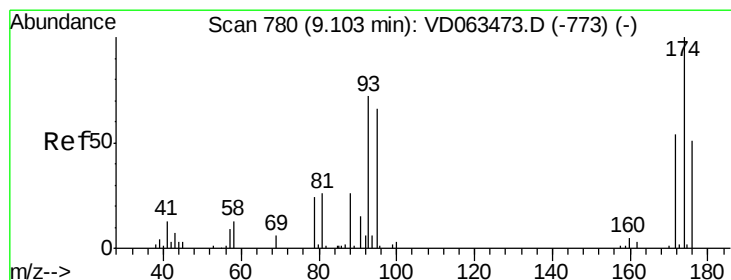
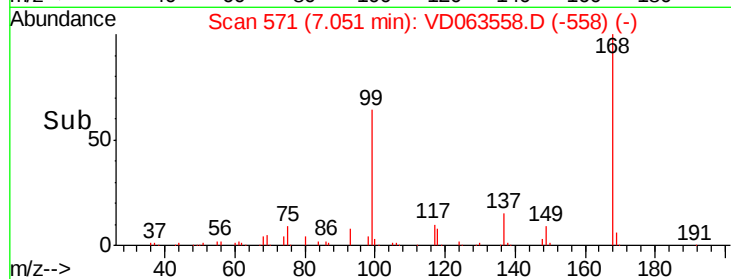
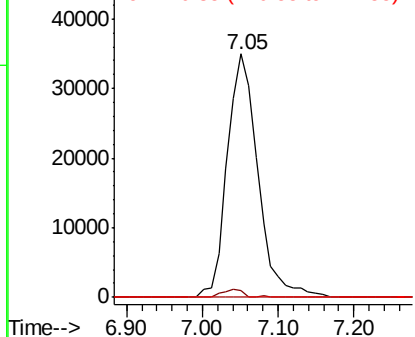
#38  
Carbon Tetrachloride  
Concen: 5.007 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. -0.07 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion:117 Resp: 98026  
Ion Ratio Lower Upper  
117 100  
119 3.0 74.2 111.2#  
121 0.0 23.1 34.7#

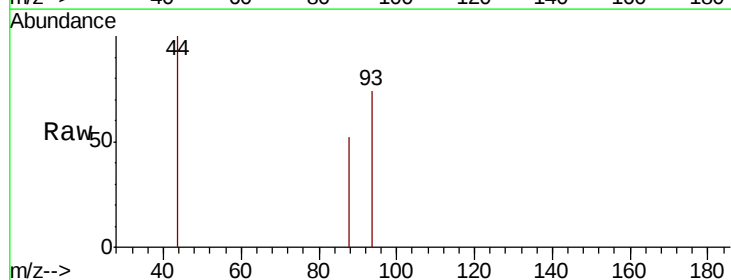


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

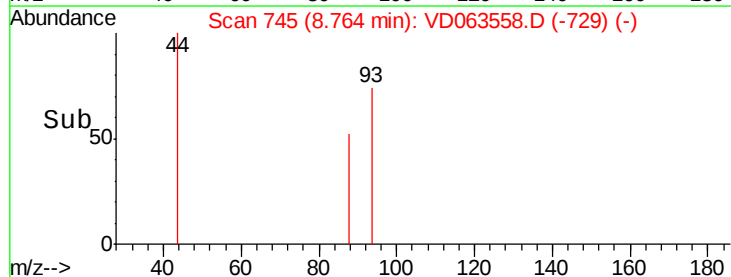
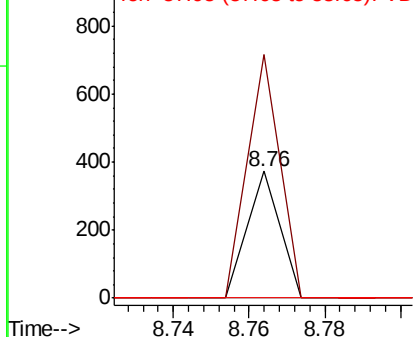


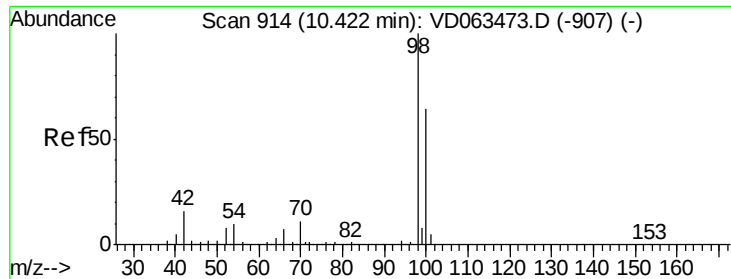
#49  
1,4-Dioxane  
Concen: 29.600 ug/l  
RT: 8.76 min Scan# 745  
Delta R.T. -0.34 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

Tgt Ion: 88 Resp: 220  
Ion Ratio Lower Upper  
88 100  
43 192.0 22.9 34.3#  
58 0.0 40.1 60.1#



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

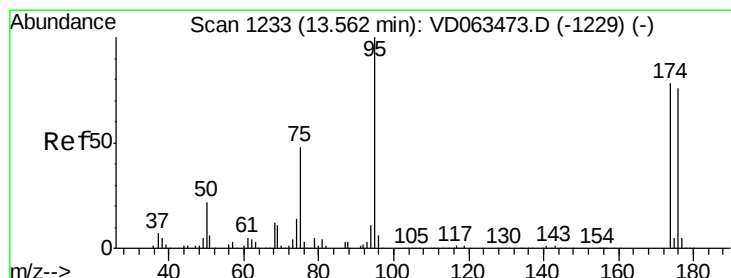
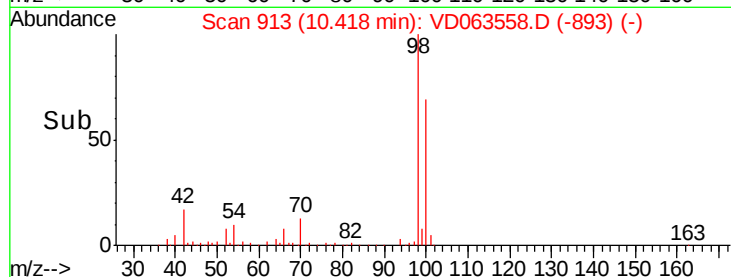
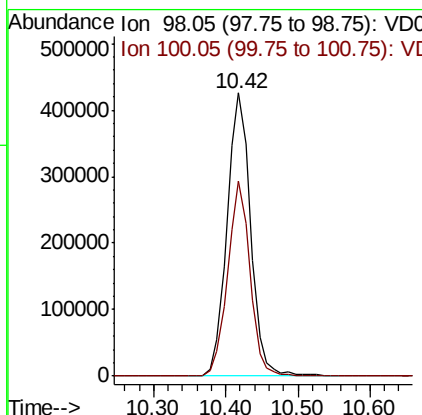
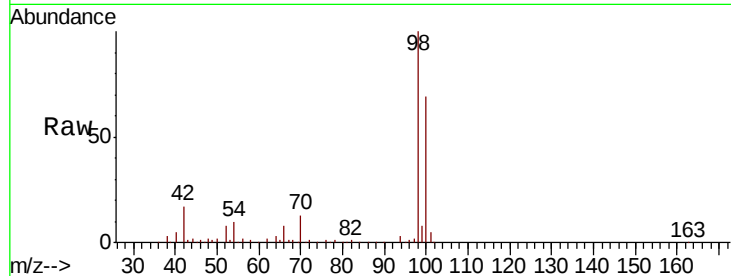




#50  
Toluene-d8  
Concen: 35.593 ug/l  
RT: 10.42 min Scan# 913  
Delta R.T. -0.00 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

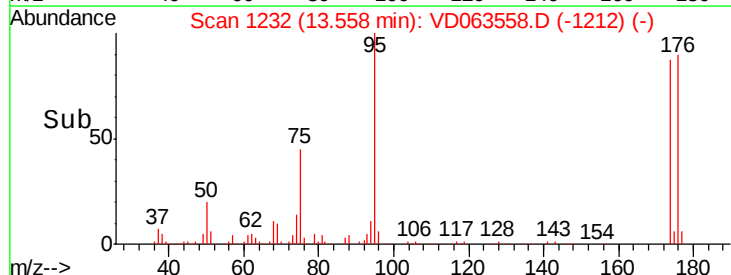
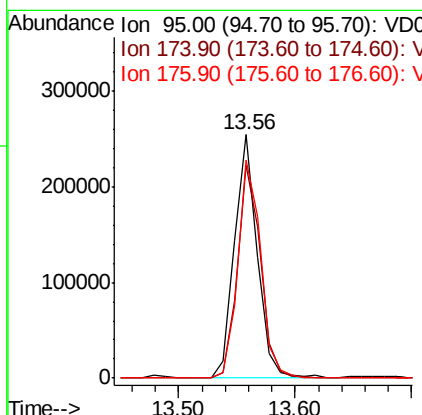
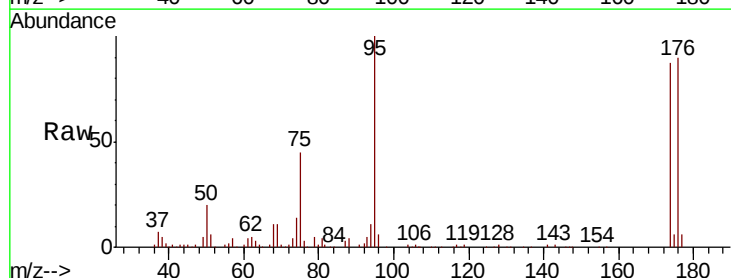
Instrument :  
MSVOA\_D  
ClientSampleId :

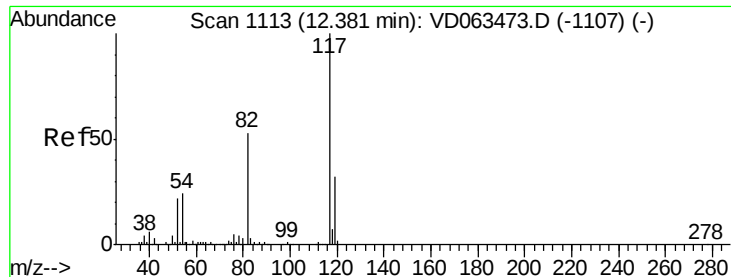
Tot Ion: 98 Resp: 968420  
Ion Ratio Lower Upper  
98 100  
100 68.8 51.7 77.5



#62  
4-Bromofluorobenzene  
Concen: 27.904 ug/l  
RT: 13.56 min Scan# 1232  
Delta R.T. -0.00 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

Tgt Ion: 95 Resp: 344106  
Ion Ratio Lower Upper  
95 100  
174 87.2 0.0 155.4  
176 89.6 0.0 152.4

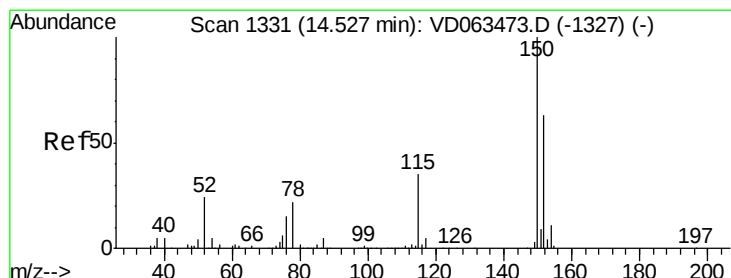
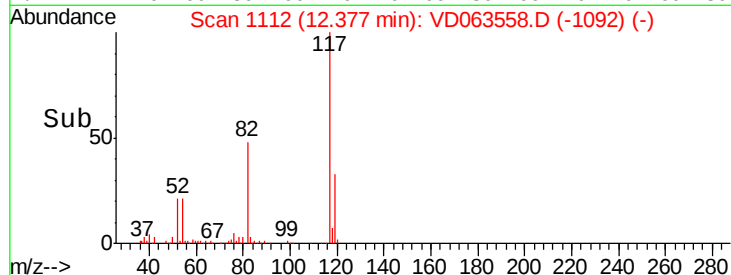
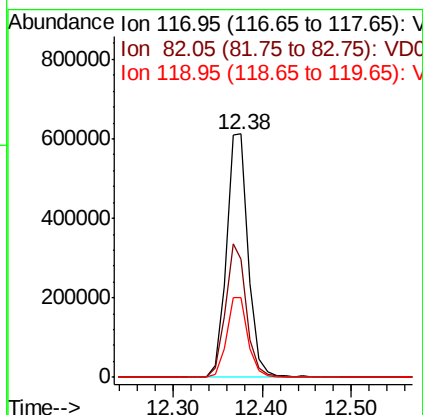
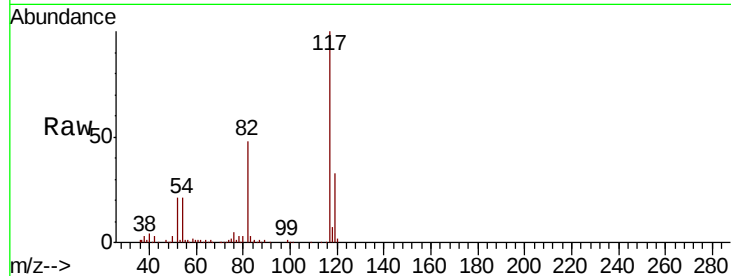




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.38 min Scan# 1112  
Delta R.T. -0.00 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

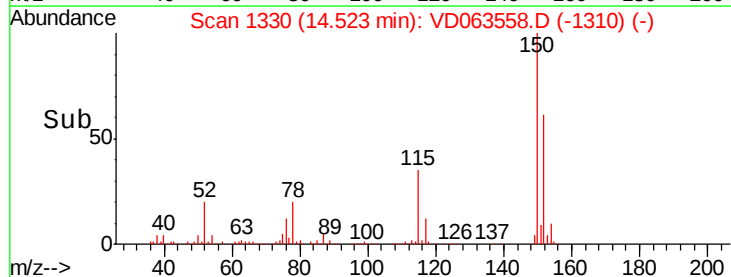
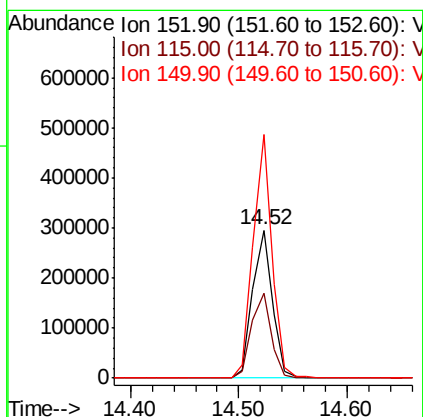
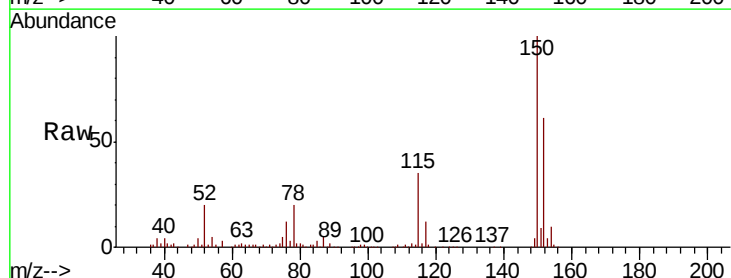
Instrument :  
MSVOA\_D  
ClientSampleId :

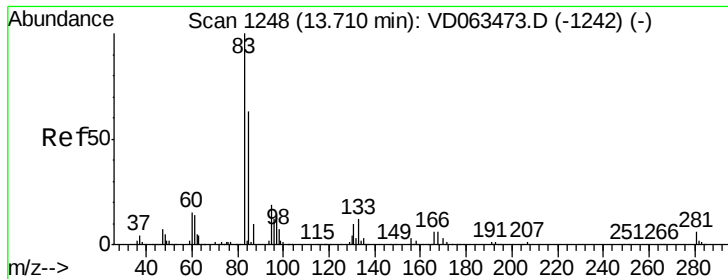
Tot Ion:117 Resp: 1061320  
Ion Ratio Lower Upper  
117 100  
82 48.4 42.0 63.0  
119 33.0 25.4 38.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. -0.00 min  
Lab File: VD063558.D  
Acq: 14 Aug 2019 7:06

Tgt Ion:152 Resp: 376847  
Ion Ratio Lower Upper  
152 100  
115 57.7 30.9 92.7  
150 164.5 0.0 318.6





#75

1,1,2,2-Tetrachloroethane

Concen: 1.085 ug/l

RT: 13.72 min Scan# 1248

Delta R.T. 0.01 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

Instrument :

MSVOA\_D

ClientSampleId :

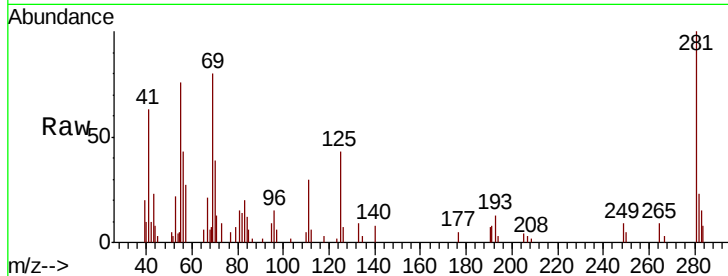
Tot Ion: 83 Resp: 4318

Ion Ratio Lower Upper

83 100

131 0.0 5.3 15.8#

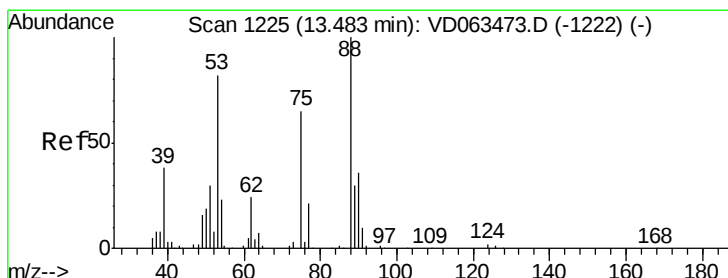
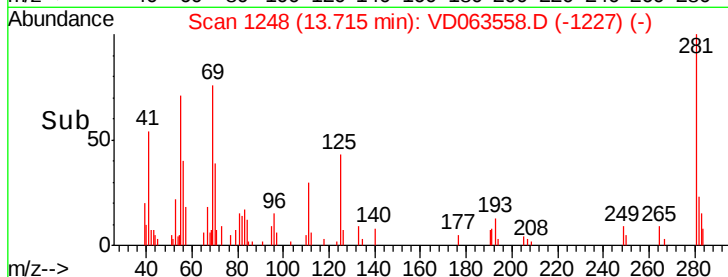
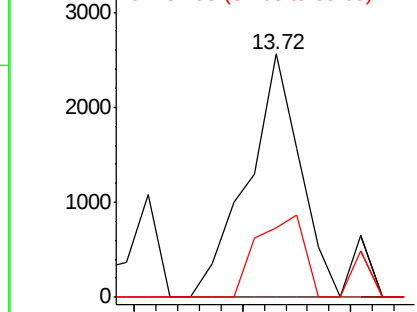
85 28.7 31.4 94.3#



Abundance Ion 82.95 (82.65 to 83.65): VDC

Ion 130.90 (130.60 to 131.60): VDC

Ion 84.95 (84.65 to 85.65): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 132.745 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.07 min

Lab File: VD063558.D

Acq: 14 Aug 2019 7:06

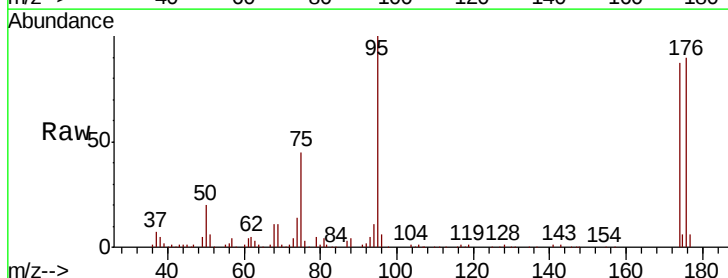
Tgt Ion: 75 Resp: 154307

Ion Ratio Lower Upper

75 100

53 0.0 101.0 151.4#

89 0.0 37.0 55.6#



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

