

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD031619\  
 Data File : VD061112.D  
 Acq On : 16 Mar 2019 16:32  
 Operator : VA/AP  
 Sample : K1911-01  
 Misc : 3.33g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 02:27:50 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D030719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 08 02:35:39 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.06  | 168  | 478474   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 911360   | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 751587   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 312716   | 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   | 208734   | 52.41 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 104.82% |          |
| 35) Dibromofluoromethane    | 6.94  | 113  | 333441   | 49.30 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 98.60%  |          |
| 50) Toluene-d8              | 10.41 | 98   | 727865   | 42.85 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 85.70%  |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 274556   | 41.66 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 83.32%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.21  | 94   | 180      | Below Cal | #      | 8      |
| 11) Tert butyl alcohol         | 4.04  | 59   | 1303     | 5.139     | ug/l # | 75     |
| 16) Acetone                    | 3.23  | 43   | 49216    | 43.214    | ug/l   | 95     |
| 20) Methylene Chloride         | 3.83  | 84   | 38299    | 2.990     | ug/l   | 93     |
| 31) Cyclohexane                | 7.06  | 56   | 7219     | 1.024     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.06  | 75   | 35509    | 4.520     | ug/l # | 45     |
| 38) Carbon Tetrachloride       | 7.06  | 117  | 45648    | 5.275     | ug/l # | 15     |
| 52) Toluene                    | 10.51 | 92   | 43552    | 3.568     | ug/l   | 97     |
| 76) 1,2,3-Trichloropropane     | 13.56 | 75   | 92100    | 20.471    | ug/l # | 44     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 101986   | 76.890    | ug/l # | 17     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.06 min Scan# 572

Delta R.T. 0.01 min

Lab File: VD061112.D

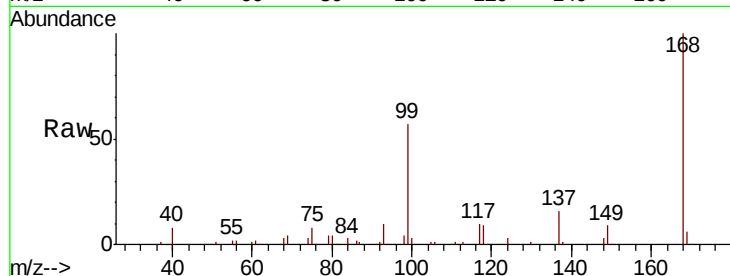
Acq: 16 Mar 2019 16:32

Tgt Ion: 168 Resp: 478474

Ion Ratio Lower Upper

168 100

99 57.1 47.3 70.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.06

150000

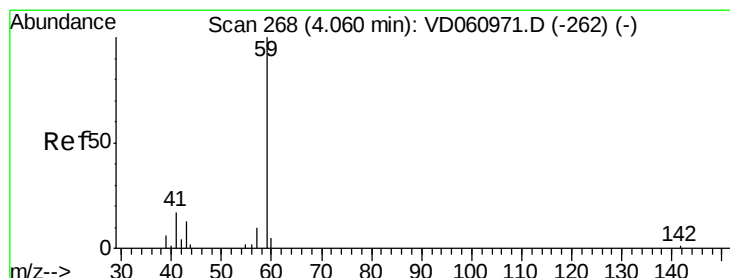
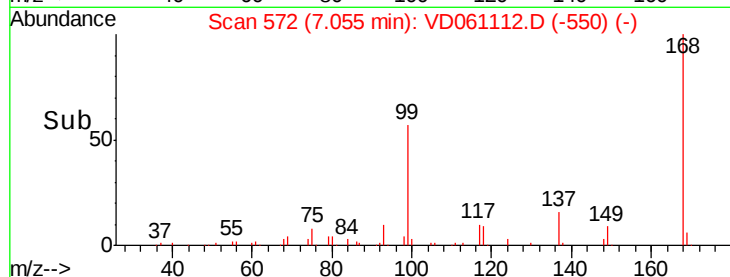
100000

50000

0

Time-->

6.90 7.00 7.10 7.20



#11

Tert butyl alcohol

Concen: 5.139 ug/l

RT: 4.04 min Scan# 266

Delta R.T. -0.02 min

Lab File: VD061112.D

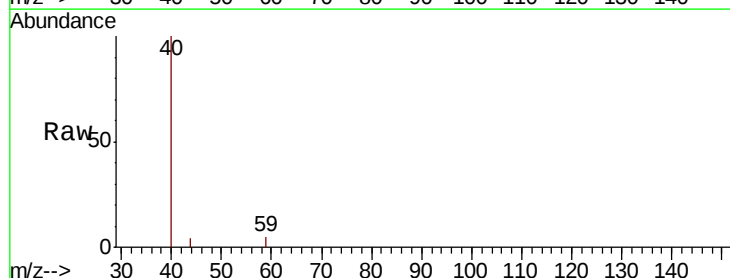
Acq: 16 Mar 2019 16:32

Tgt Ion: 59 Resp: 1303

Ion Ratio Lower Upper

59 100

57 0.0 7.1 10.7#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

4.04

600

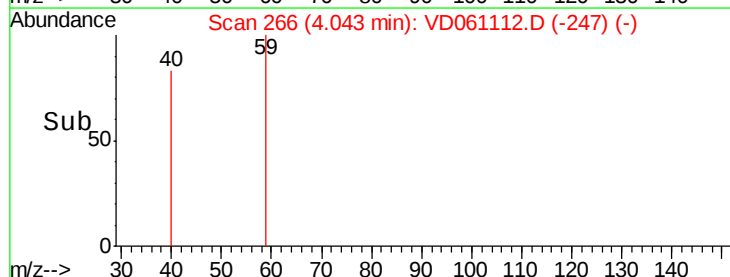
400

200

0

Time-->

4.00 4.05 4.10





#16

Acetone

Concen: 43.214 ug/l

RT: 3.23 min Scan# 183

Delta R.T. 0.00 min

Lab File: VD061112.D

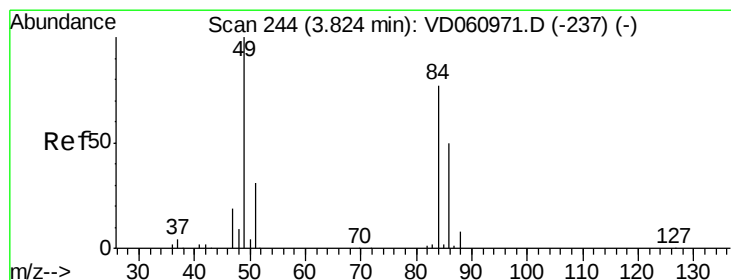
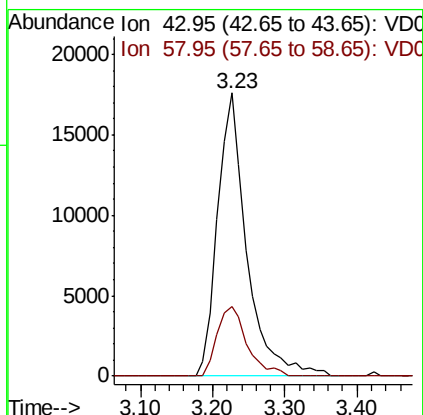
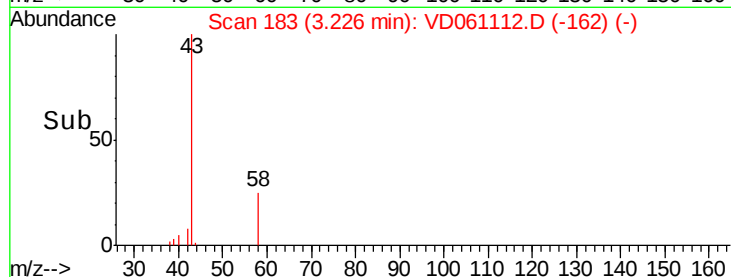
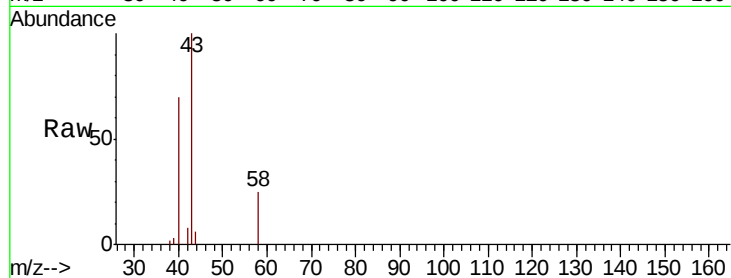
Acq: 16 Mar 2019 16:32

Tgt Ion: 43 Resp: 49216

Ion Ratio Lower Upper

43 100

58 24.6 21.6 32.4



#20

Methylene Chloride

Concen: 2.990 ug/l

RT: 3.83 min Scan# 244

Delta R.T. 0.00 min

Lab File: VD061112.D

Acq: 16 Mar 2019 16:32

Tgt Ion: 84 Resp: 38299

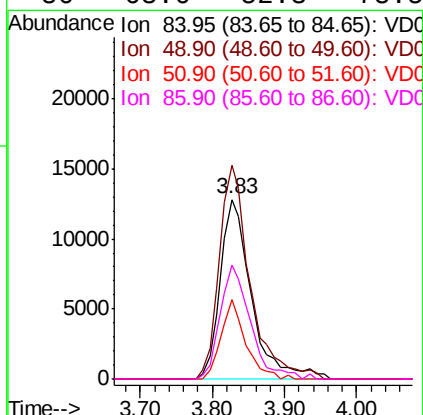
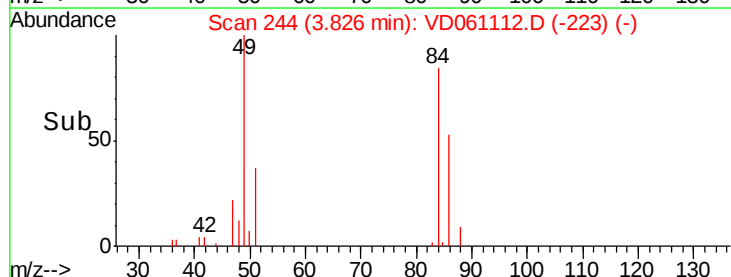
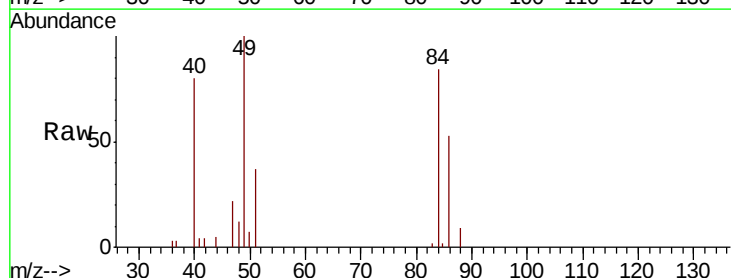
Ion Ratio Lower Upper

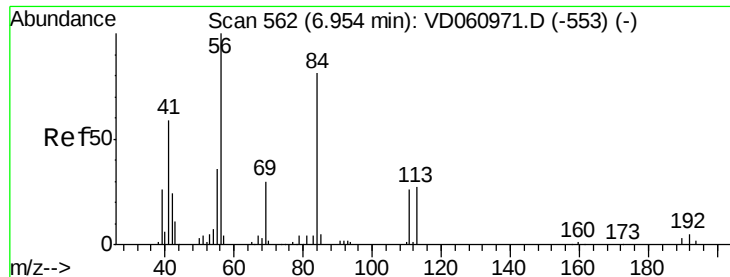
84 100

49 118.9 104.2 156.2

51 44.0 32.3 48.5

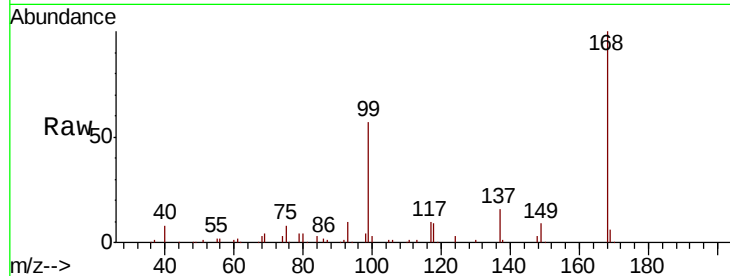
86 63.6 52.3 78.5



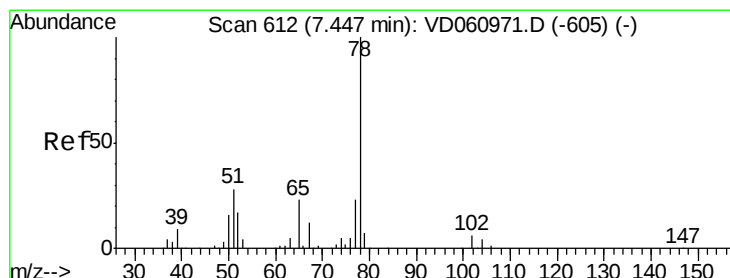
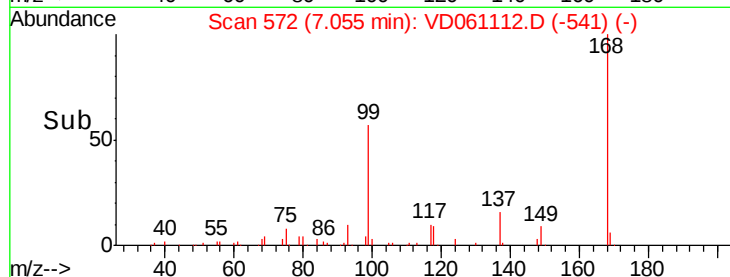
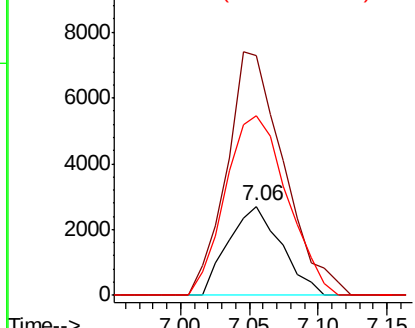


#31  
Cyclohexane  
Concen: 1.024 ug/l  
RT: 7.06 min Scan# 572  
Delta R.T. 0.10 min  
Lab File: VD061112.D  
Acq: 16 Mar 2019 16:32

Tgt Ion: 56 Resp: 7219  
Ion Ratio Lower Upper  
56 100  
69 270.1 24.0 36.0#  
84 201.3 65.8 98.6#

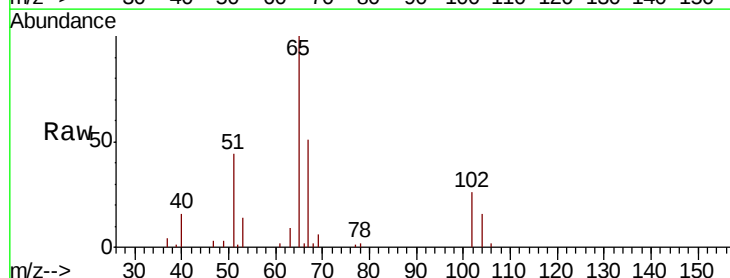


Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.05 (83.75 to 84.75): VDC

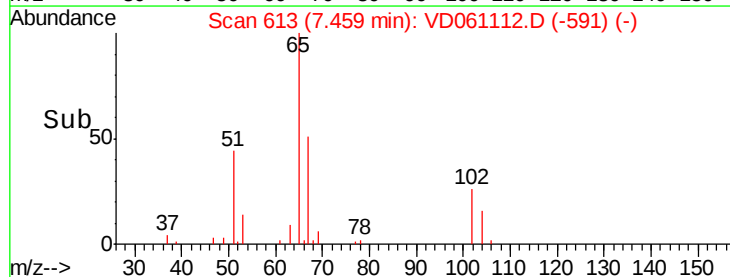
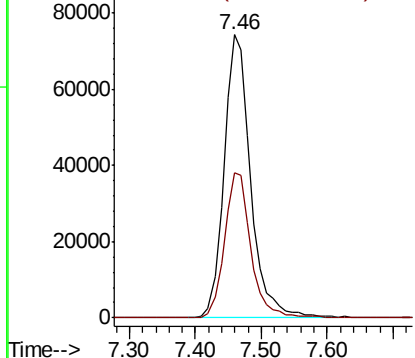


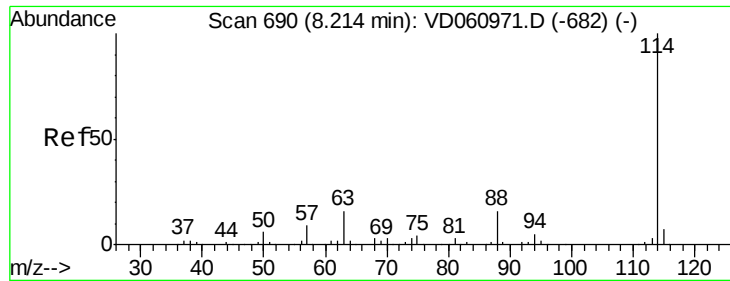
#33  
1,2-Dichloroethane-d4  
Concen: N.D. ug/l  
RT: 7.46 min Scan# 613  
Delta R.T. 0.01 min  
Lab File: VD061112.D  
Acq: 16 Mar 2019 16:32

Tgt Ion: 65 Resp: 208734  
Ion Ratio Lower Upper  
65 100  
67 51.5 0.0 105.2



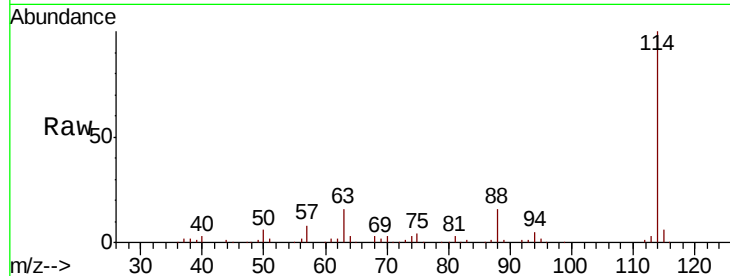
Abundance Ion 64.95 (64.65 to 65.65): VDC  
Ion 66.90 (66.60 to 67.60): VDC



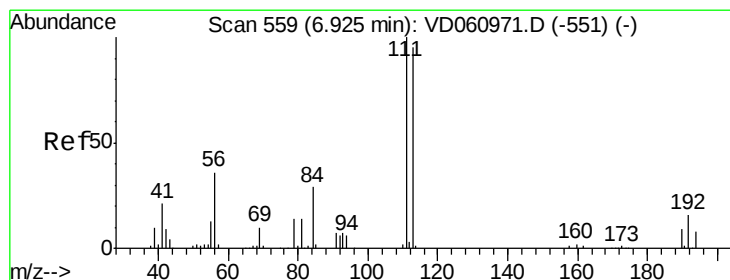
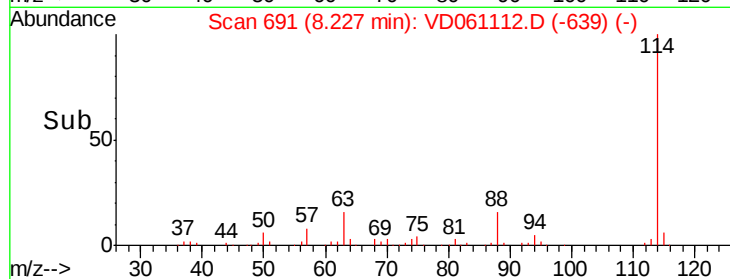
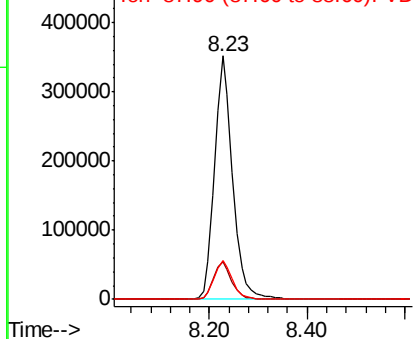


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.23 min Scan# 691  
 Delta R.T. 0.01 min  
 Lab File: VD061112.D  
 Acq: 16 Mar 2019 16:32

Tgt Ion:114 Resp: 911360  
 Ion Ratio Lower Upper  
 114 100  
 63 15.5 0.0 31.4  
 88 16.2 0.0 33.0

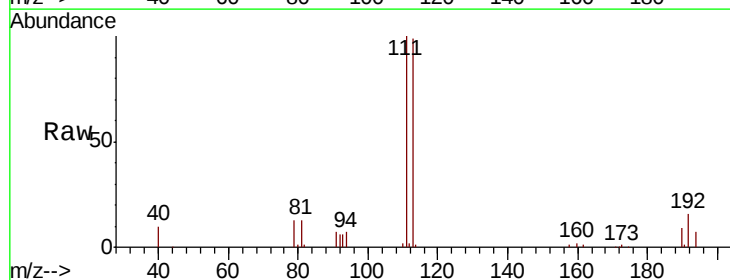


Abundance Ion 114.00 (113.70 to 114.70): V  
 Ion 62.95 (62.65 to 63.65): V  
 Ion 87.90 (87.60 to 88.60): V

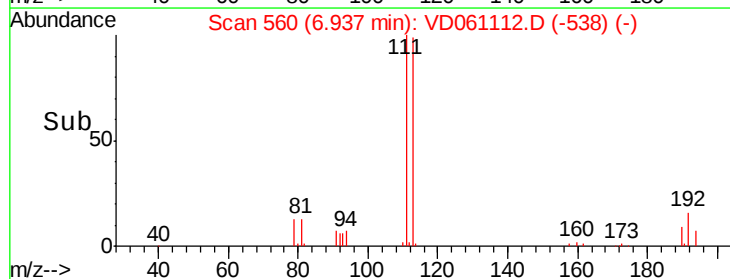
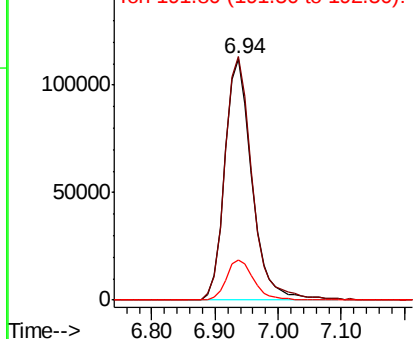


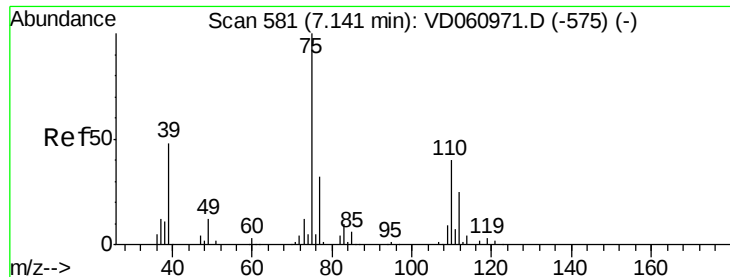
#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 6.94 min Scan# 560  
 Delta R.T. 0.01 min  
 Lab File: VD061112.D  
 Acq: 16 Mar 2019 16:32

Tgt Ion:113 Resp: 333441  
 Ion Ratio Lower Upper  
 113 100  
 111 101.0 84.2 126.4  
 192 16.5 13.1 19.7



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: 4.520 ug/l

RT: 7.06 min Scan# 572

Delta R.T. -0.09 min

Lab File: VD061112.D

Acq: 16 Mar 2019 16:32

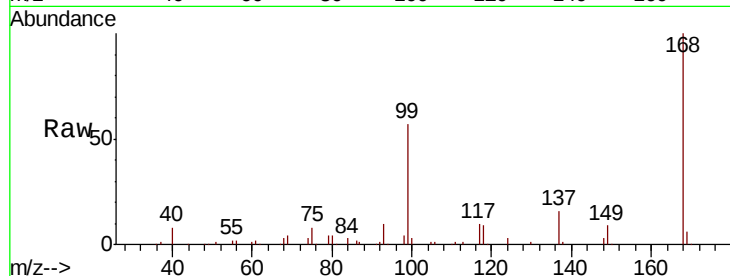
Tgt Ion: 75 Resp: 35509

Ion Ratio Lower Upper

75 100

110 6.5 19.7 59.1#

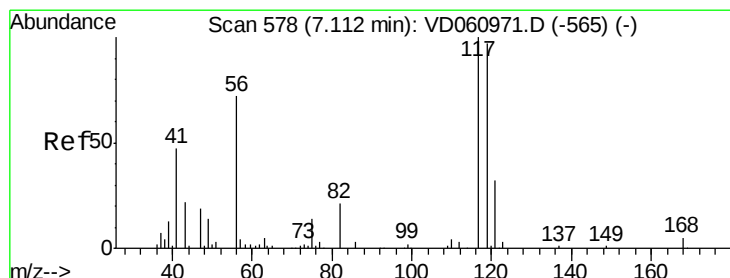
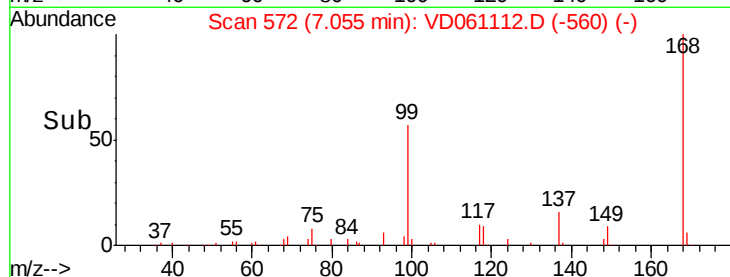
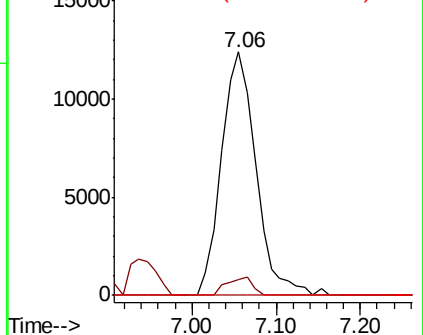
77 0.0 24.7 37.1#



Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V



#38

Carbon Tetrachloride

Concen: 5.275 ug/l

RT: 7.06 min Scan# 572

Delta R.T. -0.06 min

Lab File: VD061112.D

Acq: 16 Mar 2019 16:32

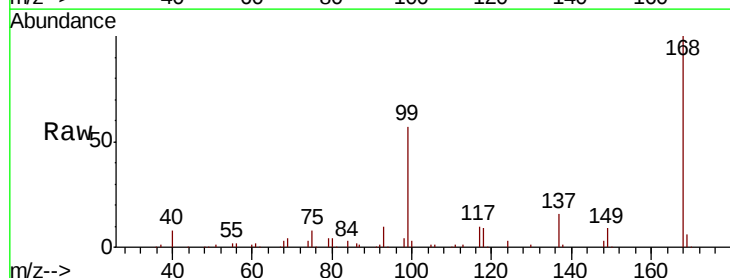
Tgt Ion: 117 Resp: 45648

Ion Ratio Lower Upper

117 100

119 4.9 77.8 116.8#

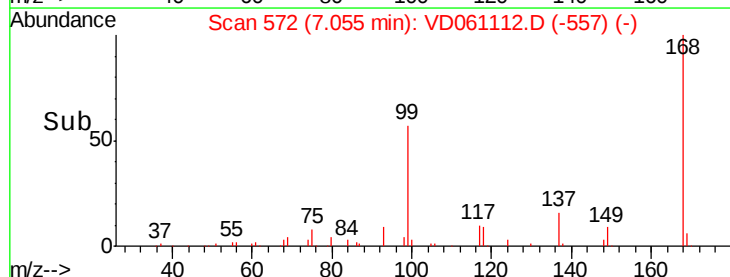
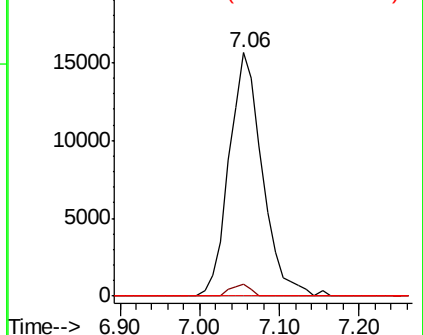
121 0.0 25.3 37.9#

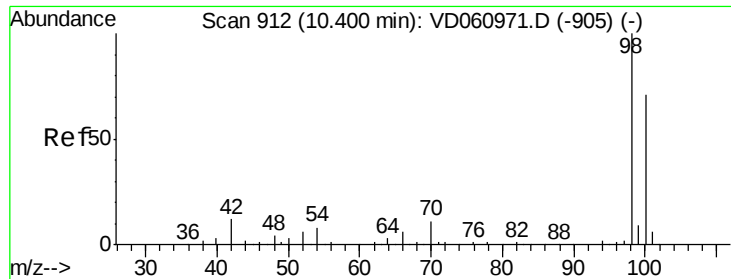


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V





#50

Toluene-d8

Concen: N.D. ug/l

RT: 10.41 min Scan# 913

Delta R.T. 0.01 min

Lab File: VD061112.D

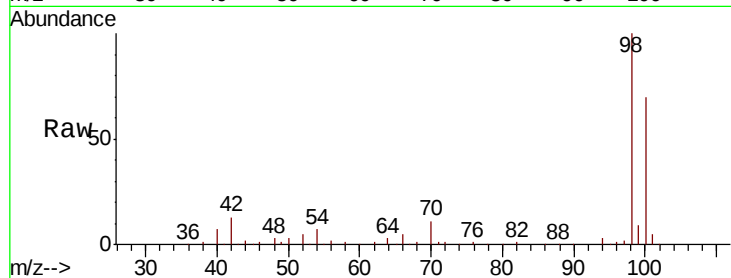
Acq: 16 Mar 2019 16:32

Tgt Ion: 98 Resp: 727865

Ion Ratio Lower Upper

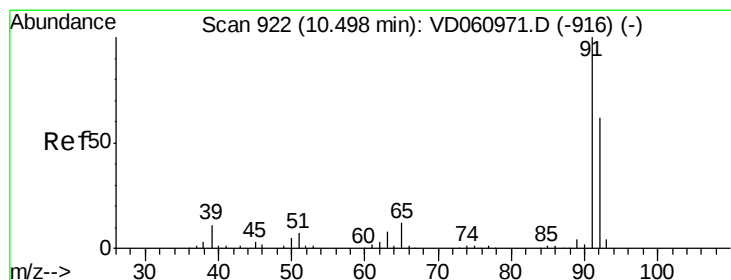
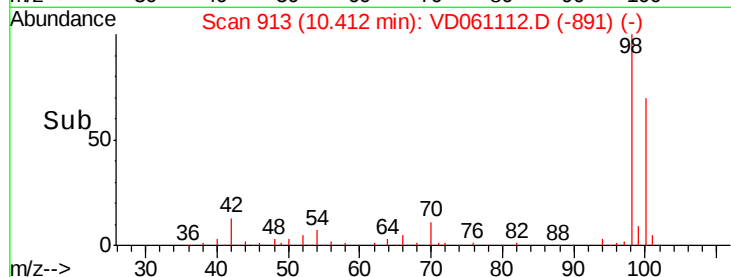
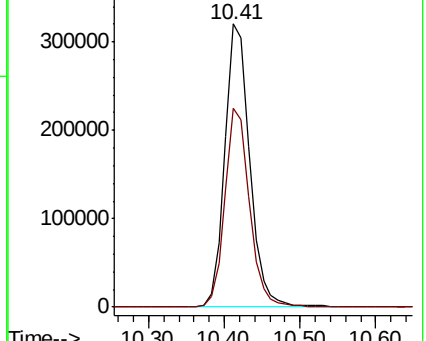
98 100

100 70.1 57.4 86.2



Abundance Ion 98.05 (97.75 to 98.75): VDC

Ion 100.05 (99.75 to 100.75): VDC



#52

Toluene

Concen: 3.568 ug/l

RT: 10.51 min Scan# 923

Delta R.T. 0.01 min

Lab File: VD061112.D

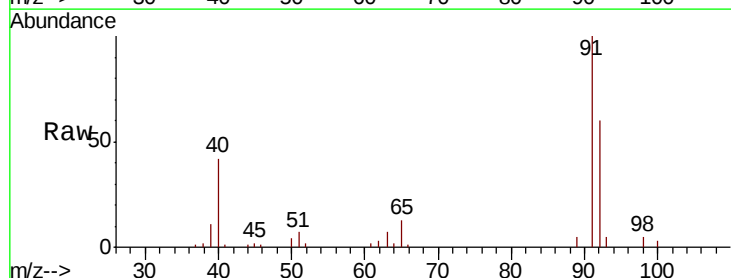
Acq: 16 Mar 2019 16:32

Tgt Ion: 92 Resp: 43552

Ion Ratio Lower Upper

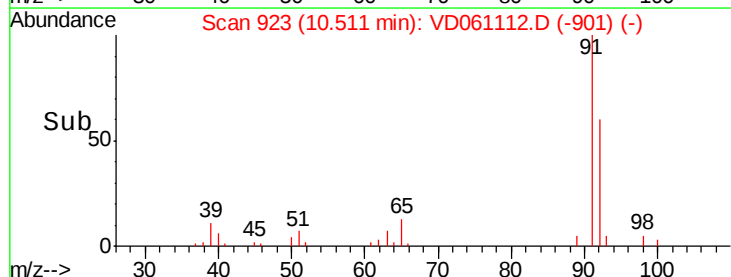
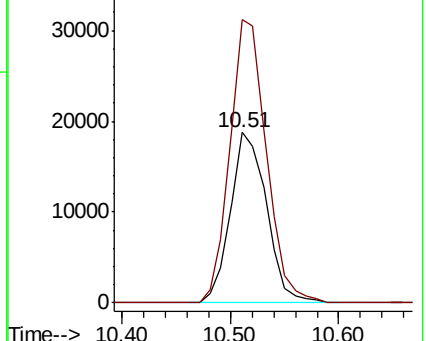
92 100

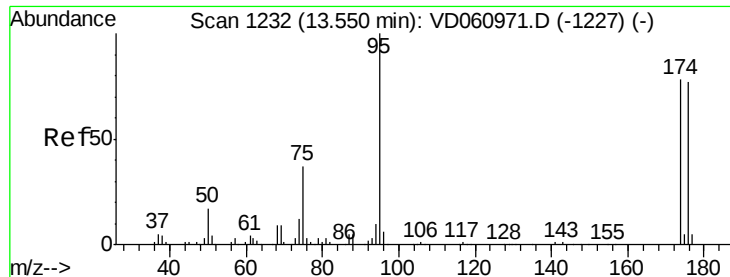
91 165.8 129.8 194.8



Abundance Ion 92.00 (91.70 to 92.70): VDC

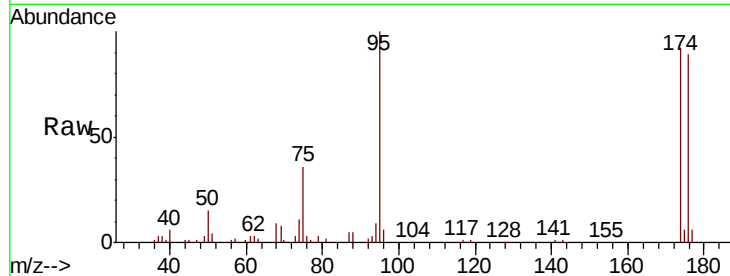
Ion 91.00 (90.70 to 91.70): VDC





#62  
4-Bromofluorobenzene  
Concen: N.D. ug/l  
RT: 13.56 min Scan# 1233  
Delta R.T. 0.01 min  
Lab File: VD061112.D  
Acq: 16 Mar 2019 16:32

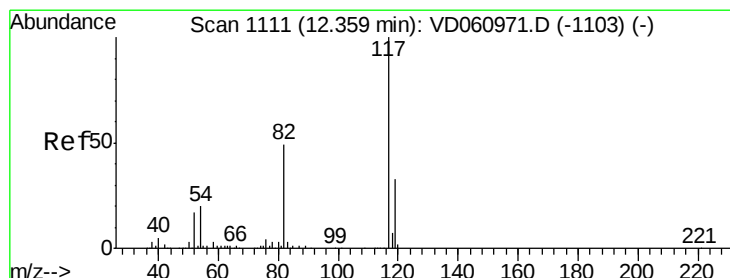
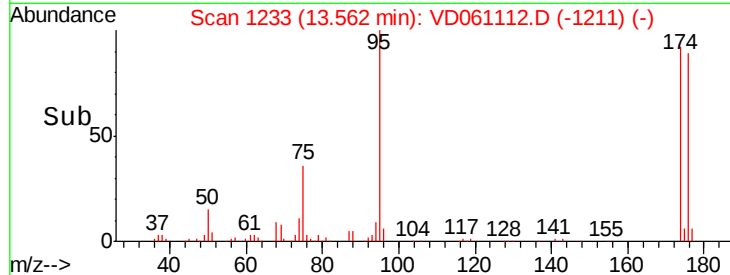
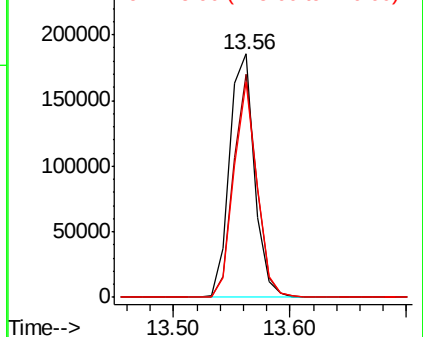
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 91.6  | 0.0   | 155.6 |
| 176     | 88.6  | 0.0   | 153.8 |



Abundance Ion 95.00 (94.70 to 95.70): V

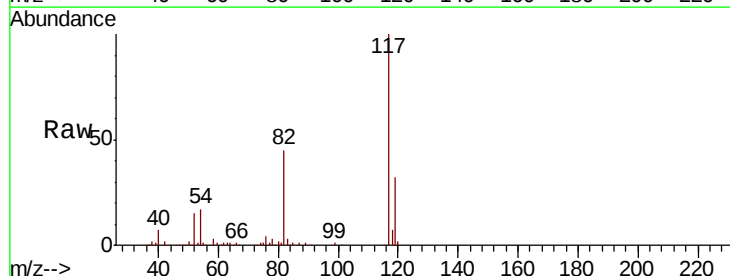
Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.37 min Scan# 1112  
Delta R.T. 0.01 min  
Lab File: VD061112.D  
Acq: 16 Mar 2019 16:32

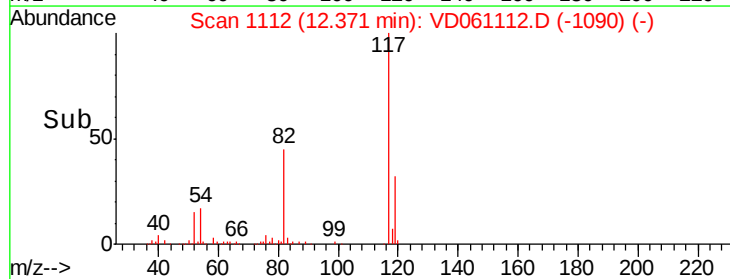
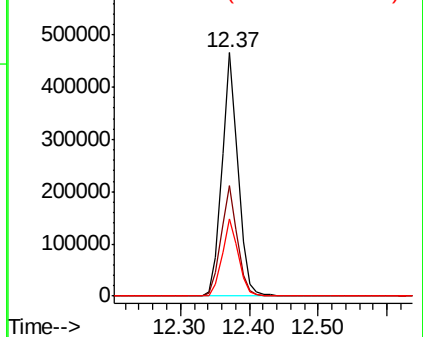
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 45.3  | 38.9  | 58.3  |
| 119     | 31.5  | 26.6  | 39.8  |

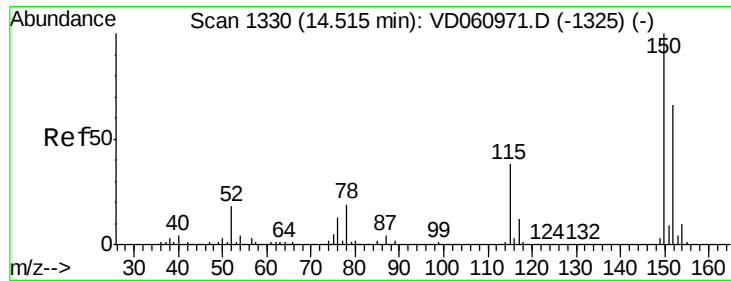


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V

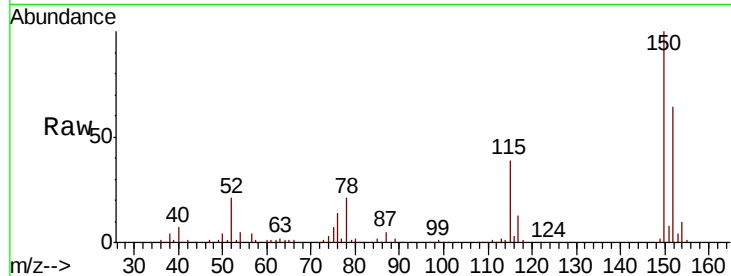




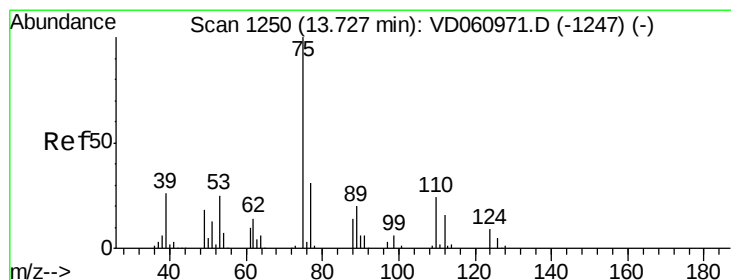
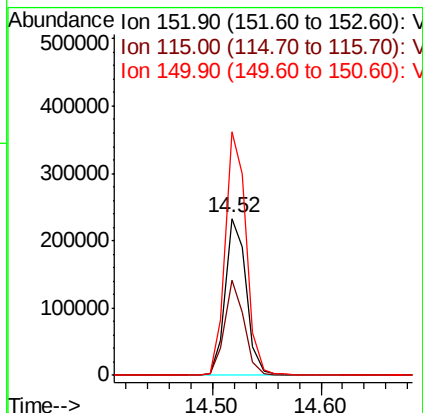
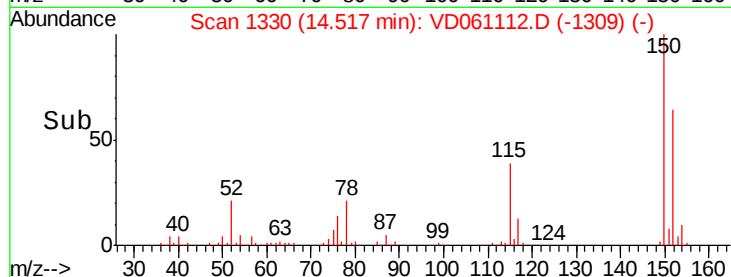
#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. 0.00 min  
Lab File: VD061112.D  
Acq: 16 Mar 2019 16:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 60.6  | 28.6  | 85.9  |
| 150     | 155.4 | 0.0   | 310.6 |



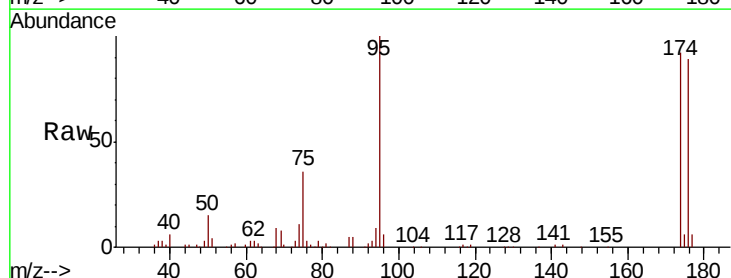
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 149.90 (149.60 to 150.60): V



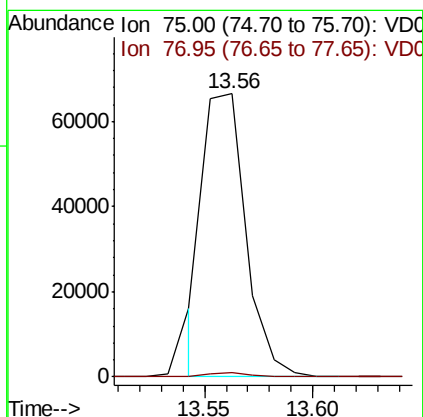
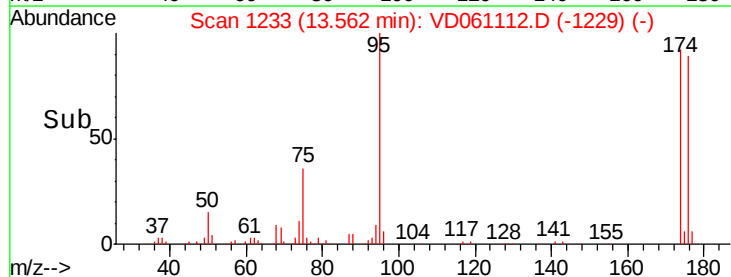
#76

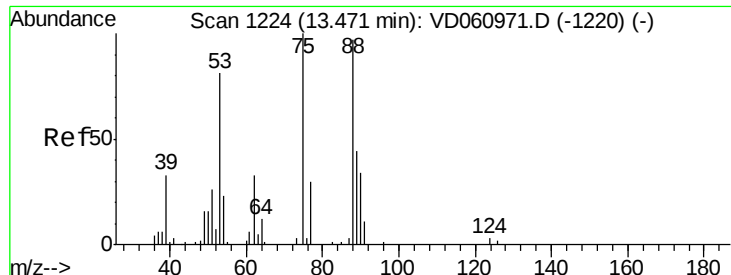
1,2,3-Trichloropropane  
Concen: 20.471 ug/l  
RT: 13.56 min Scan# 1233  
Delta R.T. -0.16 min  
Lab File: VD061112.D  
Acq: 16 Mar 2019 16:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.5   | 16.6  | 49.7  |



Abundance Ion 75.00 (74.70 to 75.70): V  
Ion 76.95 (76.65 to 77.65): V





#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 76.890 ug/l  
 RT: 13.56 min Scan# 1233  
 Delta R.T. 0.09 min  
 Lab File: VD061112.D  
 Acq: 16 Mar 2019 16:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 53      | 0.0   | 64.4  | 96.6# |
| 89      | 0.0   | 34.8  | 52.2# |

