

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD103019\  
 Data File : VD064117.D  
 Acq On : 30 Oct 2019 17:28  
 Operator : VA/SY  
 Sample : K5602-02  
 Misc : 5.03G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Oct 31 04:04:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D102919S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 30 08:00:10 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.99  | 168  | 178288   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 307106   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 299535   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 128582   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.34  | 65   | 92941    | 65.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 131.10% |          |
| 35) Dibromofluoromethane    | 7.91  | 113  | 99644    | 52.74 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.48% |          |
| 50) Toluene-d8              | 10.34 | 98   | 367835   | 48.68 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.36%  |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 115133   | 45.96 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.92%  |          |

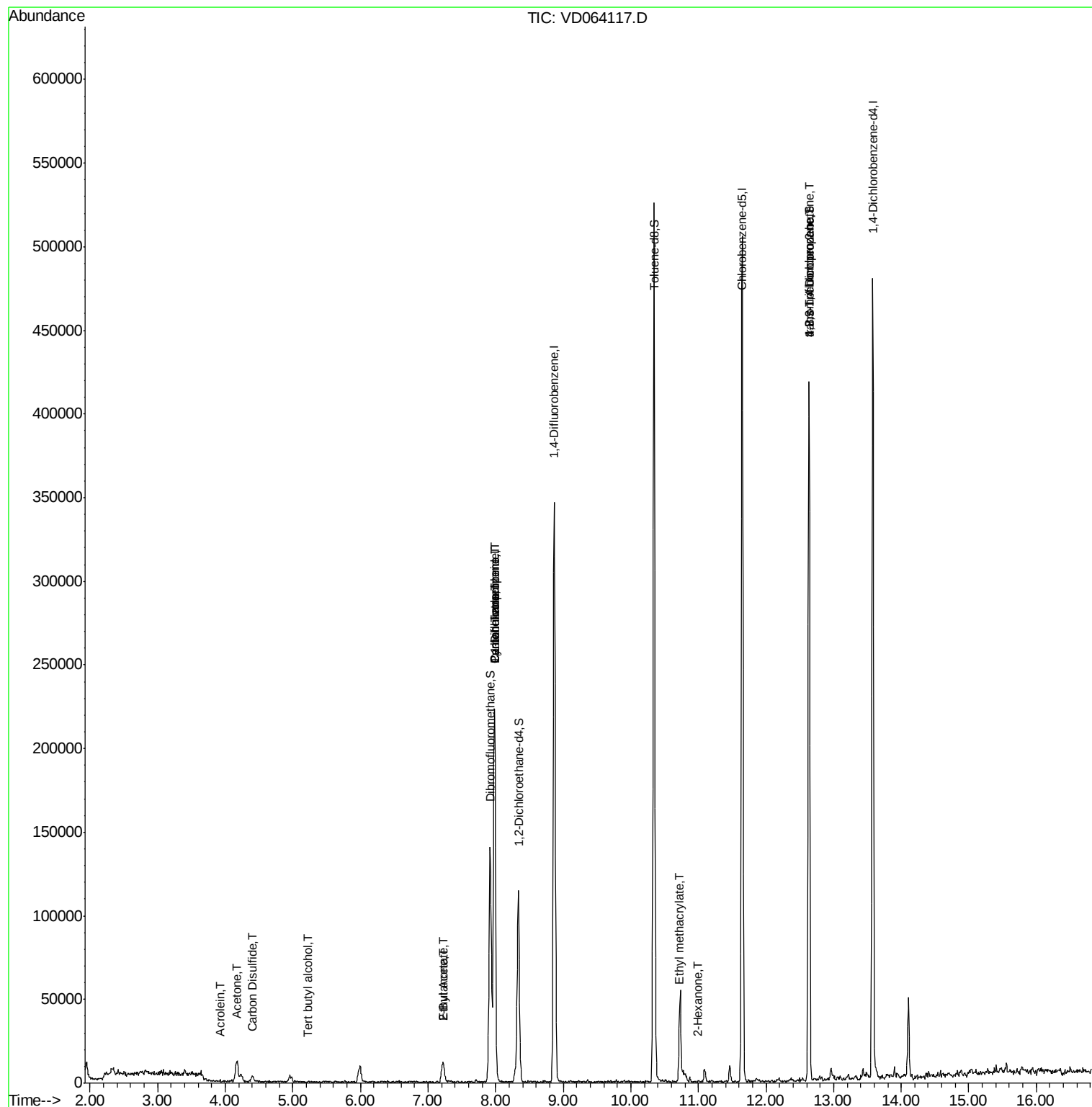
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.23  | 59   | 117      | 7.589     | ug/l # | 71     |
| 13) Acrolein                   | 3.91  | 56   | 123      | 1.360     | ug/l # | 16     |
| 16) Acetone                    | 4.16  | 43   | 23205    | 86.012    | ug/l   | 91     |
| 17) Carbon Disulfide           | 4.40  | 76   | 7545     | 1.588     | ug/l # | 90     |
| 20) Methylene Chloride         | 4.97  | 84   | 2649     | Below Cal | #      | 61     |
| 25) 2-Butanone                 | 7.24  | 43   | 7284     | 19.530    | ug/l # | 72     |
| 31) Cyclohexane                | 7.99  | 56   | 4140     | 1.570     | ug/l # | 60     |
| 36) 1,1-Dichloropropene        | 7.99  | 75   | 11896    | 4.134     | ug/l # | 46     |
| 37) Ethyl Acetate              | 7.24  | 43   | 7284     | 8.224     | ug/l # | 69     |
| 38) Carbon Tetrachloride       | 7.99  | 117  | 17006    | 5.416     | ug/l # | 17     |
| 56) Ethyl methacrylate         | 10.71 | 69   | 143      | 3.090     | ug/l # | 1      |
| 59) 2-Hexanone                 | 11.00 | 43   | 189      | 9.253     | ug/l # | 22     |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 60473    | 69.992    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 60473    | 142.942   | ug/l # | 15     |

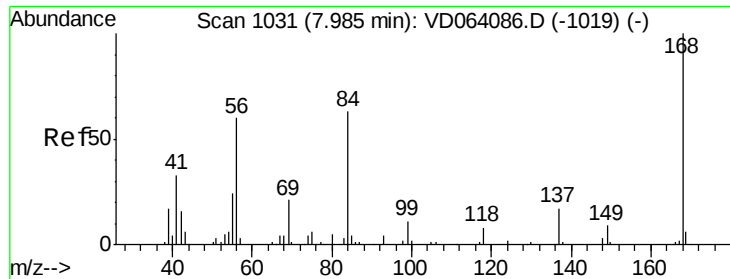
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD103019\  
Data File : VD064117.D  
Acq On : 30 Oct 2019 17:28  
Operator : VA/SY  
Sample : K5602-02  
Misc : 5.03G/5.00ml/MSVOA D/SOIL  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Oct 31 04:04:38 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D102919S.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 30 08:00:10 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.99 min Scan# 1031

Delta R.T. 0.00 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Instrument :

MSVOA\_D

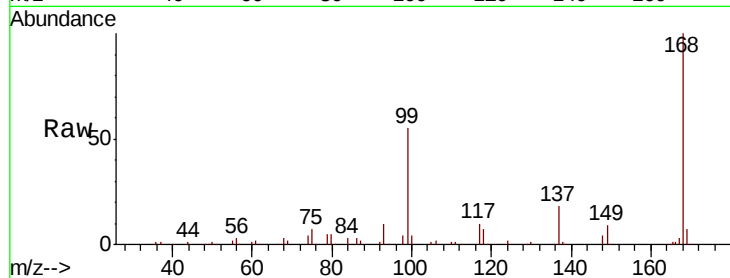
ClientSampleId :

Tot Ion:168 Resp: 178288

Ion Ratio Lower Upper

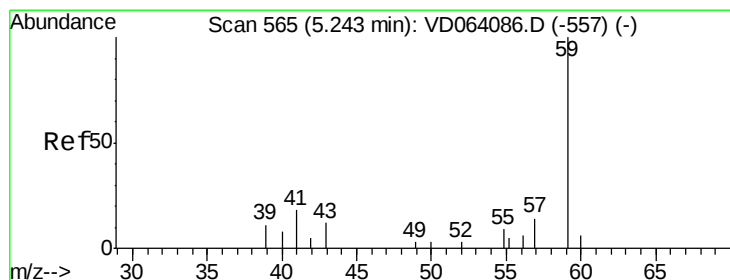
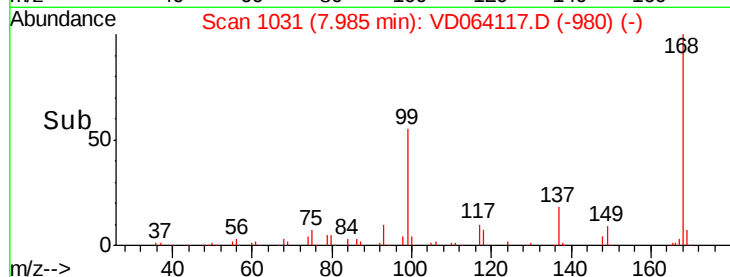
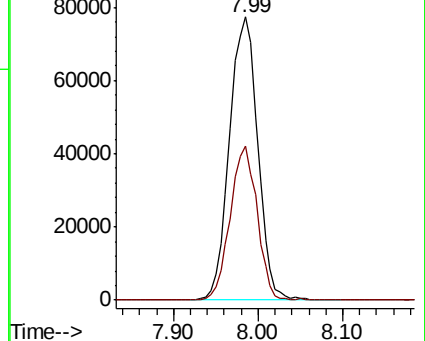
168 100

99 54.5 37.6 56.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#11

Tert butyl alcohol

Concen: 7.589 ug/l

RT: 5.23 min Scan# 563

Delta R.T. -0.01 min

Lab File: VD064117.D

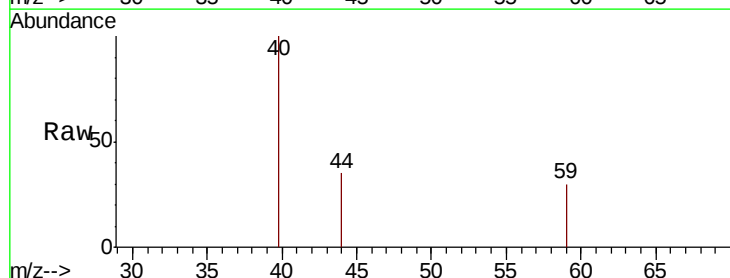
Acq: 30 Oct 2019 17:28

Tgt Ion: 59 Resp: 117

Ion Ratio Lower Upper

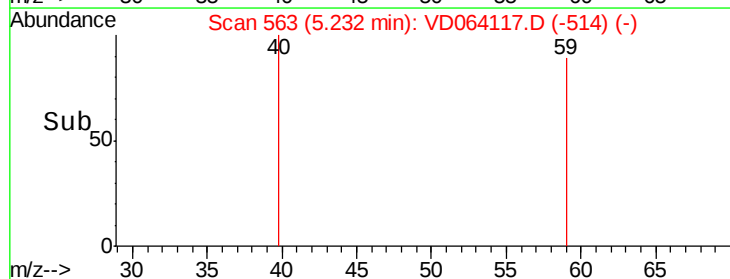
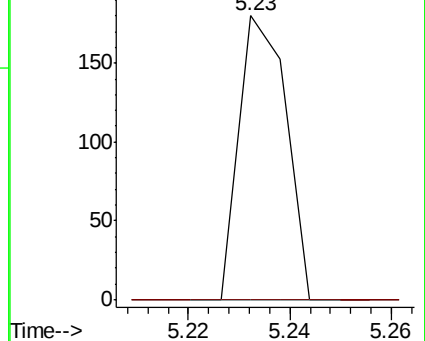
59 100

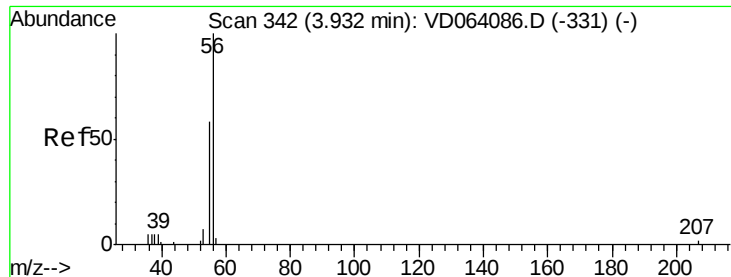
57 0.0 8.7 13.1#



Abundance Ion 59.00 (58.70 to 59.70): VDC

Ion 57.00 (56.70 to 57.70): VDC





#13

Acrolein

Concen: 1.360 ug/l

RT: 3.91 min Scan# 339

Delta R.T. -0.02 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Instrument :

MSVOA\_D

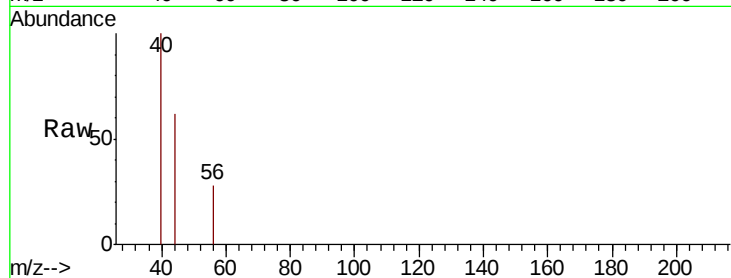
ClientSampleId :

Tot Ion: 56 Resp: 123

Ion Ratio Lower Upper

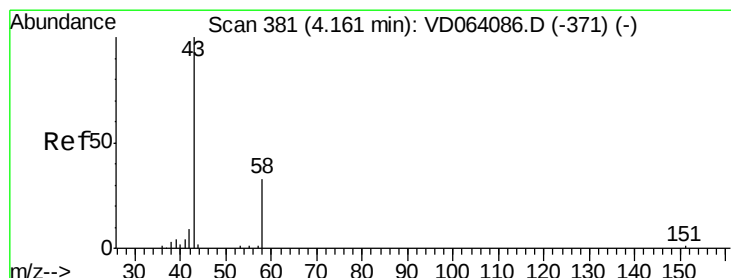
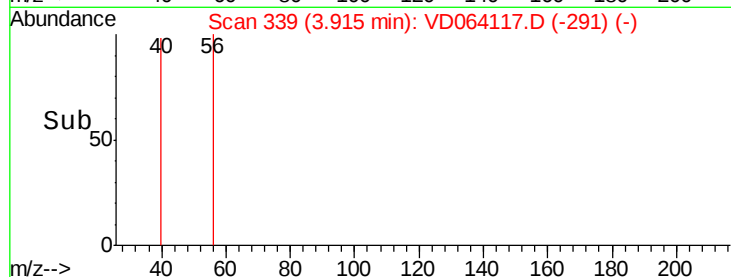
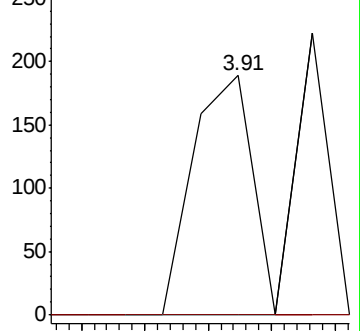
56 100

55 0.0 53.8 80.6#



Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 55.00 (54.70 to 55.70): VDC



#16

Acetone

Concen: 86.012 ug/l

RT: 4.16 min Scan# 381

Delta R.T. 0.00 min

Lab File: VD064117.D

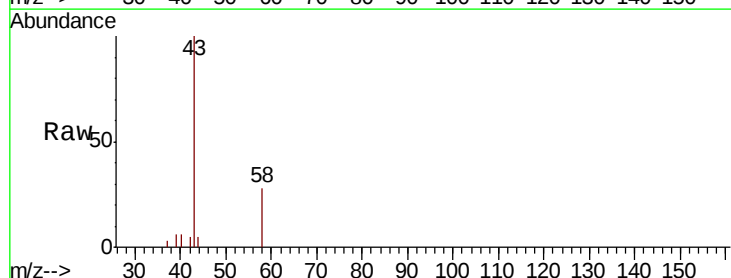
Acq: 30 Oct 2019 17:28

Tgt Ion: 43 Resp: 23205

Ion Ratio Lower Upper

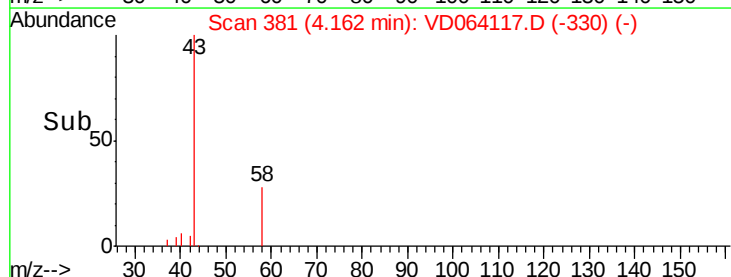
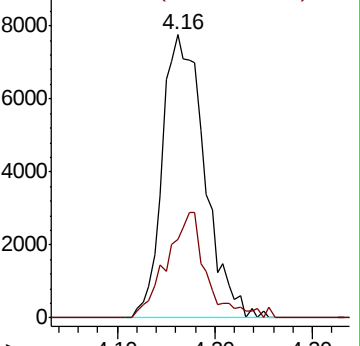
43 100

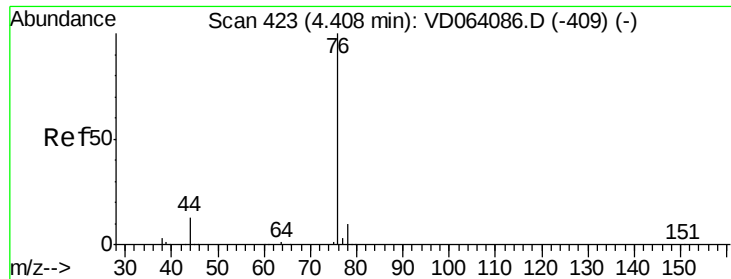
58 28.0 26.3 39.5



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC





#17

Carbon Disulfide

Concen: 1.588 ug/l

RT: 4.40 min Scan# 422

Delta R.T. -0.01 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Instrument :

MSVOA\_D

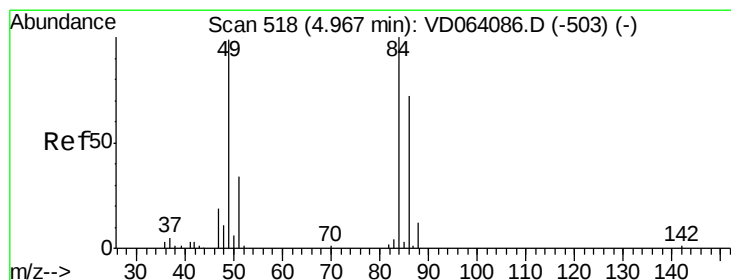
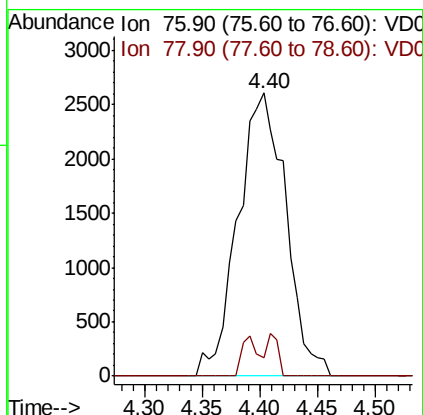
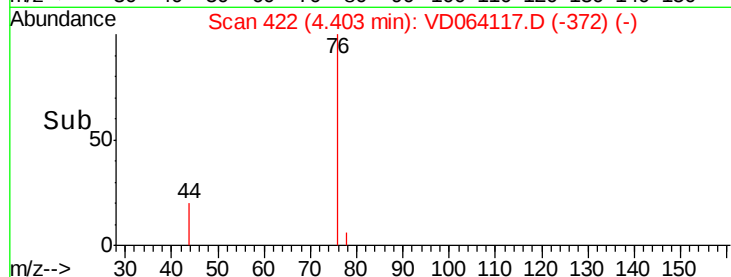
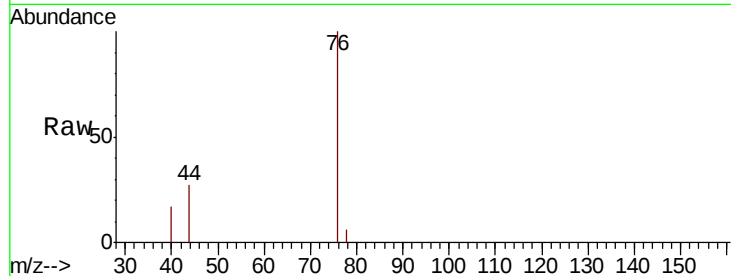
ClientSampleId :

Tot Ion: 76 Resp: 7545

Ion Ratio Lower Upper

76 100

78 6.3 8.1 12.1#



#20

Methylene Chloride

Concen: Below Cal

RT: 4.97 min Scan# 518

Delta R.T. 0.00 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Tgt Ion: 84 Resp: 2649

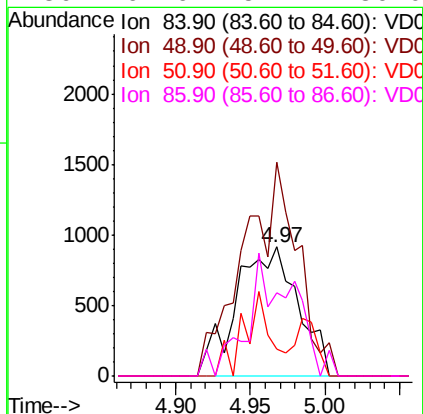
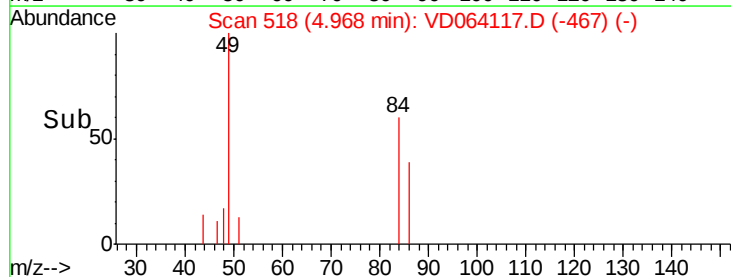
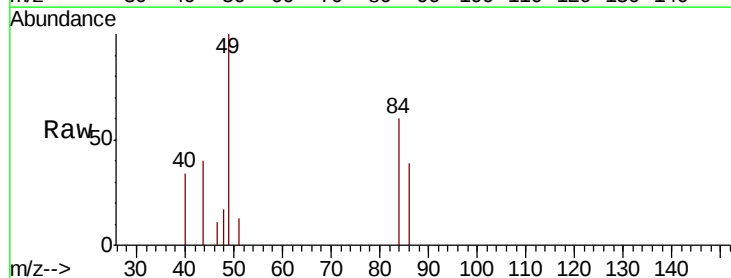
Ion Ratio Lower Upper

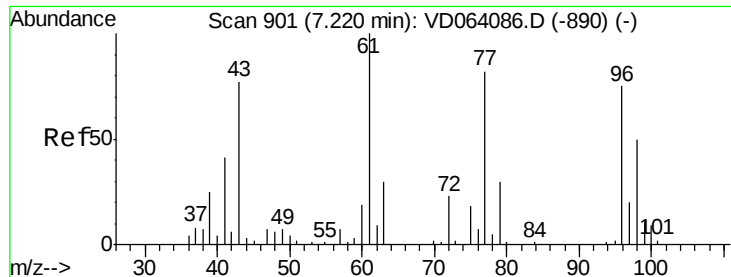
84 100

49 165.5 79.4 119.0#

51 21.1 27.4 41.2#

86 64.6 57.4 86.0

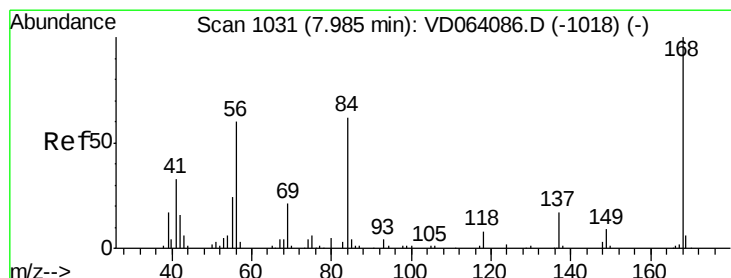
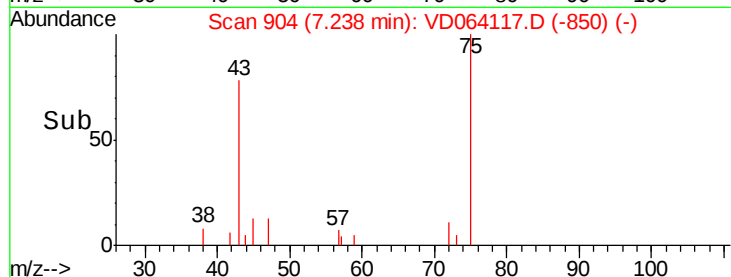
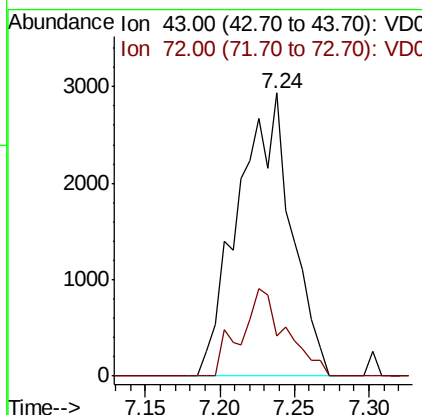
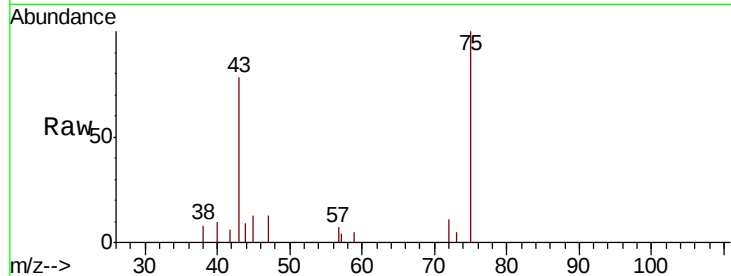




#25  
 2-Butanone  
 Concen: 19.530 ug/l  
 RT: 7.24 min Scan# 904  
 Delta R.T. 0.02 min  
 Lab File: VD064117.D  
 Acq: 30 Oct 2019 17:28

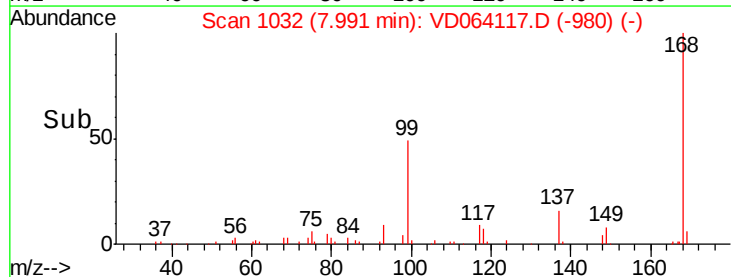
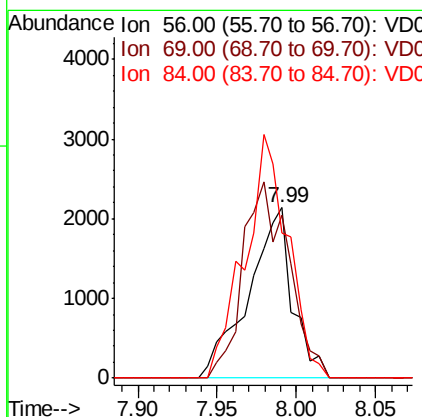
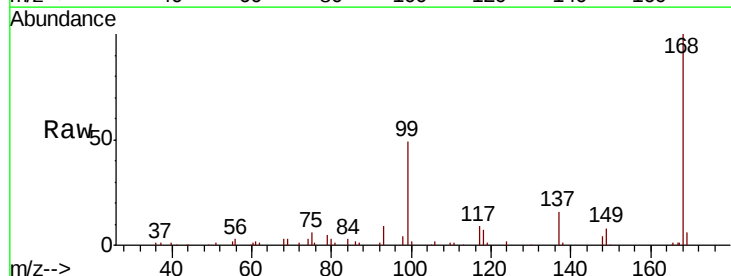
Instrument :  
 MSVOA\_D  
 ClientSampleId :

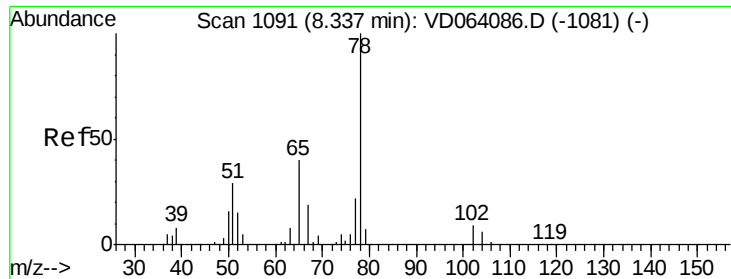
Tot Ion: 43 Resp: 7284  
 Ion Ratio Lower Upper  
 43 100  
 72 14.0 23.4 35.0#



#31  
 Cyclohexane  
 Concen: 1.570 ug/l  
 RT: 7.99 min Scan# 1032  
 Delta R.T. 0.01 min  
 Lab File: VD064117.D  
 Acq: 30 Oct 2019 17:28

Tgt Ion: 56 Resp: 4140  
 Ion Ratio Lower Upper  
 56 100  
 69 95.7 27.7 41.5#  
 84 85.3 83.1 124.7





#33

1,2-Dichloroethane-d4

Concen: 65.547 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.00 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Instrument :

MSVOA\_D

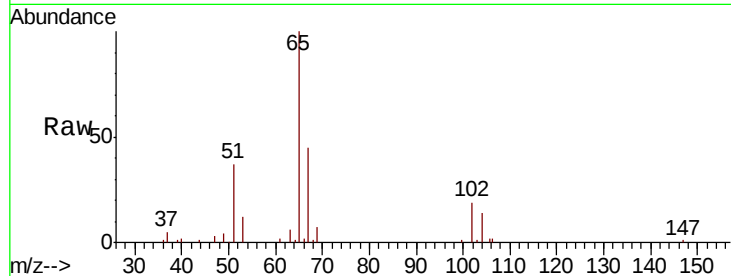
ClientSampleId :

Tot Ion: 65 Resp: 92941

Ion Ratio Lower Upper

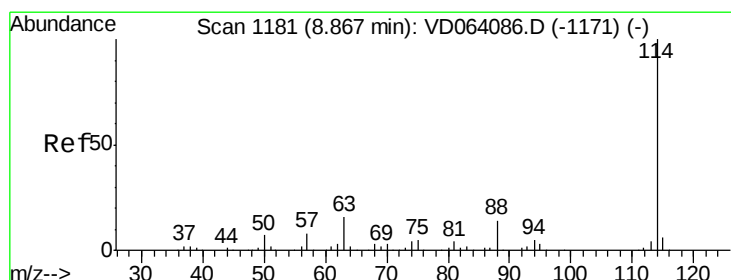
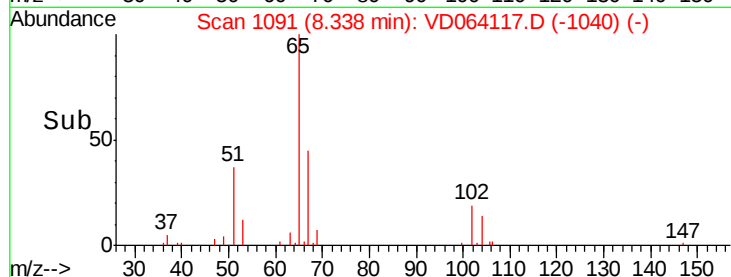
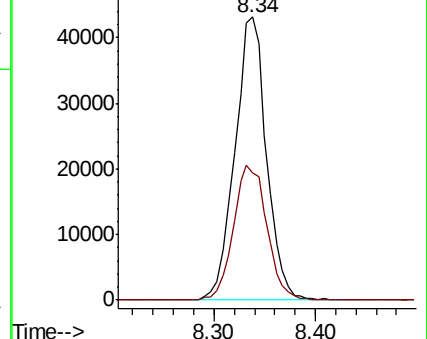
65 100

67 50.4 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

Delta R.T. 0.00 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

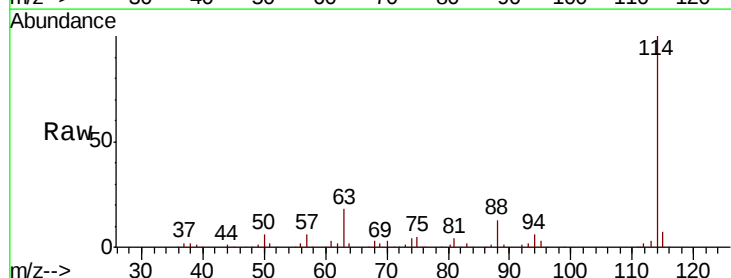
Tgt Ion:114 Resp: 307106

Ion Ratio Lower Upper

114 100

63 18.1 0.0 32.8

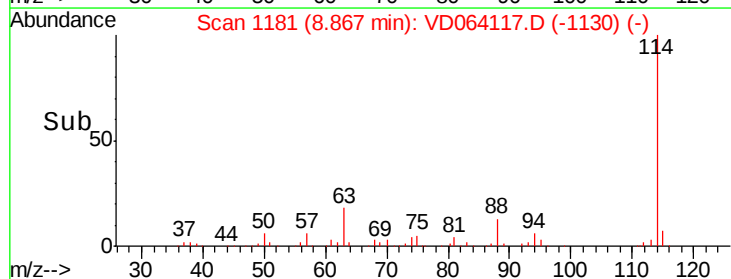
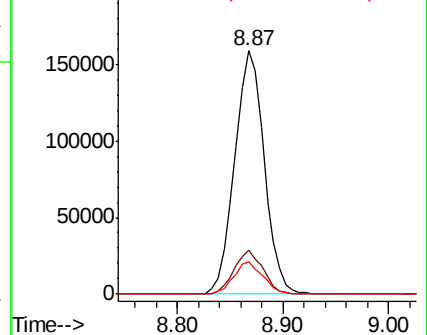
88 13.1 0.0 27.6

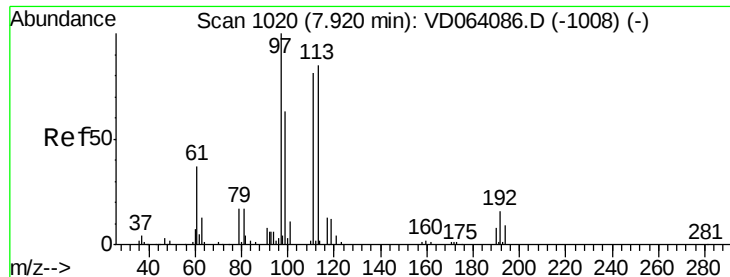


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC

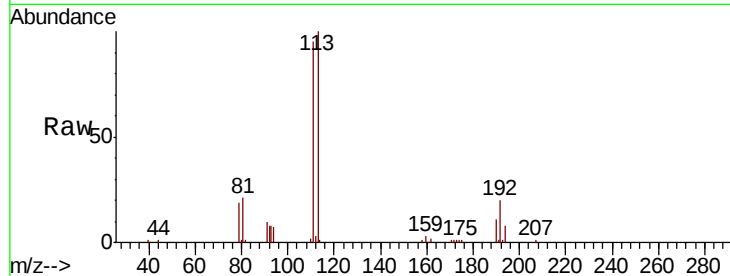




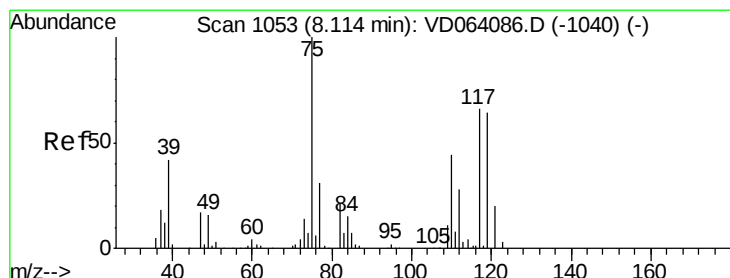
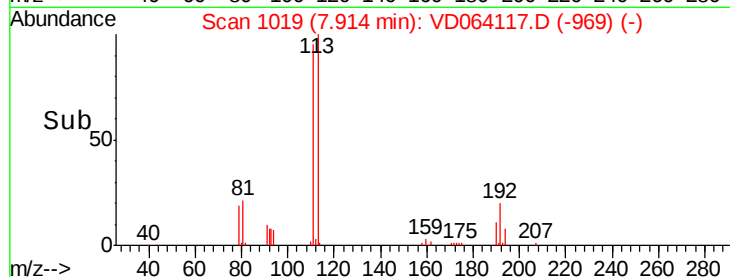
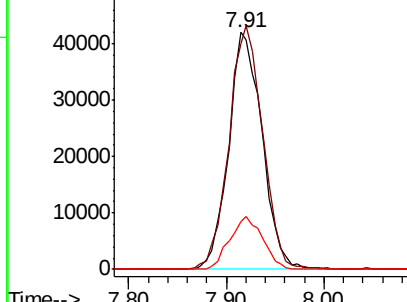
#35  
 Dibromofluoromethane  
 Concen: 52.738 ug/l  
 RT: 7.91 min Scan# 1019  
 Delta R.T. -0.01 min  
 Lab File: VD064117.D  
 Acq: 30 Oct 2019 17:28

Instrument :  
 MSVOA\_D  
 ClientSampled :

Tot Ion:113 Resp: 99644  
 Ion Ratio Lower Upper  
 113 100  
 111 103.6 79.3 118.9  
 192 21.8 16.2 24.2

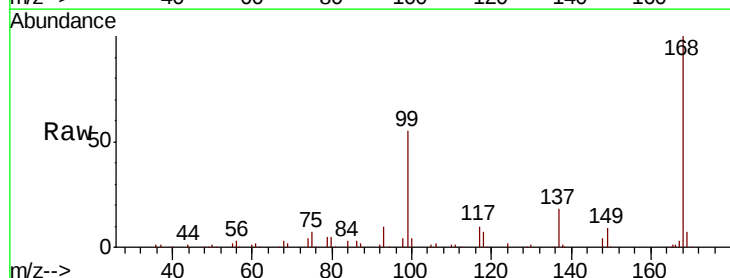


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

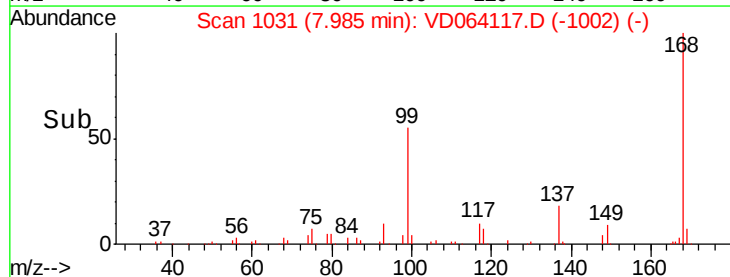
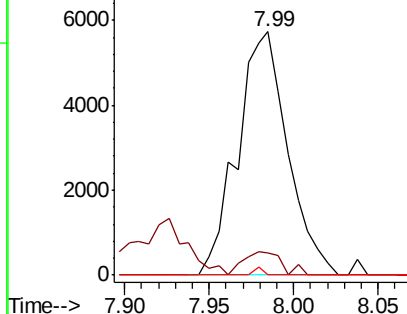


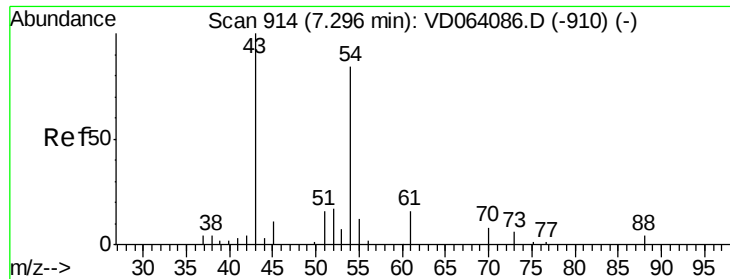
#36  
 1,1-Dichloropropene  
 Concen: 4.134 ug/l  
 RT: 7.99 min Scan# 1031  
 Delta R.T. -0.13 min  
 Lab File: VD064117.D  
 Acq: 30 Oct 2019 17:28

Tgt Ion: 75 Resp: 11896  
 Ion Ratio Lower Upper  
 75 100  
 110 7.4 20.0 59.9#  
 77 0.6 24.7 37.1#



Abundance Ion 74.90 (74.60 to 75.60): VDC  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VDC

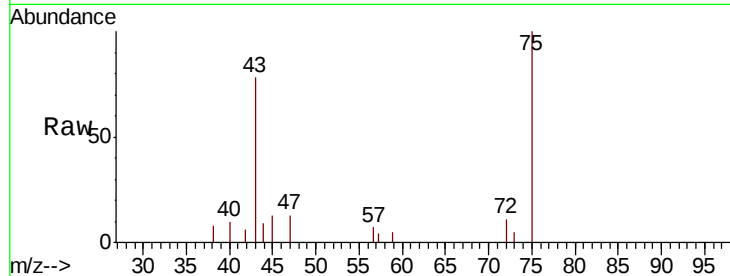




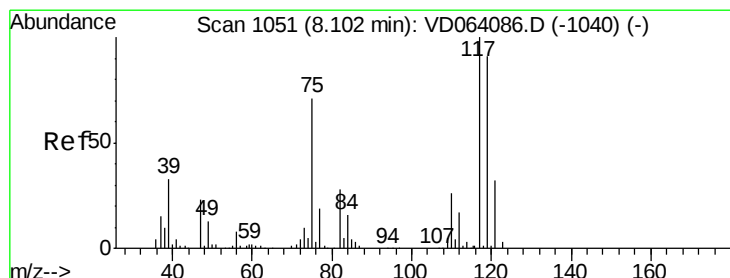
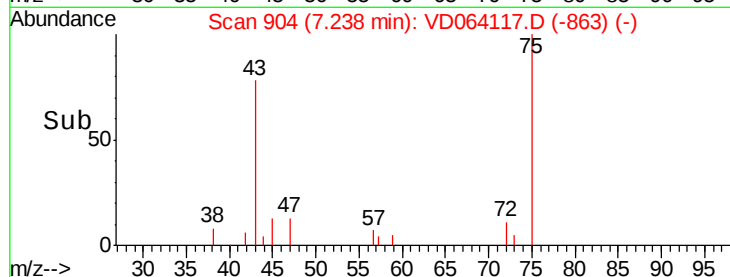
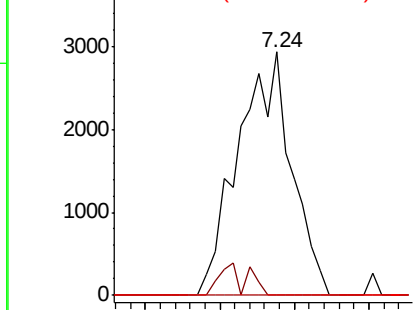
#37  
Ethyl Acetate  
Concen: 8.224 ug/l  
RT: 7.24 min Scan# 904  
Delta R.T. -0.06 min  
Lab File: VD064117.D  
Acq: 30 Oct 2019 17:28

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 43 Resp: 7284  
Ion Ratio Lower Upper  
43 100  
61 0.0 12.0 18.0#  
70 0.0 3.8 5.6#

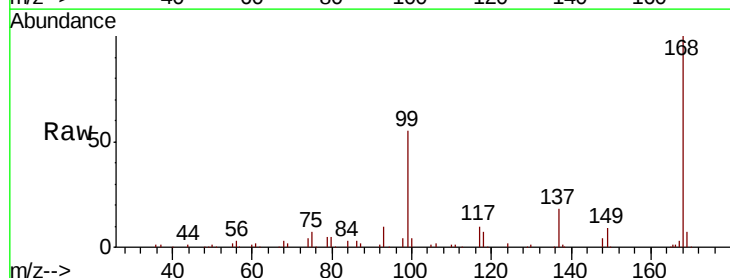


Abundance Ion 43.00 (42.70 to 43.70): VDC  
Ion 60.90 (60.60 to 61.60): VDC  
Ion 70.00 (69.70 to 70.70): VDC

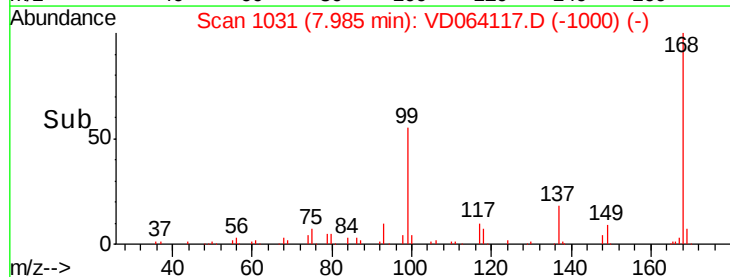
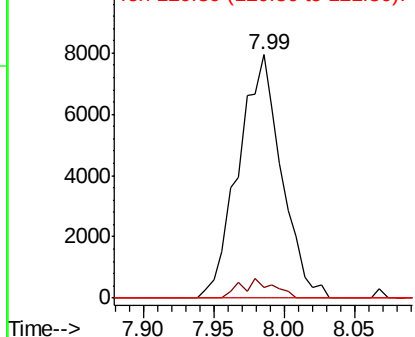


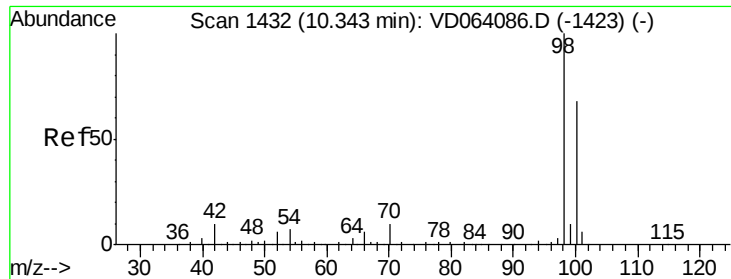
#38  
Carbon Tetrachloride  
Concen: 5.416 ug/l  
RT: 7.99 min Scan# 1031  
Delta R.T. -0.12 min  
Lab File: VD064117.D  
Acq: 30 Oct 2019 17:28

Tgt Ion: 117 Resp: 17006  
Ion Ratio Lower Upper  
117 100  
119 4.2 72.6 108.8#  
121 0.0 25.8 38.6#



Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V





#50

Toluene-d8

Concen: 48.681 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.00 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Instrument :

MSVOA\_D

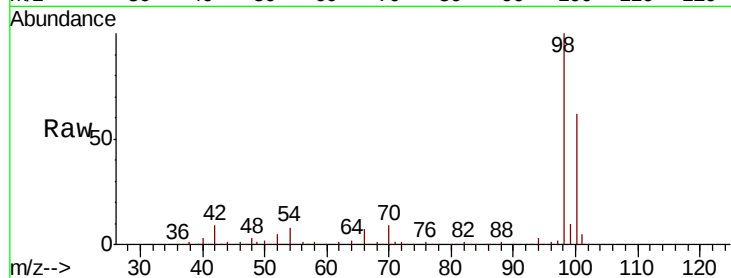
ClientSampled :

Tot Ion: 98 Resp: 367835

Ion Ratio Lower Upper

98 100

100 65.7 53.4 80.0



Abundance Ion 98.00 (97.70 to 98.70): VDC

Ion 100.00 (99.70 to 100.70): VDC

250000

200000

150000

100000

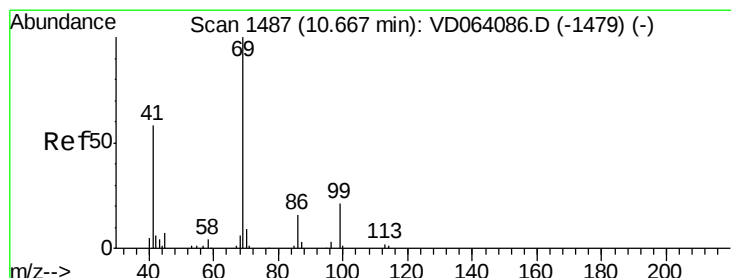
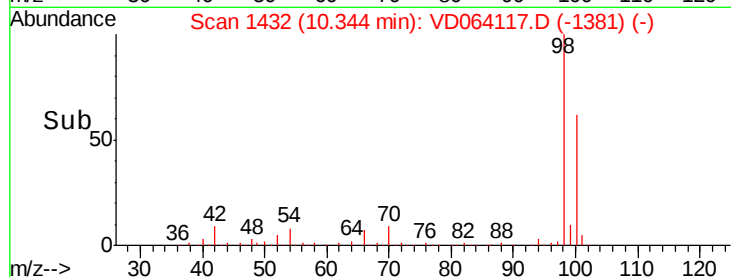
50000

0

10.30

10.40

Time-->



#56

Ethyl methacrylate

Concen: 3.090 ug/l

RT: 10.71 min Scan# 1494

Delta R.T. 0.04 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

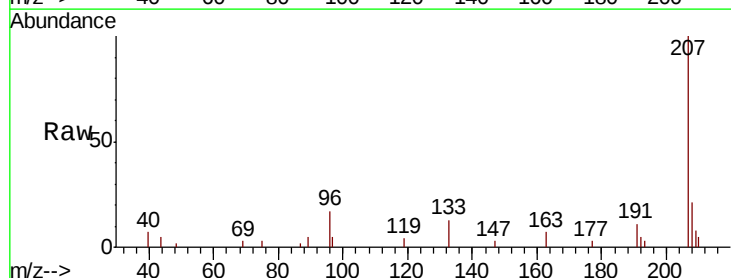
Tgt Ion: 69 Resp: 143

Ion Ratio Lower Upper

69 100

41 0.0 46.9 70.3#

39 165.7 27.3 40.9#



Abundance Ion 69.00 (68.70 to 69.70): VDC

Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

300

200

100

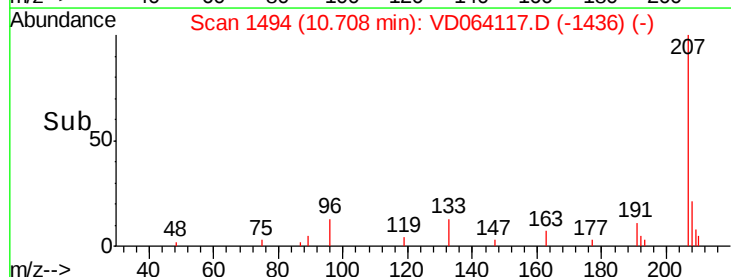
0

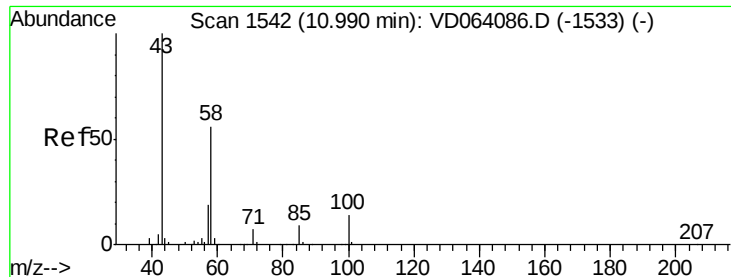
10.68

10.70

10.72

Time-->

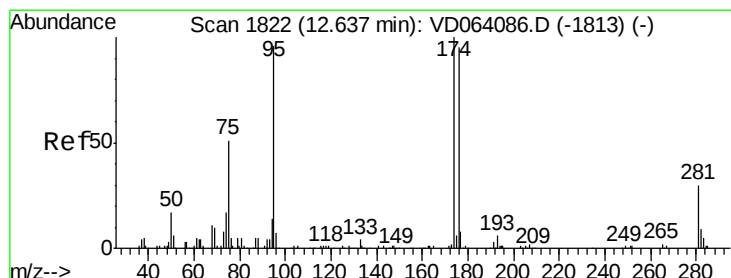
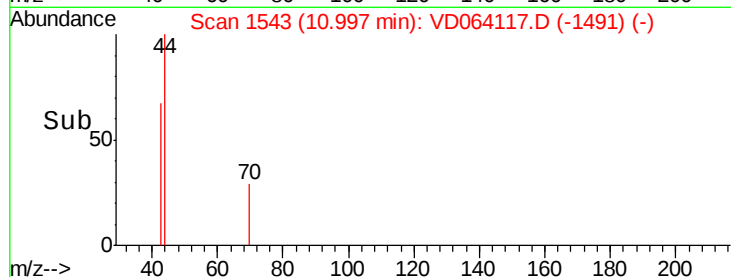
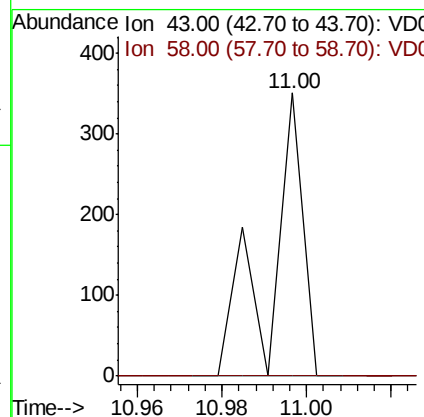
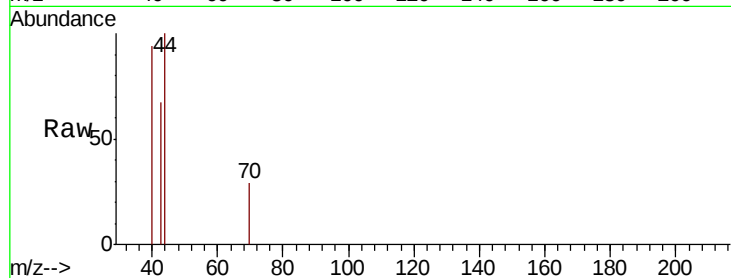




#59  
2-Hexanone  
Concen: 9.253 ug/l  
RT: 11.00 min Scan# 1543  
Delta R.T. 0.01 min  
Lab File: VD064117.D  
Acq: 30 Oct 2019 17:28

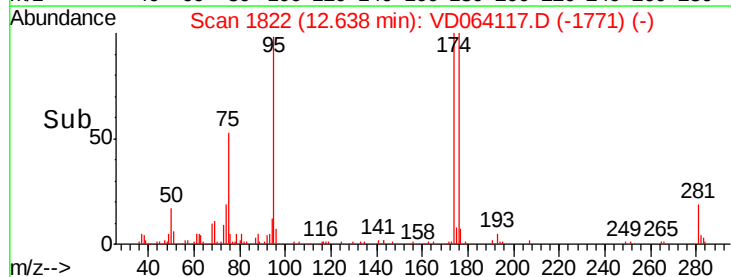
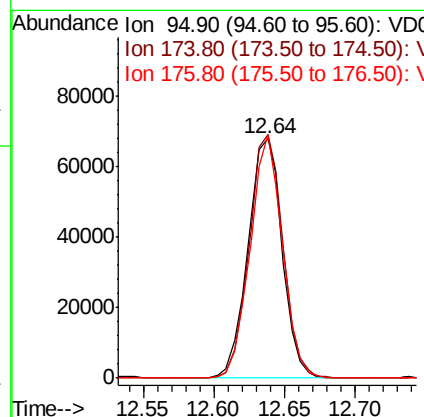
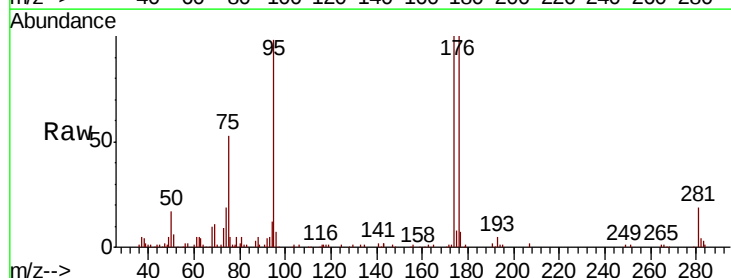
Instrument :  
MSVOA\_D  
ClientSampleId :

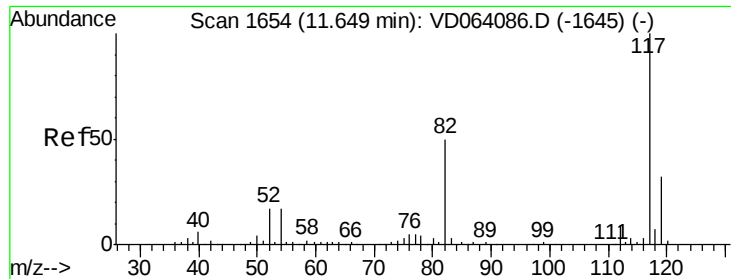
Tot Ion: 43 Resp: 189  
Ion Ratio Lower Upper  
43 100  
58 0.0 29.2 87.6#



#62  
4-Bromofluorobenzene  
Concen: 45.960 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.00 min  
Lab File: VD064117.D  
Acq: 30 Oct 2019 17:28

Tgt Ion: 95 Resp: 115133  
Ion Ratio Lower Upper  
95 100  
174 100.5 0.0 201.6  
176 95.9 0.0 192.6

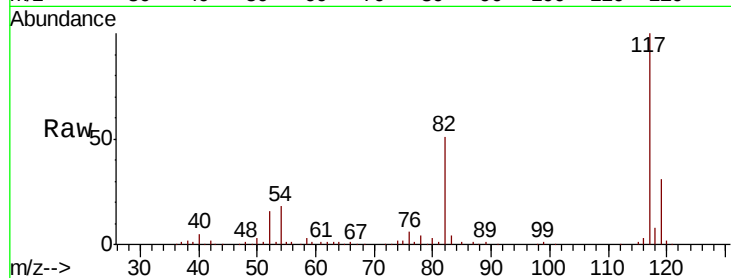




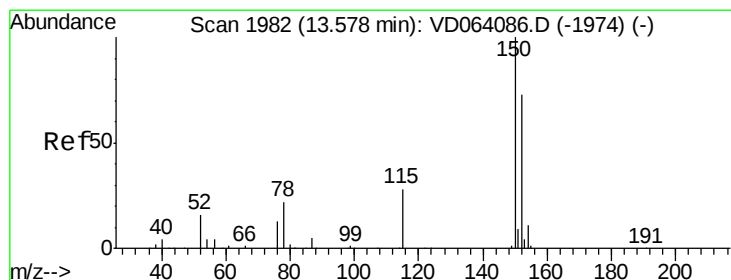
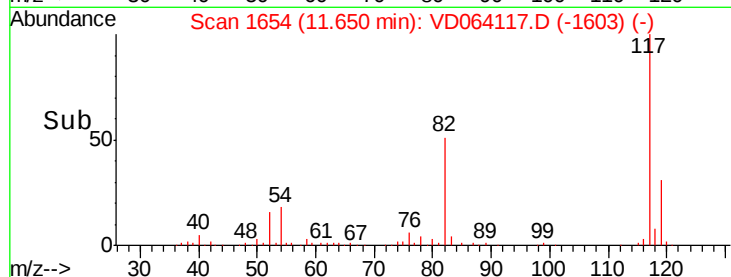
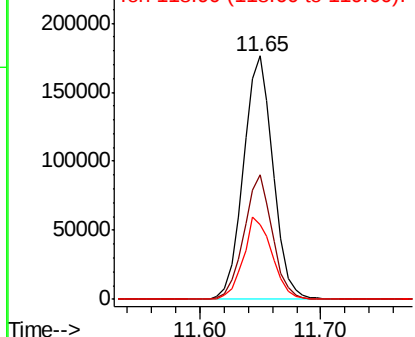
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD064117.D  
Acq: 30 Oct 2019 17:28

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:117 Resp: 299535  
Ion Ratio Lower Upper  
117 100  
82 51.2 40.2 60.4  
119 30.8 26.0 39.0

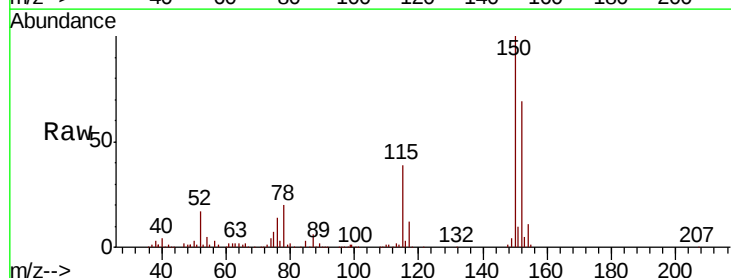


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

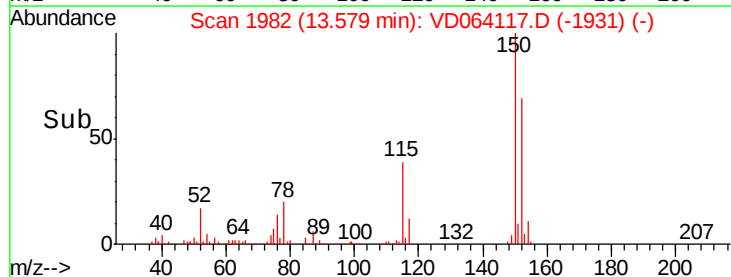
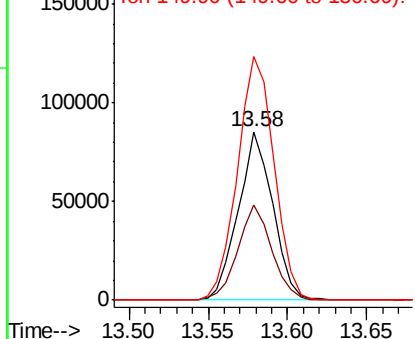


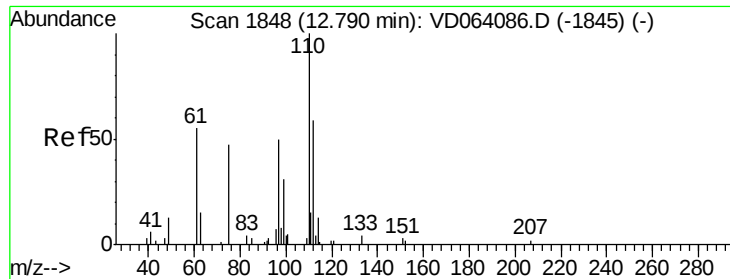
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. 0.00 min  
Lab File: VD064117.D  
Acq: 30 Oct 2019 17:28

Tgt Ion:152 Resp: 128582  
Ion Ratio Lower Upper  
152 100  
115 55.7 26.2 78.6  
150 153.6 0.0 338.8



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 69.992 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

Instrument :

MSVOA\_D

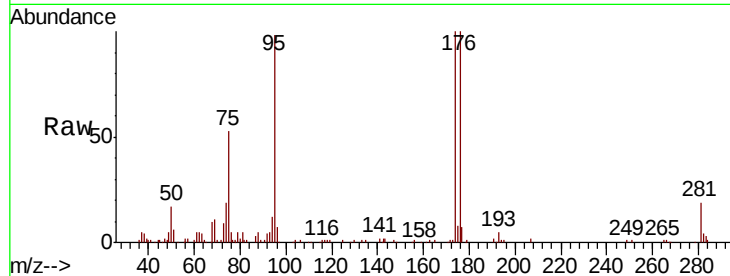
ClientSampleId :

Tot Ion: 75 Resp: 60473

Ion Ratio Lower Upper

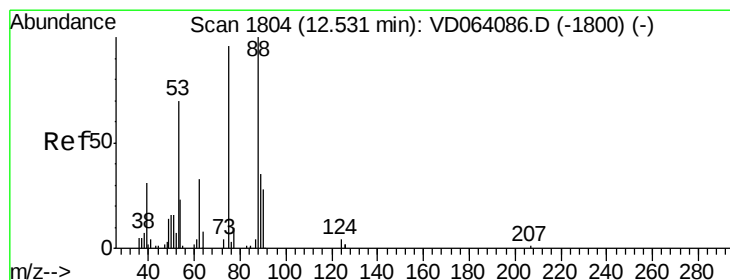
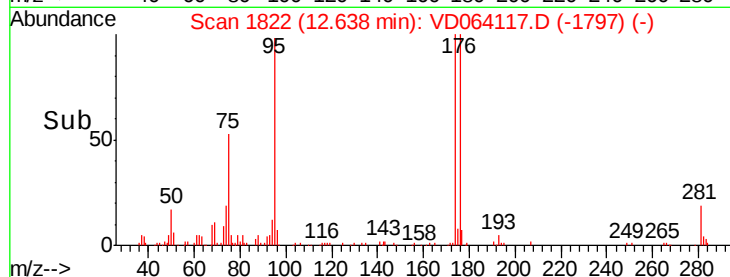
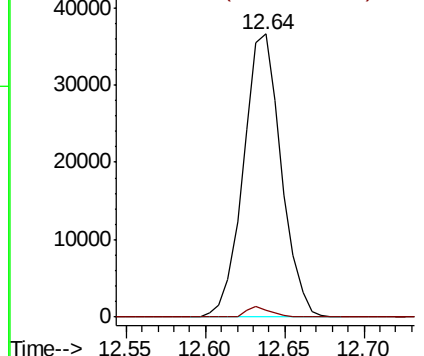
75 100

77 2.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 142.942 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD064117.D

Acq: 30 Oct 2019 17:28

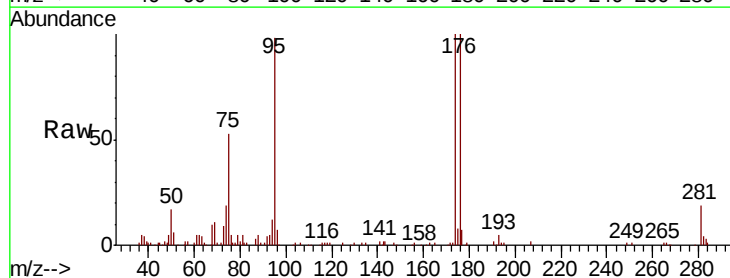
Tgt Ion: 75 Resp: 60473

Ion Ratio Lower Upper

75 100

53 0.2 68.6 103.0#

89 0.4 36.9 55.3#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 88.90 (88.60 to 89.60): VDC

