

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD082319\  
 Data File : VD063772.D  
 Acq On : 23 Aug 2019 17:55  
 Operator : JC/SY  
 Sample : K4461-09RE  
 Misc : 4.99g/5ml/MSVOA D/SOIL  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Aug 26 11:13:53 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      | 7.04  | 168  | 23030    | 50.00 | ug/l  | -0.03    |
| 34) 1,4-Difluorobenzene    | 8.22  | 114  | 34463    | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 12.36 | 117  | 36727    | 50.00 | ug/l  | -0.02    |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 25784    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.45  | 65   | 29581    | 120.16 | ug/l    | -0.02    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 240.32% |          |
| 35) Dibromofluoromethane    | 6.92  | 113  | 21127    | 72.79  | ug/l    | -0.02    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 145.58% |          |
| 50) Toluene-d8              | 10.41 | 98   | 42230    | 66.18  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 132.36% |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 22384    | 77.39  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 154.78% |          |

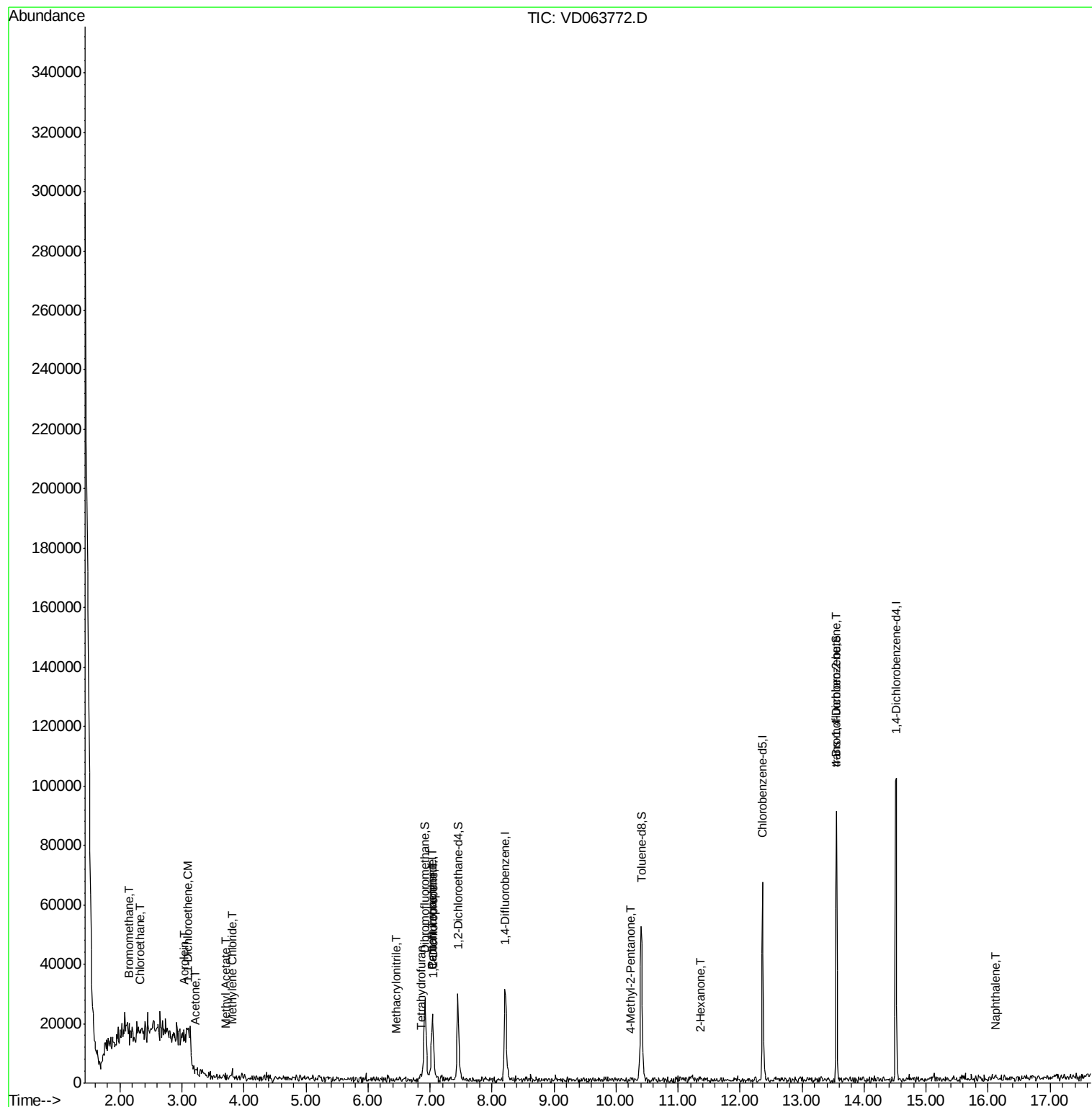
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 5) Bromomethane                | 2.14  | 94   | 627      | 6.149   | ug/l # | 11     |
| 6) Chloroethane                | 2.31  | 64   | 196      | 1.983   | ug/l # | 1      |
| 12) 1,1-Dichloroethene         | 3.09  | 96   | 207      | 1.112   | ug/l # | 1      |
| 13) Acrolein                   | 3.03  | 56   | 227      | 21.520  | ug/l # | 18     |
| 16) Acetone                    | 3.23  | 43   | 2177     | 43.503  | ug/l # | 65     |
| 18) Methyl Acetate             | 3.70  | 43   | 677      | 7.142   | ug/l # | 57     |
| 20) Methylene Chloride         | 3.81  | 84   | 1071     | 4.949   | ug/l # | 49     |
| 29) Tetrahydrofuran            | 6.84  | 42   | 209      | 9.075   | ug/l # | 35     |
| 36) 1,1-Dichloropropene        | 7.06  | 75   | 1621     | 5.321   | ug/l # | 42     |
| 38) Carbon Tetrachloride       | 7.04  | 117  | 3022     | 6.582   | ug/l # | 13     |
| 41) Methacrylonitrile          | 6.46  | 41   | 243      | 1.512   | ug/l # | 37     |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 196      | 1.675   | ug/l # | 40     |
| 59) 2-Hexanone                 | 11.35 | 43   | 356      | 4.182   | ug/l # | 30     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 12134    | 152.564 | ug/l # | 1      |
| 95) Naphthalene                | 16.12 | 128  | 1043     | 1.360   | ug/l # | 71     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD082319\  
Data File : VD063772.D  
Acq On : 23 Aug 2019 17:55  
Operator : JC/SY  
Sample : K4461-09RE  
Misc : 4.99µl/5ml/MSVOA D/SOIL  
ALS Vial : 29 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Aug 26 11:13:53 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: 7.04 min Scan# 570

Delta R.T. -0.03 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :

MSVOA\_D

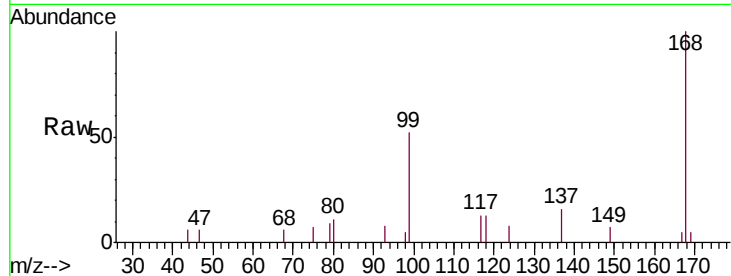
ClientSampleId :

Tot Ion:168 Resp: 23030

Ion Ratio Lower Upper

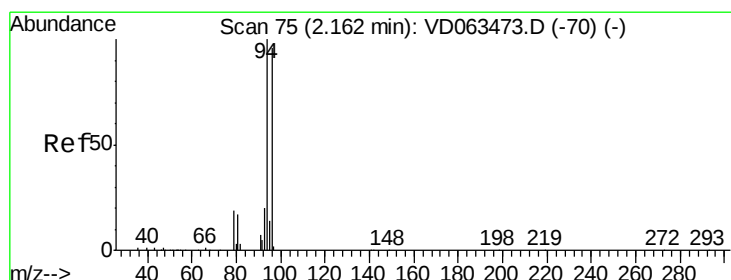
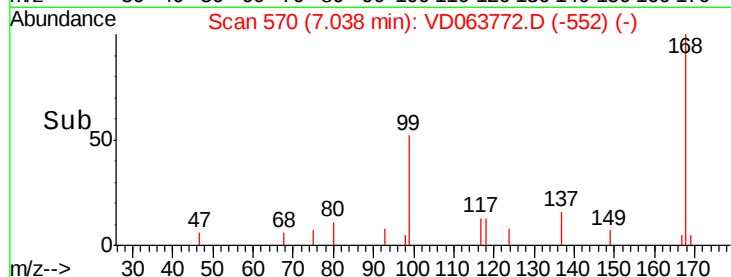
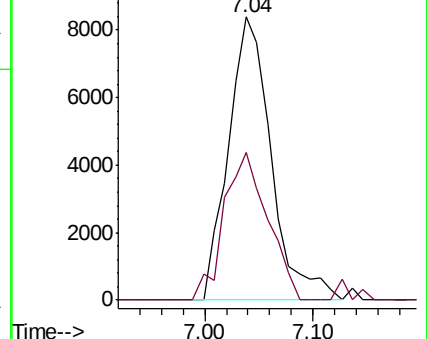
168 100

99 52.4 46.7 70.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#5

Bromomethane

Concen: 6.149 ug/l

RT: 2.14 min Scan# 72

Delta R.T. -0.03 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

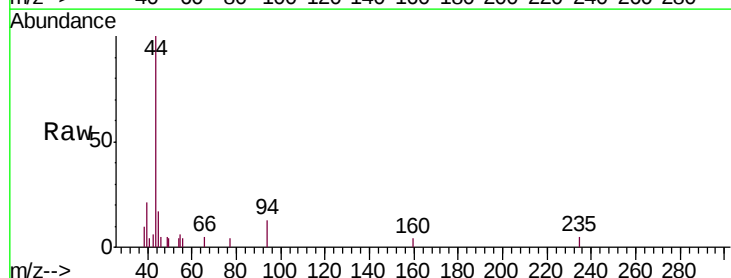
Tgt Ion: 94 Resp: 627

Ion Ratio Lower Upper

94 100

96 0.0 76.5 114.7#

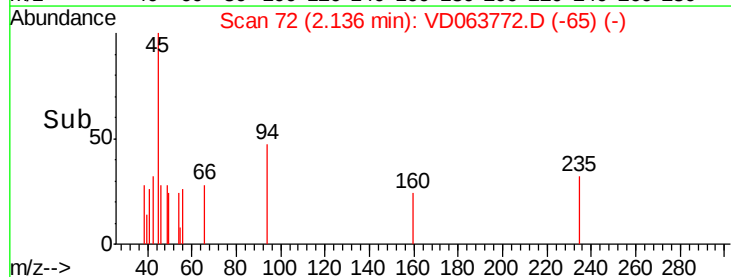
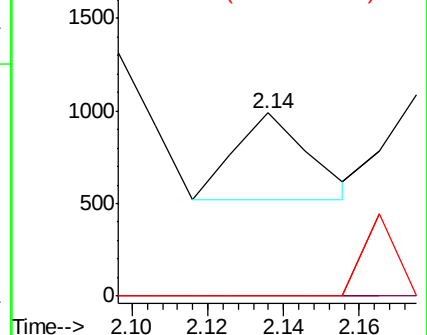
93 0.0 15.8 23.8#

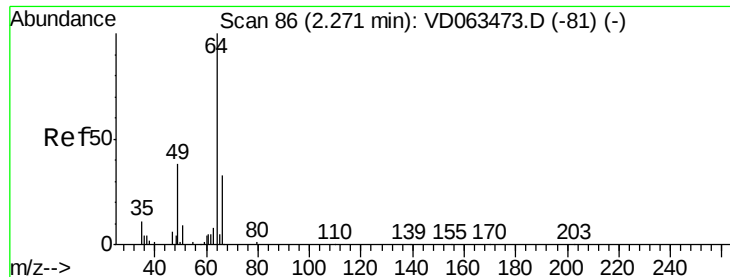


Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC





#6

Chloroethane

Concen: 1.983 ug/l

RT: 2.31 min Scan# 90

Delta R.T. 0.04 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :

MSVOA\_D

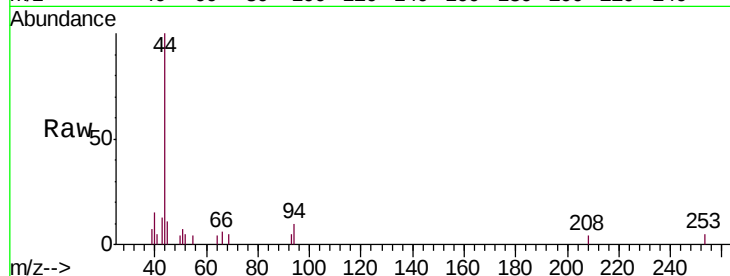
ClientSampled :

Tot Ion: 64 Resp: 196

Ion Ratio Lower Upper

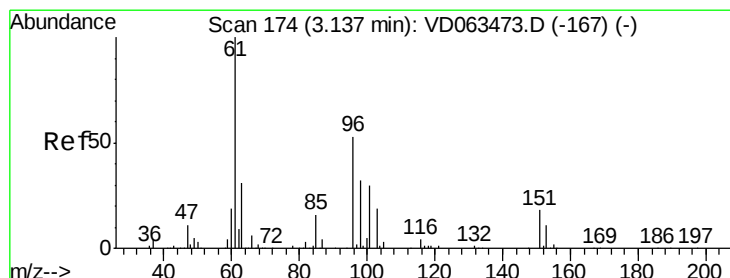
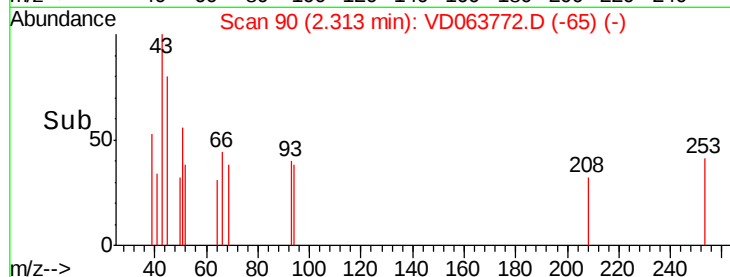
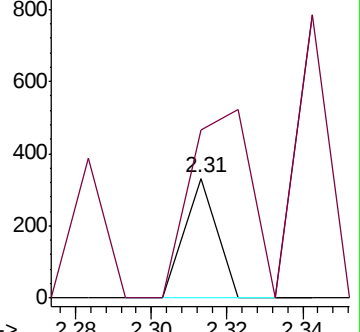
64 100

66 140.8 26.3 39.5#



Abundance Ion 63.95 (63.65 to 64.65): VDC

Ion 65.90 (65.60 to 66.60): VDC



#12

1,1-Dichloroethene

Concen: 1.112 ug/l

RT: 3.09 min Scan# 169

Delta R.T. -0.05 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

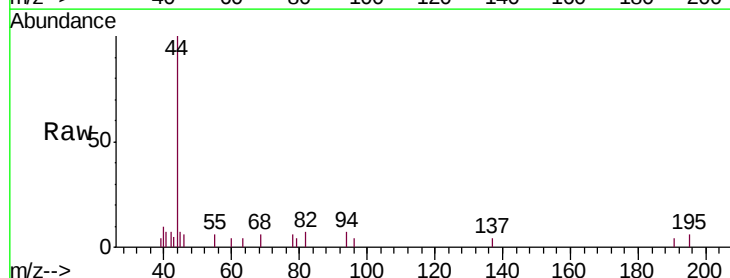
Tgt Ion: 96 Resp: 207

Ion Ratio Lower Upper

96 100

61 0.0 151.7 227.5#

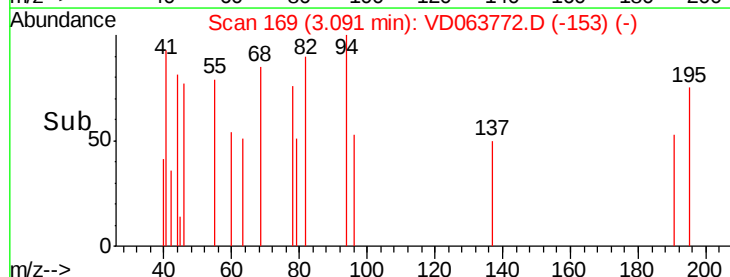
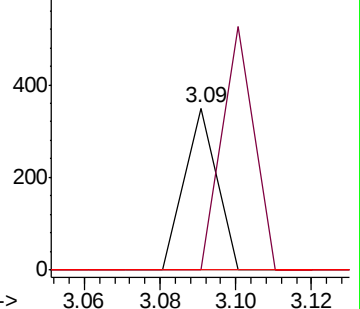
98 0.0 48.4 72.6#

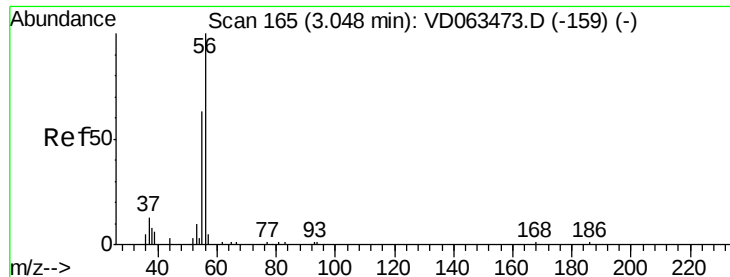


Abundance Ion 95.90 (95.60 to 96.60): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 97.85 (97.55 to 98.55): VDC





#13

Acrolein

Concen: 21.520 ug/l

RT: 3.03 min Scan# 163

Delta R.T. -0.02 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :

MSVOA\_D

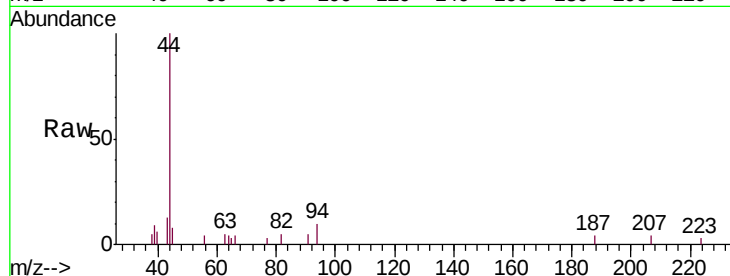
ClientSampleId :

Tot Ion: 56 Resp: 227

Ion Ratio Lower Upper

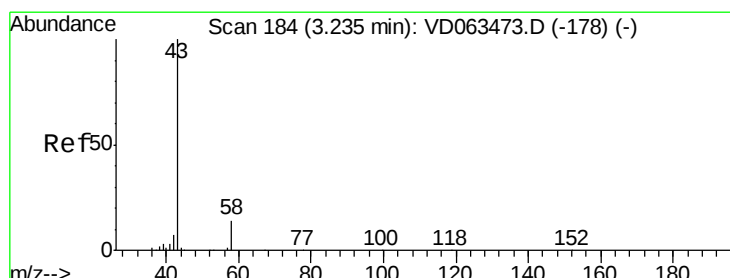
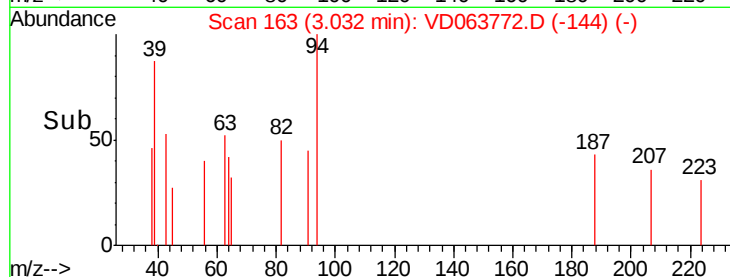
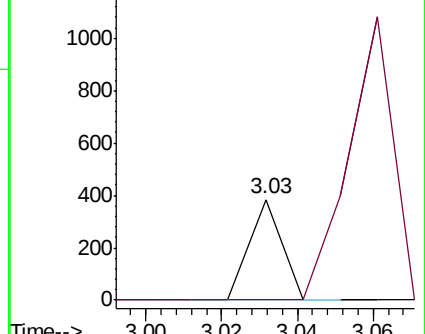
56 100

55 0.0 51.3 76.9#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



#16

Acetone

Concen: 43.503 ug/l

RT: 3.23 min Scan# 183

Delta R.T. -0.01 min

Lab File: VD063772.D

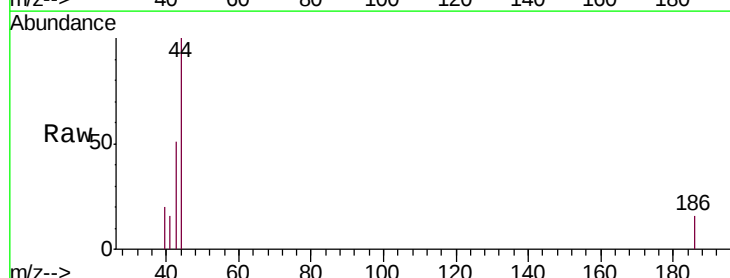
Acq: 23 Aug 2019 17:55

Tgt Ion: 43 Resp: 2177

Ion Ratio Lower Upper

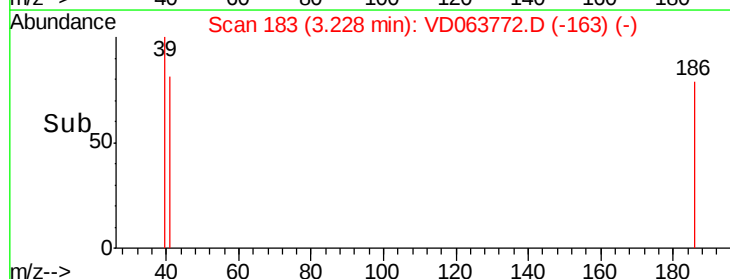
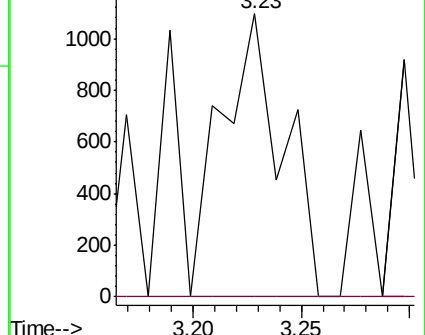
43 100

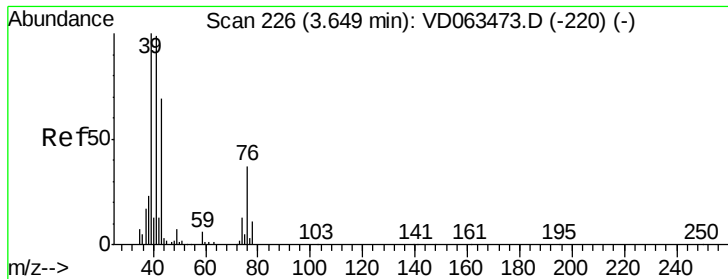
58 0.0 11.4 17.2#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

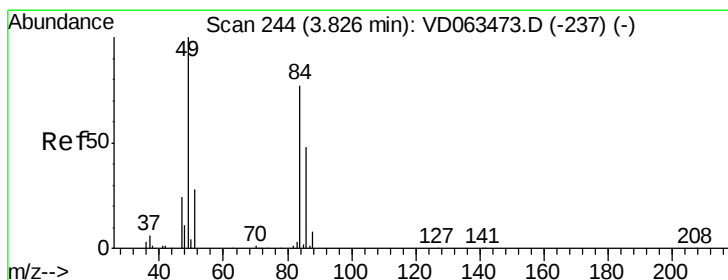
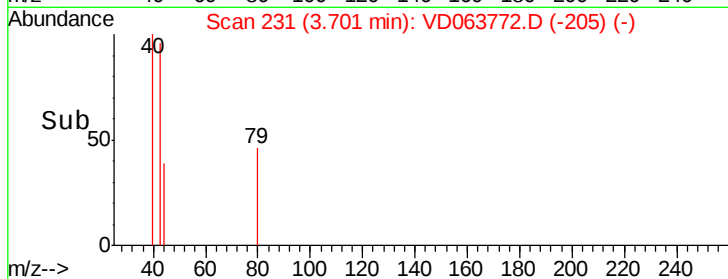
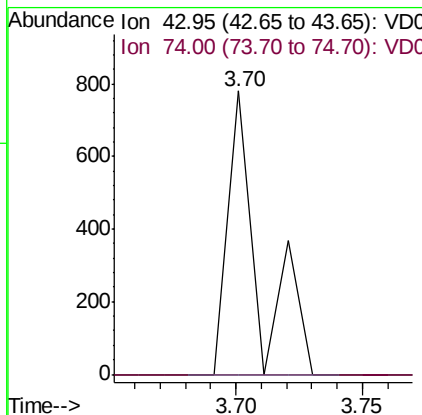
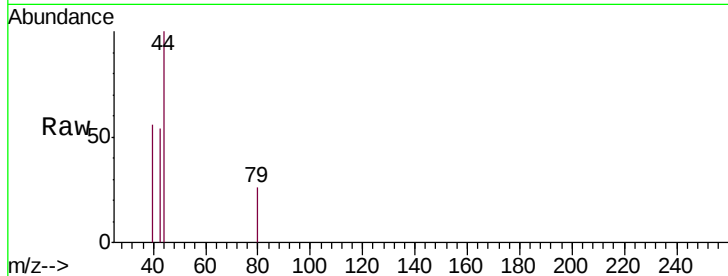




#18  
Methyl Acetate  
Concen: 7.142 ug/l  
RT: 3.70 min Scan# 231  
Delta R.T. 0.05 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

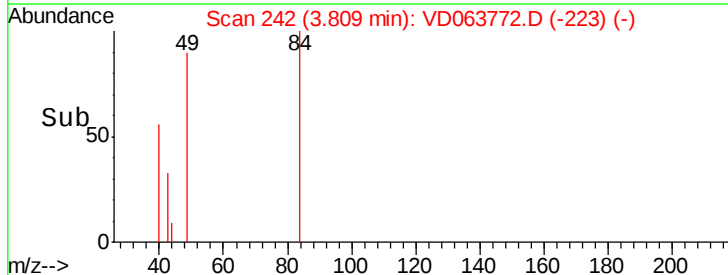
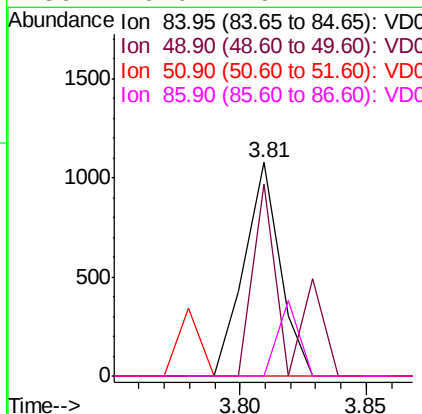
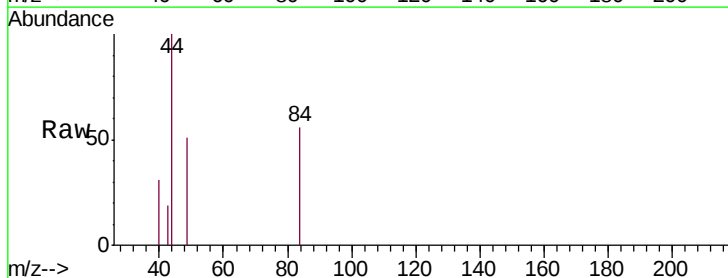
Instrument :  
MSVOA\_D  
ClientSampleId :

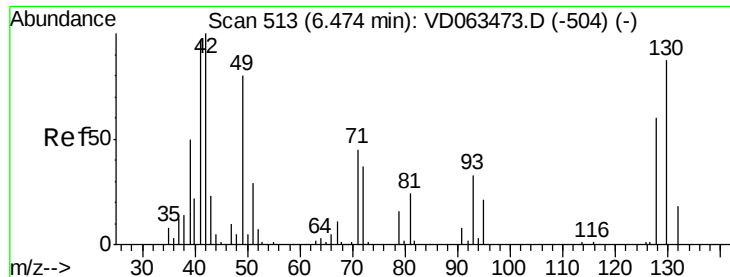
Tot Ion: 43 Resp: 677  
Ion Ratio Lower Upper  
43 100  
74 0.0 15.4 23.2#



#20  
Methylene Chloride  
Concen: 4.949 ug/l  
RT: 3.81 min Scan# 242  
Delta R.T. -0.02 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

Tgt Ion: 84 Resp: 1071  
Ion Ratio Lower Upper  
84 100  
49 89.8 103.4 155.2#  
51 0.0 28.5 42.7#  
86 0.0 49.4 74.2#





#29

Tetrahydrofuran

Concen: 9.075 ug/l

RT: 6.84 min Scan# 550

Delta R.T. 0.37 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :  
MSVOA\_D  
ClientSampled :

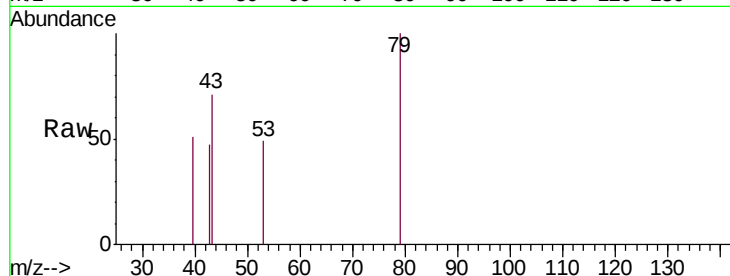
Tot Ion: 42 Resp: 209

Ion Ratio Lower Upper

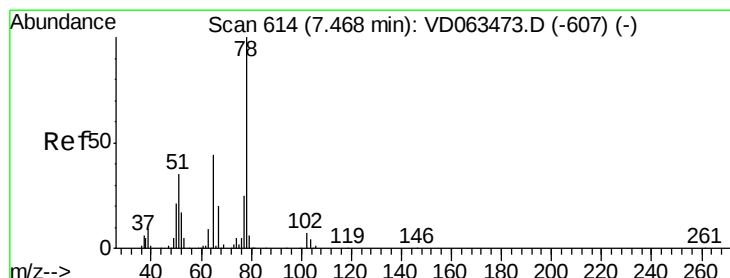
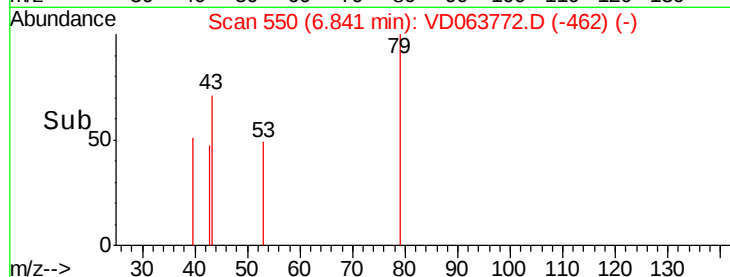
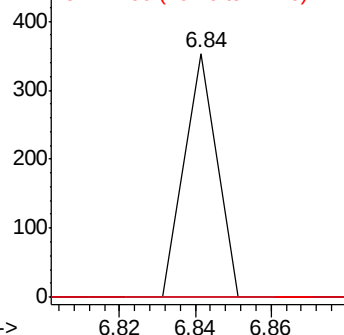
42 100

72 0.0 31.5 47.3#

71 0.0 33.8 50.8#



Abundance Ion 42.00 (41.70 to 42.70): VDC  
Ion 72.00 (71.70 to 72.70): VDC  
Ion 71.00 (70.70 to 71.70): VDC



#33

1,2-Dichloroethane-d4

Concen: 120.163 ug/l

RT: 7.45 min Scan# 612

Delta R.T. -0.02 min

Lab File: VD063772.D

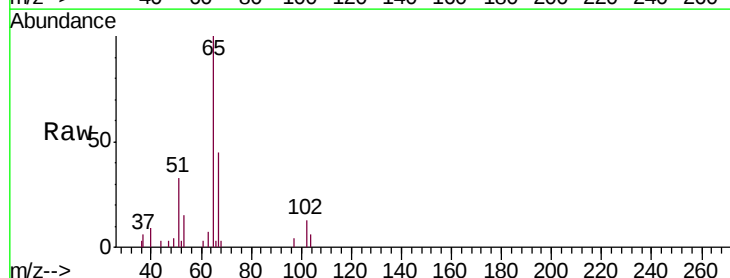
Acq: 23 Aug 2019 17:55

Tgt Ion: 65 Resp: 29581

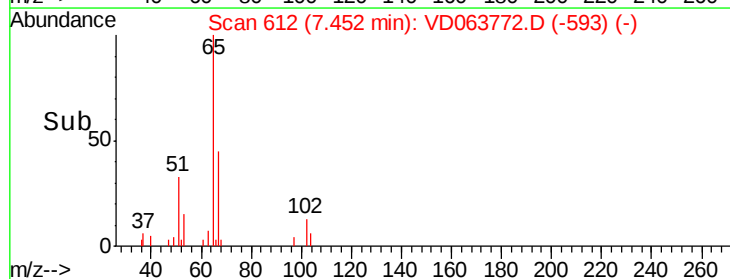
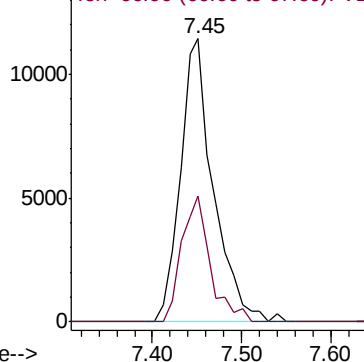
Ion Ratio Lower Upper

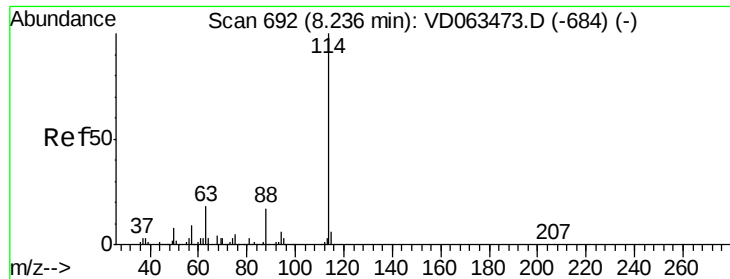
65 100

67 44.7 0.0 89.2



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: 8.22 min Scan# 690

Delta R.T. -0.02 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :

MSVOA\_D

ClientSampleId :

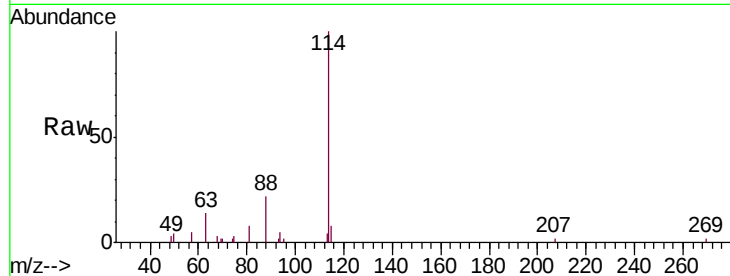
Tot Ion:114 Resp: 34463

Ion Ratio Lower Upper

114 100

63 14.2 0.0 36.2

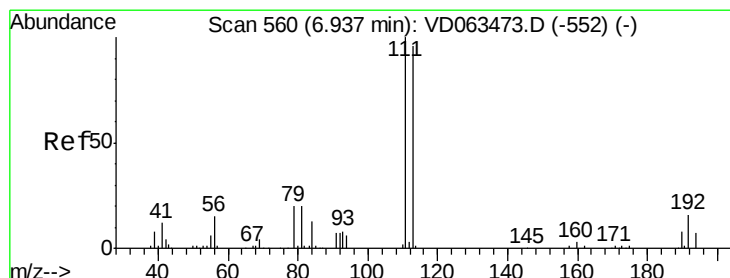
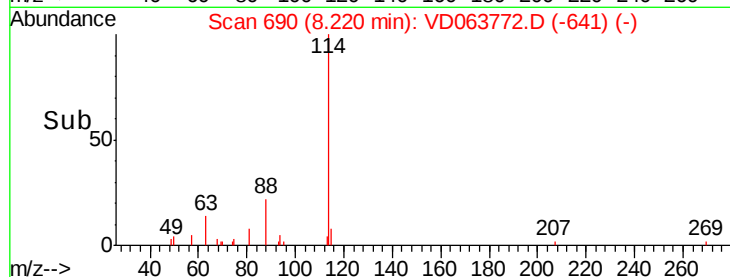
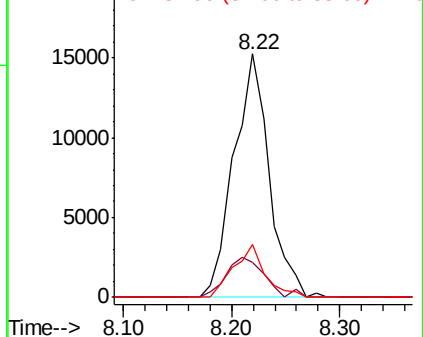
88 21.8 0.0 35.0



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: 72.789 ug/l

RT: 6.92 min Scan# 558

Delta R.T. -0.02 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

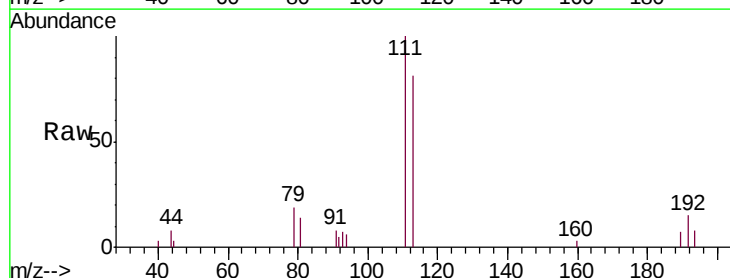
Tgt Ion:113 Resp: 21127

Ion Ratio Lower Upper

113 100

111 123.0 83.1 124.7

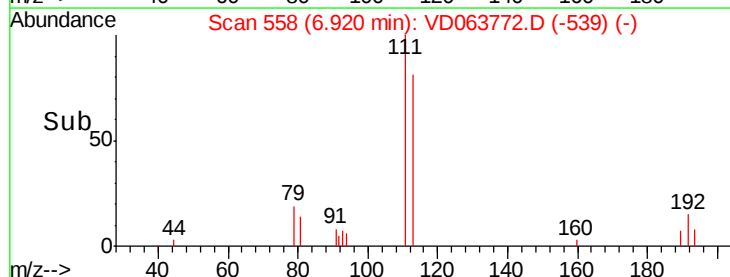
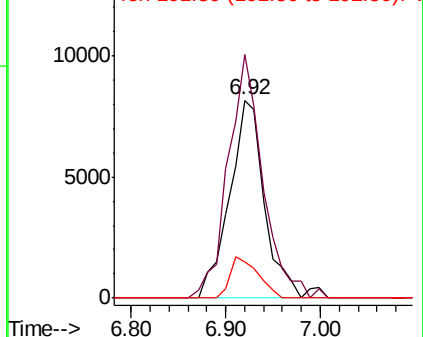
192 18.4 13.1 19.7

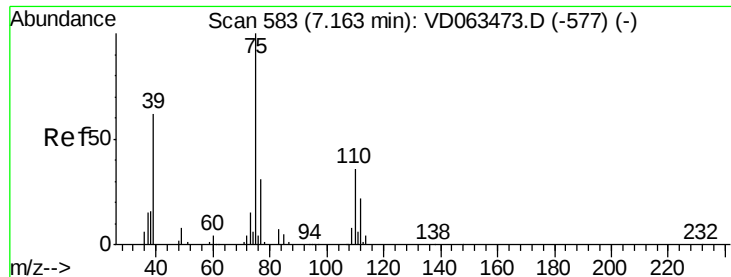


Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V





#36

1,1-Dichloropropene

Concen: 5.321 ug/l

RT: 7.06 min Scan# 572

Delta R.T. -0.11 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :

MSVOA\_D

ClientSampleId :

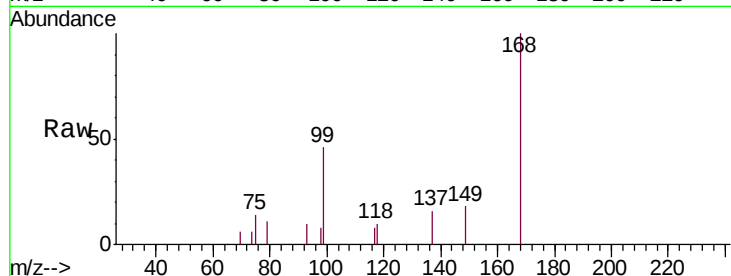
Tot Ion: 75 Resp: 1621

Ion Ratio Lower Upper

75 100

110 0.0 17.6 52.8#

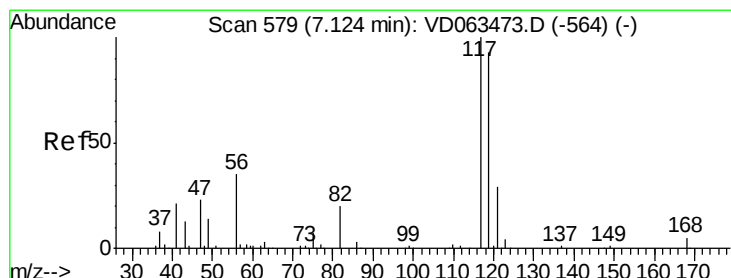
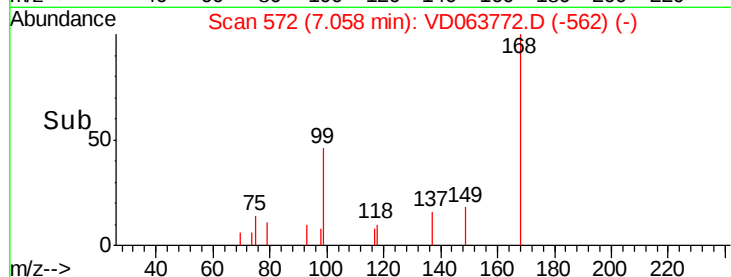
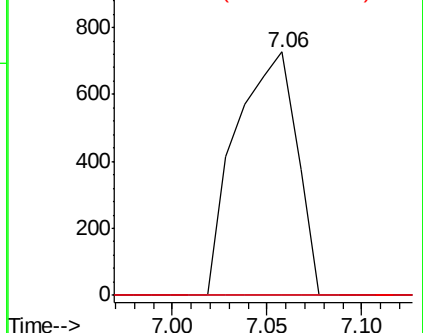
77 0.0 24.3 36.5#



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: 6.582 ug/l

RT: 7.04 min Scan# 570

Delta R.T. -0.09 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

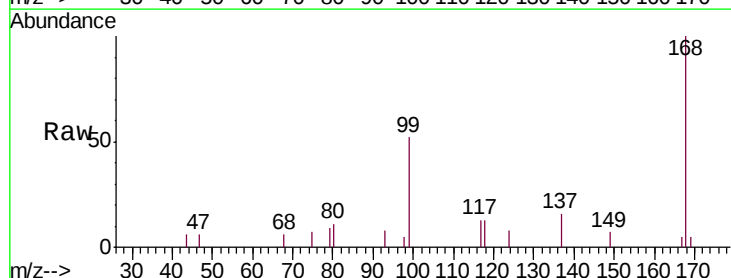
Tgt Ion: 117 Resp: 3022

Ion Ratio Lower Upper

117 100

119 0.0 74.2 111.2#

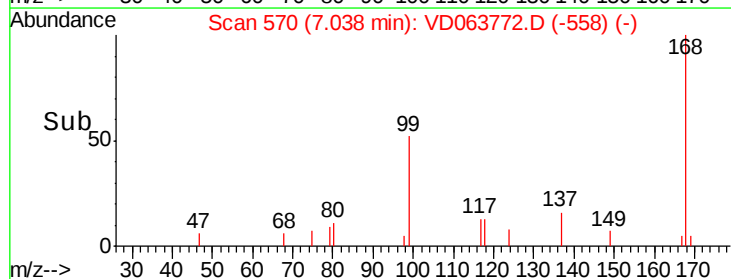
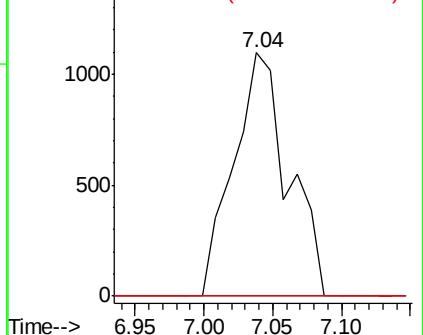
121 0.0 23.1 34.7#

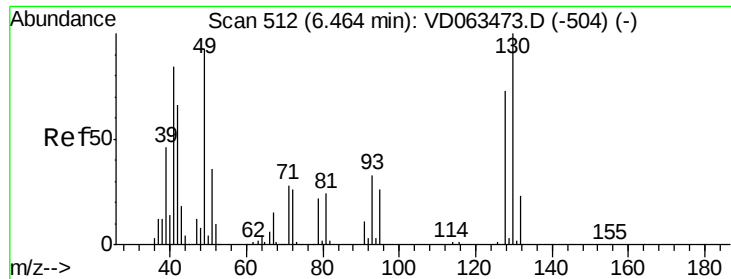


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V

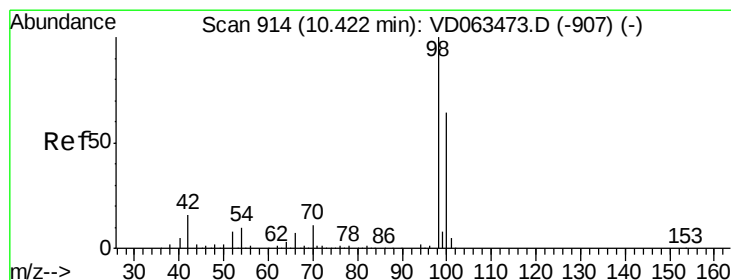
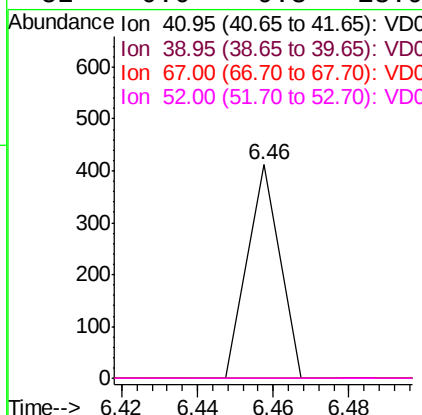
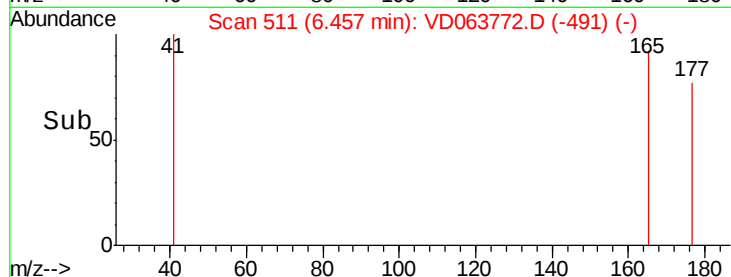
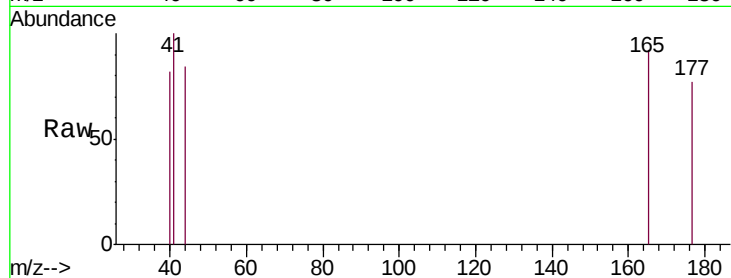




#41  
Methacrylonitrile  
Concen: 1.512 ug/l  
RT: 6.46 min Scan# 511  
Delta R.T. -0.01 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

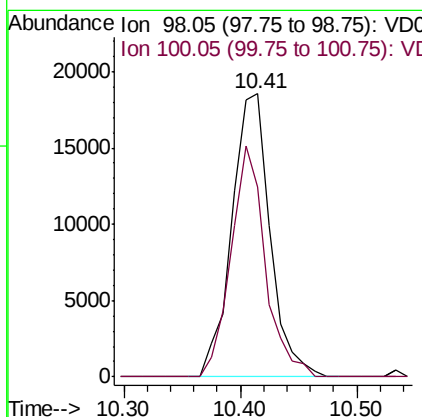
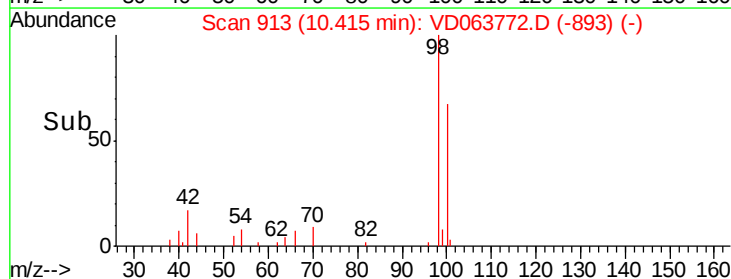
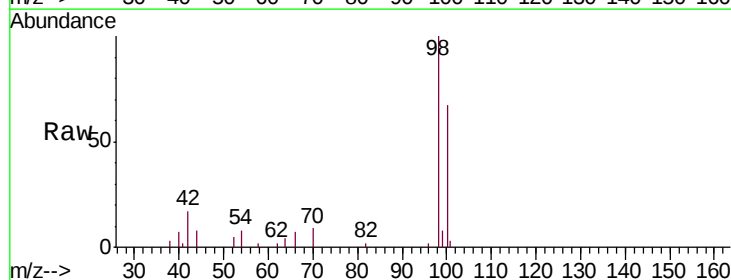
Instrument :  
MSVOA\_D  
ClientSampleId :

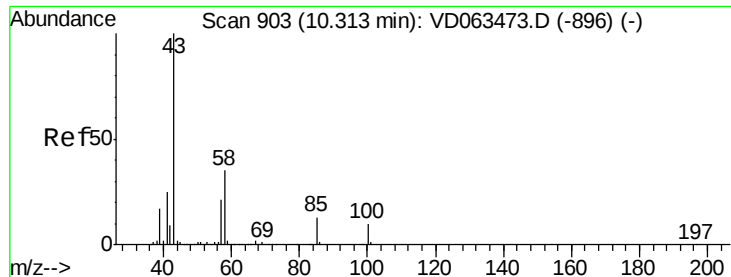
Tot Ion: 41 Resp: 243  
Ion Ratio Lower Upper  
41 100  
39 0.0 44.6 66.8#  
67 0.0 14.4 21.6#  
52 0.0 9.3 13.9#



#50  
Toluene-d8  
Concen: 66.178 ug/l  
RT: 10.41 min Scan# 913  
Delta R.T. -0.01 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

Tgt Ion: 98 Resp: 42230  
Ion Ratio Lower Upper  
98 100  
100 67.3 51.7 77.5

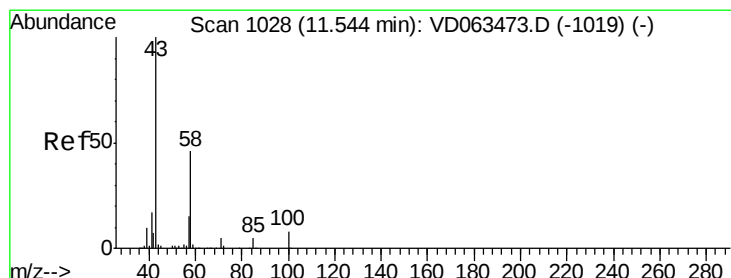
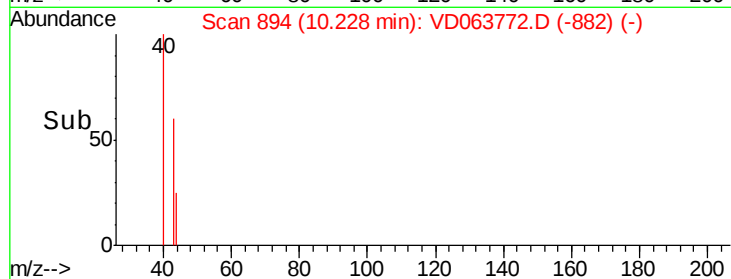
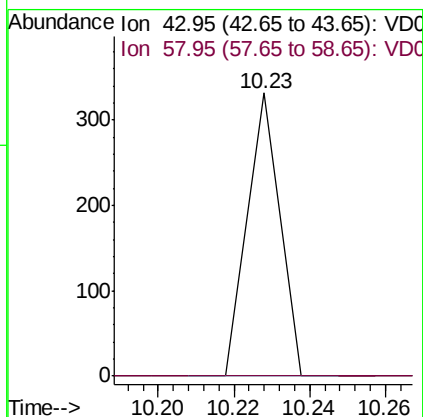
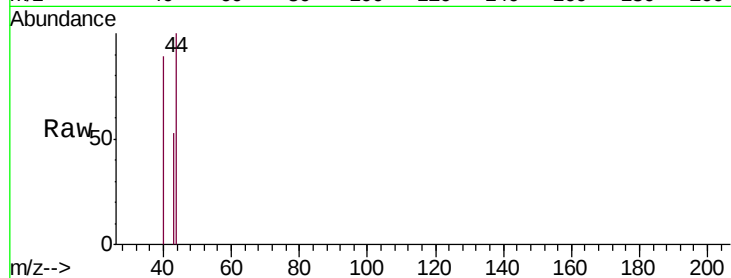




#51  
4-Methyl-2-Pentanone  
Concen: 1.675 ug/l  
RT: 10.23 min Scan# 894  
Delta R.T. -0.09 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

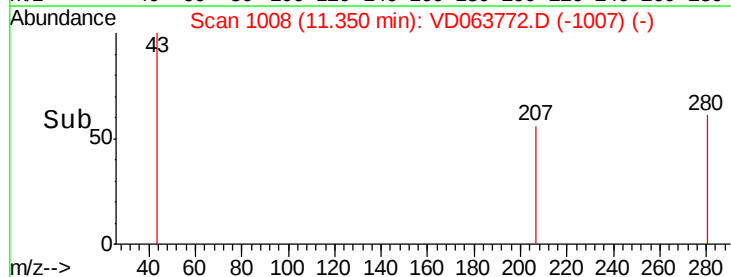
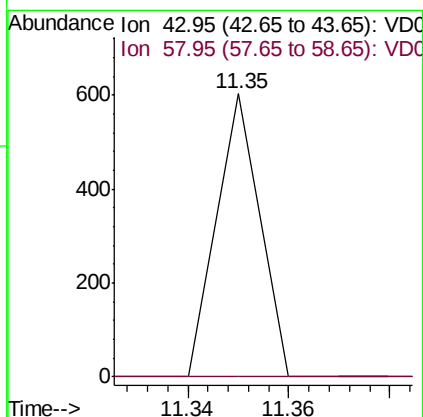
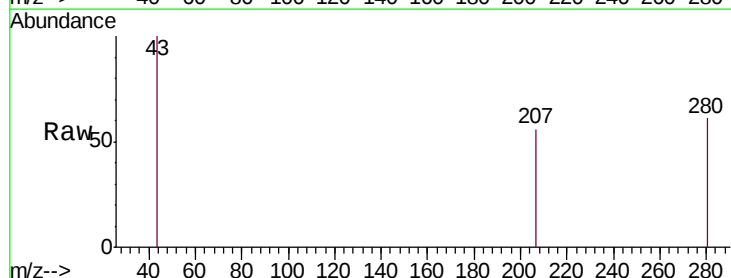
Instrument :  
MSVOA\_D  
ClientSampleId :

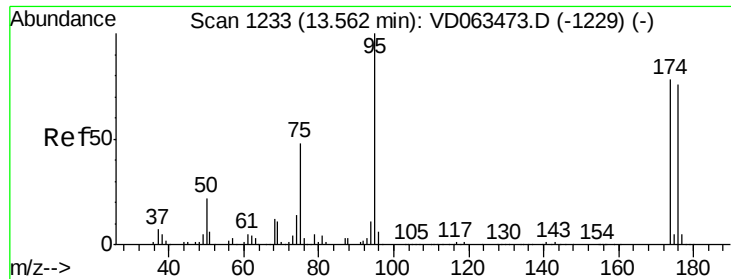
Tot Ion: 43 Resp: 196  
Ion Ratio Lower Upper  
43 100  
58 0.0 28.0 42.0#



#59  
2-Hexanone  
Concen: 4.182 ug/l  
RT: 11.35 min Scan# 1008  
Delta R.T. -0.19 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

Tgt Ion: 43 Resp: 356  
Ion Ratio Lower Upper  
43 100  
58 0.0 23.1 69.2#

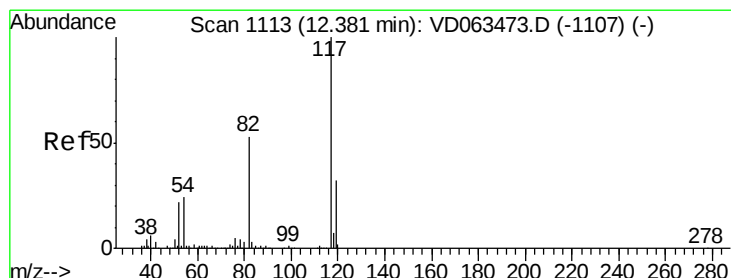
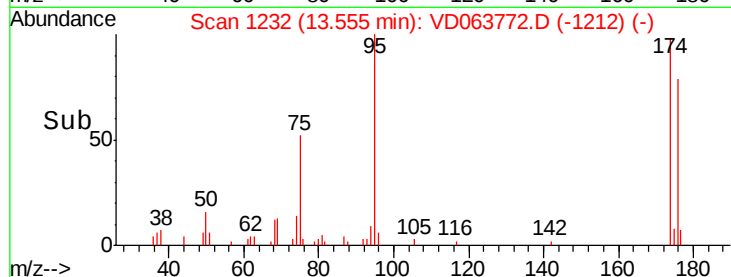
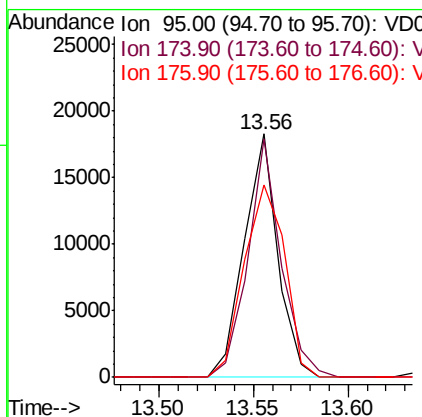
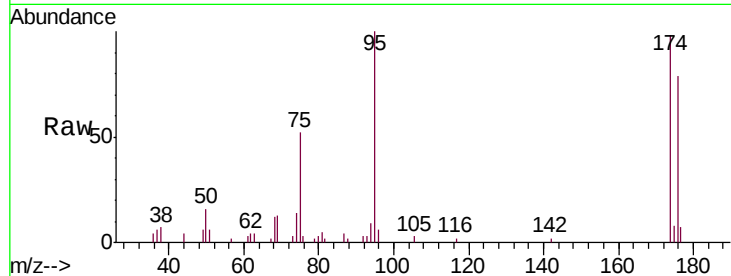




#62  
4-Bromofluorobenzene  
Concen: 77.393 ug/l  
RT: 13.56 min Scan# 1232  
Delta R.T. -0.01 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

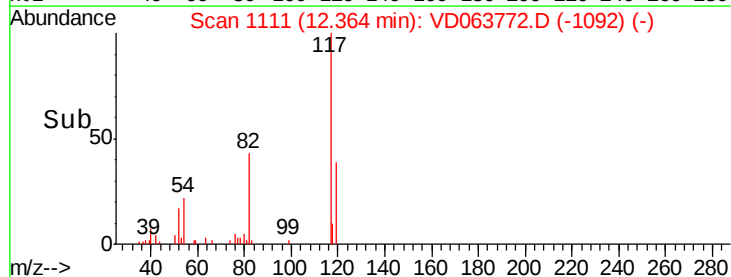
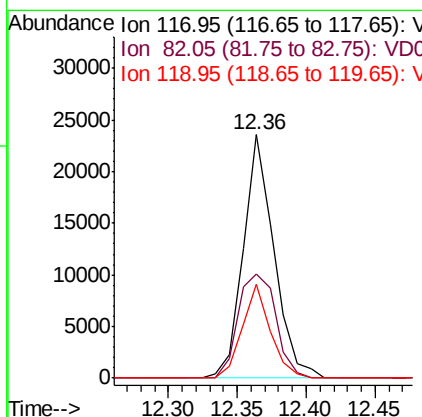
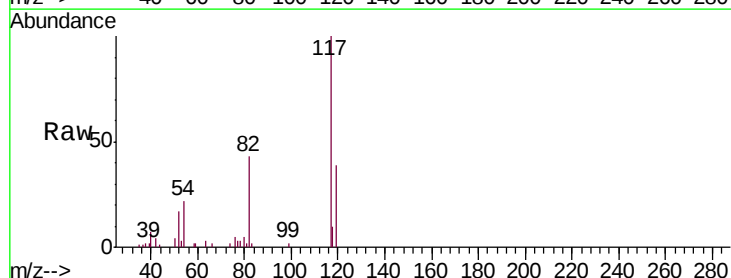
Instrument :  
MSVOA\_D  
ClientSampled :

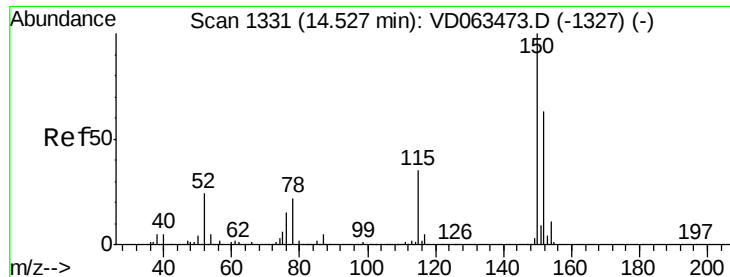
Tot Ion: 95 Resp: 22384  
Ion Ratio Lower Upper  
95 100  
174 98.2 0.0 155.4  
176 79.2 0.0 152.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.36 min Scan# 1111  
Delta R.T. -0.02 min  
Lab File: VD063772.D  
Acq: 23 Aug 2019 17:55

Tgt Ion: 117 Resp: 36727  
Ion Ratio Lower Upper  
117 100  
82 42.6 42.0 63.0  
119 38.7 25.4 38.0#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.52 min Scan# 1330

Delta R.T. -0.01 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

Instrument :

MSVOA\_D

ClientSampleId :

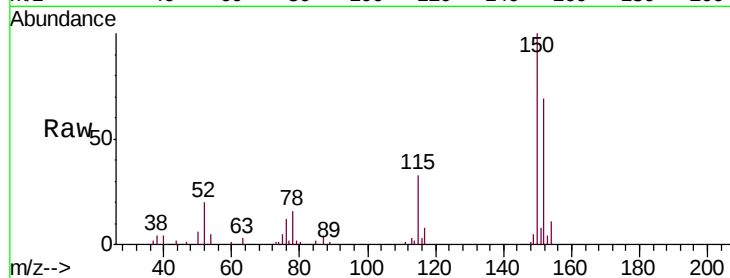
Tot Ion:152 Resp: 25784

Ion Ratio Lower Upper

152 100

115 47.9 30.9 92.7

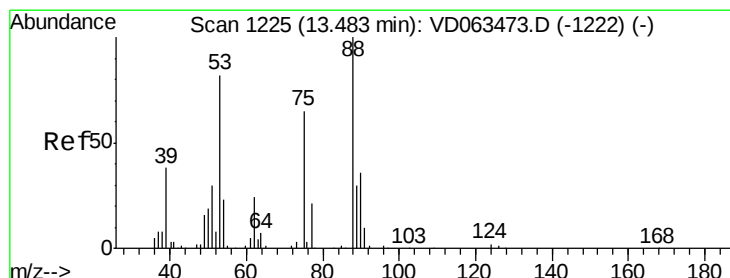
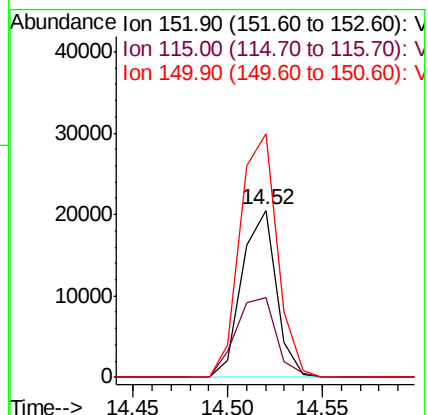
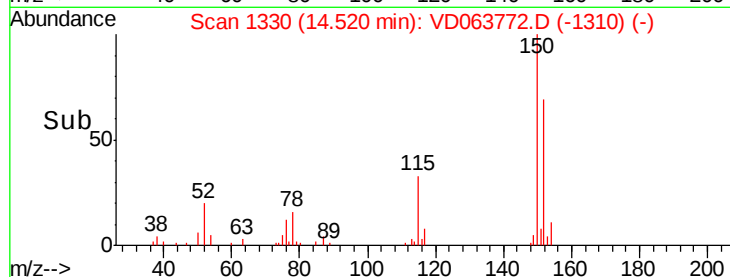
150 146.0 0.0 318.6



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



#81

trans-1,4-Dichloro-2-butene

Concen: 152.564 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.07 min

Lab File: VD063772.D

Acq: 23 Aug 2019 17:55

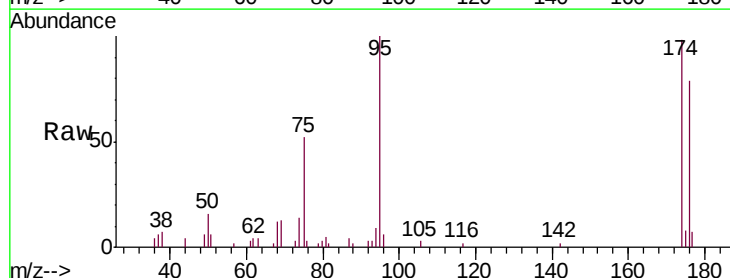
Tgt Ion: 75 Resp: 12134

Ion Ratio Lower Upper

75 100

53 0.0 101.0 151.4#

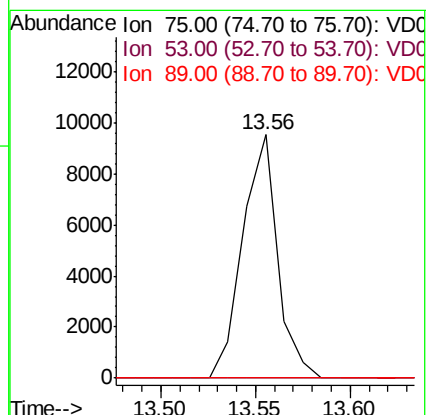
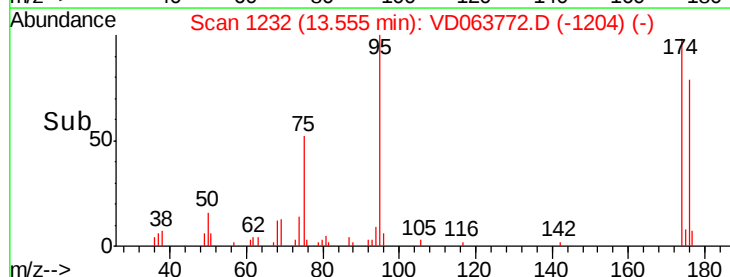
89 0.0 37.0 55.6#

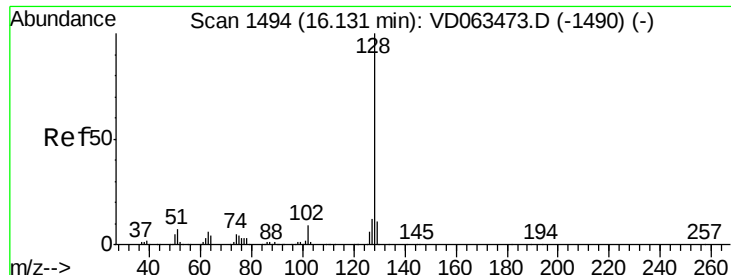


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC





#95  
 Naphthalene  
 Concen: 1.360 ug/l  
 RT: 16.12 min Scan# 1493  
 Delta R.T. -0.01 min  
 Lab File: VD063772.D  
 Acq: 23 Aug 2019 17:55

Instrument :  
 MSVOA\_D  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 0.0   | 9.4   | 14.0# |
| 129     | 0.0   | 8.5   | 12.7# |

