

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD041719\  
 Data File : VD061864.D  
 Acq On : 17 Apr 2019 20:36  
 Operator : VA/AP  
 Sample : K2423-13RE  
 Misc : 5.15g/5ml/MSVOA D/SOIL  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Apr 18 01:08:27 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D041519S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 16 08:53:01 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.03  | 168  | 104566   | 50.00 | ug/l  | -0.06    |
| 34) 1,4-Difluorobenzene    | 8.20  | 114  | 199846   | 50.00 | ug/l  | -0.06    |
| 63) Chlorobenzene-d5       | 12.36 | 117  | 171229   | 50.00 | ug/l  | -0.04    |
| 72) 1,4-Dichlorobenzene-d4 | 14.51 | 152  | 98245    | 50.00 | ug/l  | -0.02    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.44  | 65   | 79069    | 90.22  | ug/l    | -0.06    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 180.44% |          |
| 35) Dibromofluoromethane    | 6.90  | 113  | 88181    | 58.40  | ug/l    | -0.07    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 116.80% |          |
| 50) Toluene-d8              | 10.39 | 98   | 168540   | 47.11  | ug/l    | -0.06    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 94.22%  |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 82065    | 56.60  | ug/l    | -0.03    |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 113.20% |          |

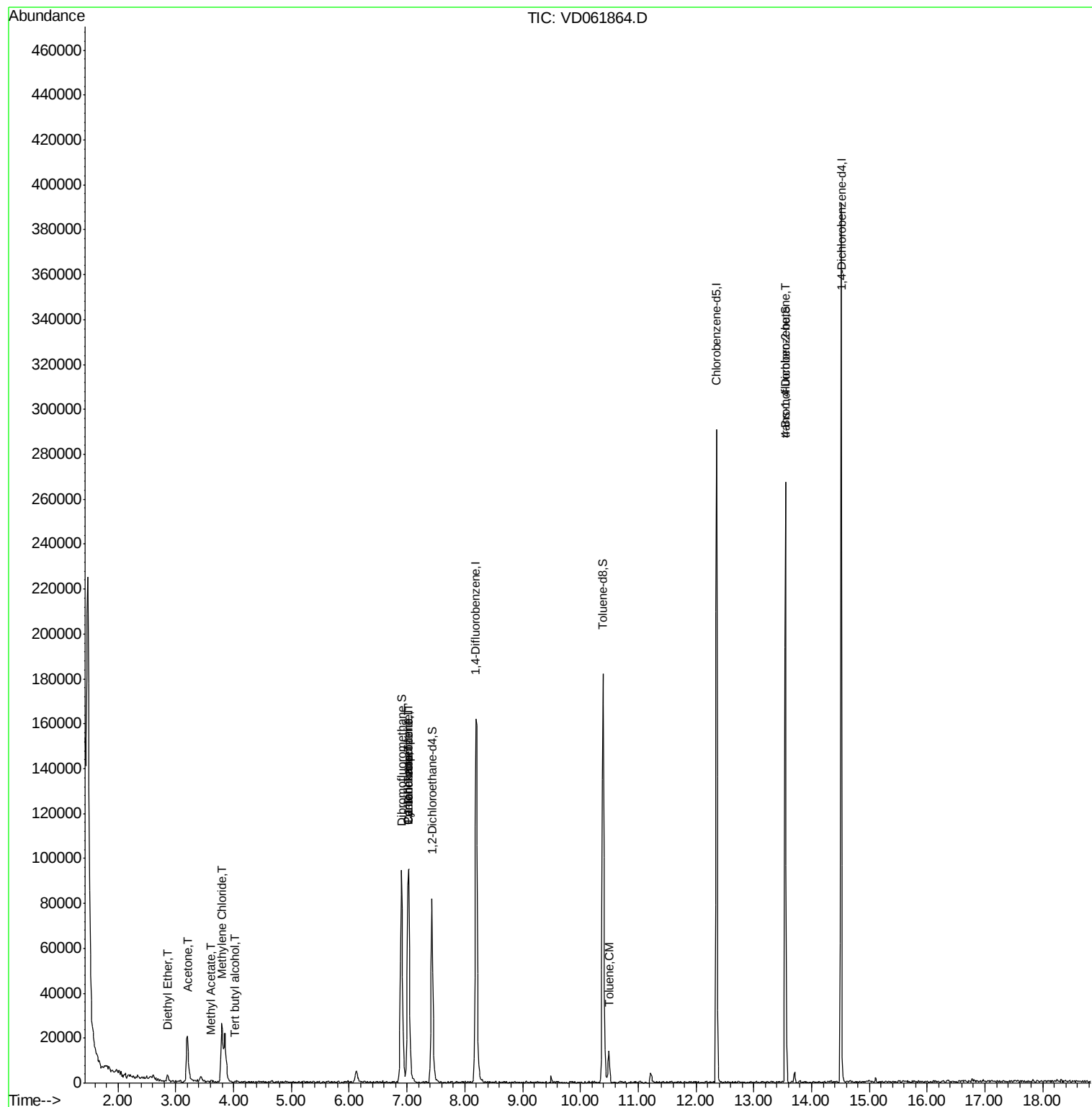
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.14  | 94   | 200      | Below Cal | #      | 12     |
| 8) Diethyl Ether               | 2.86  | 74   | 1040     | 3.031     | ug/l   | 74     |
| 11) Tert butyl alcohol         | 4.03  | 59   | 232      | 4.489     | ug/l # | 76     |
| 16) Acetone                    | 3.19  | 43   | 38962    | 180.388   | ug/l   | 98     |
| 18) Methyl Acetate             | 3.63  | 43   | 1407     | 3.250     | ug/l # | 53     |
| 20) Methylene Chloride         | 3.79  | 84   | 21541    | 17.040    | ug/l   | 95     |
| 31) Cyclohexane                | 7.01  | 56   | 1498     | 1.129     | ug/l # | 36     |
| 36) 1,1-Dichloropropene        | 7.02  | 75   | 7592     | 4.649     | ug/l # | 40     |
| 38) Carbon Tetrachloride       | 7.02  | 117  | 9858     | 4.781     | ug/l # | 12     |
| 52) Toluene                    | 10.49 | 92   | 8373     | 3.333     | ug/l   | 98     |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 30658    | 71.762    | ug/l # | 16     |

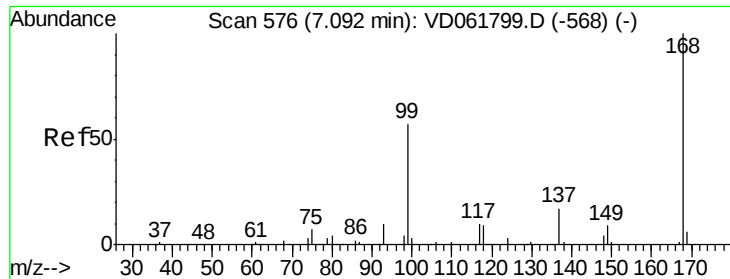
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD041719\  
Data File : VD061864.D  
Acq On : 17 Apr 2019 20:36  
Operator : VA/AP  
Sample : K2423-13RE  
Misc : 5.15g/5ml/MSVOA D/SOIL  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Apr 18 01:08:27 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D041519S.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 16 08:53:01 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.03 min Scan# 570

Delta R.T. -0.06 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

Instrument :

MSVOA\_D

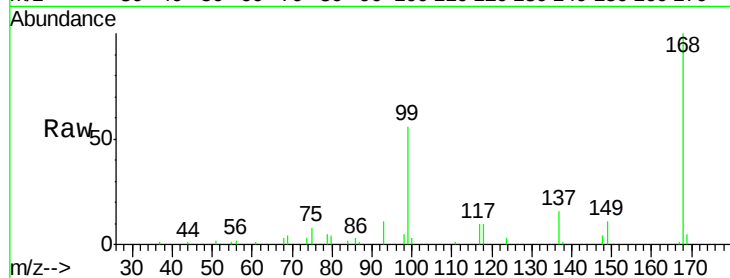
ClientSampleId :

Tot Ion:168 Resp: 104566

Ion Ratio Lower Upper

168 100

99 56.0 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.03

40000

30000

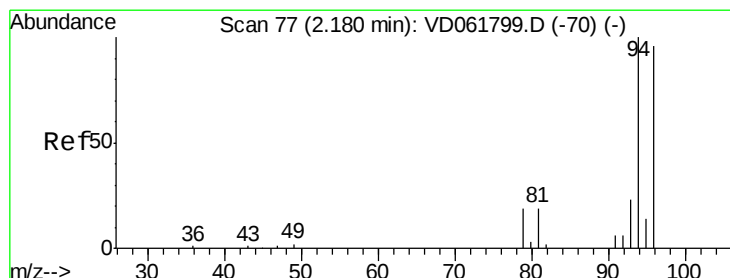
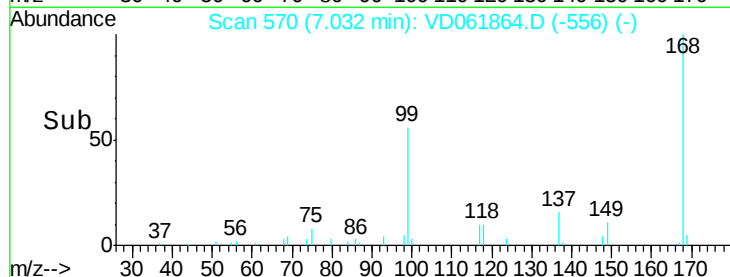
20000

10000

0

Time-->

6.90 7.00 7.10 7.20



#5

Bromomethane

Concen: Below Cal

RT: 2.14 min Scan# 73

Delta R.T. -0.04 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

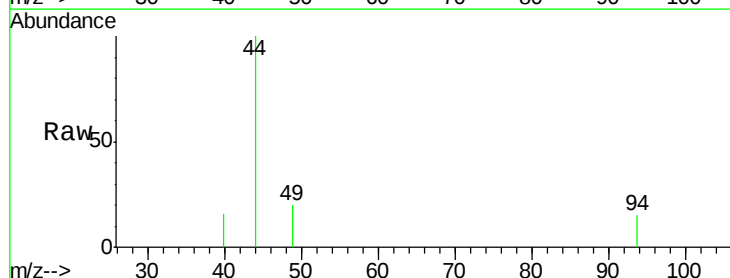
Tgt Ion: 94 Resp: 200

Ion Ratio Lower Upper

94 100

96 0.0 76.6 115.0#

93 0.0 18.5 27.7#



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

2.14

400

300

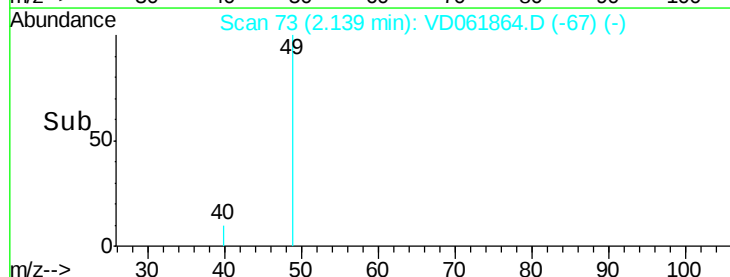
200

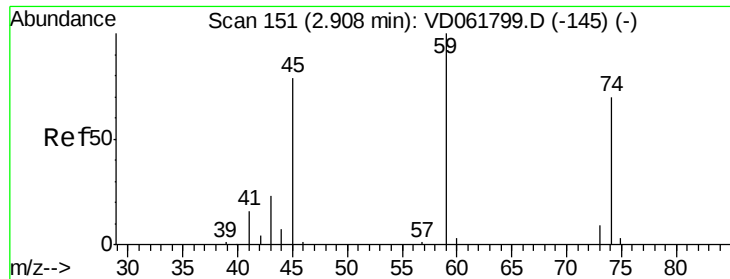
100

0

Time-->

2.12 2.14 2.16





#8

Diethyl Ether

Concen: 3.031 ug/l

RT: 2.86 min Scan# 146

Delta R.T. -0.05 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

Instrument :

MSVOA\_D

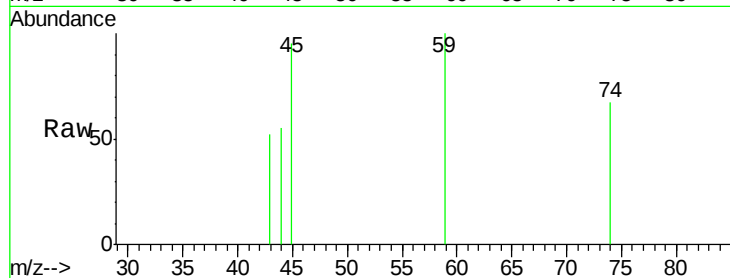
ClientSampleId :

Tot Ion: 74 Resp: 1040

Ion Ratio Lower Upper

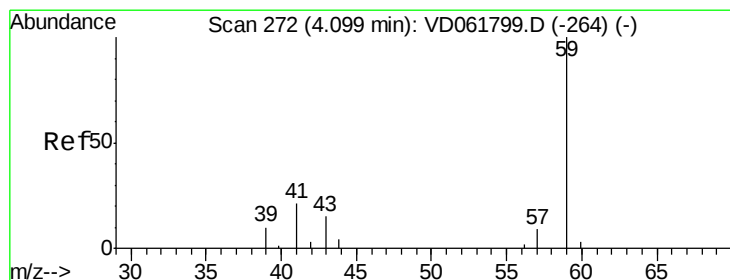
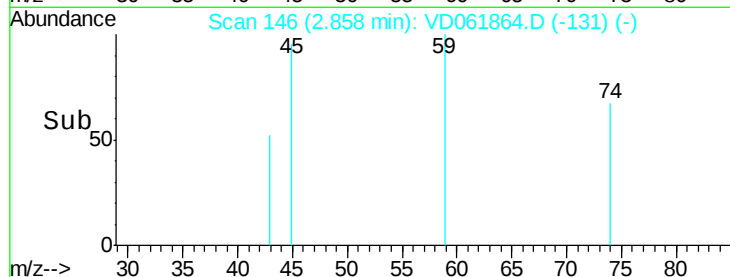
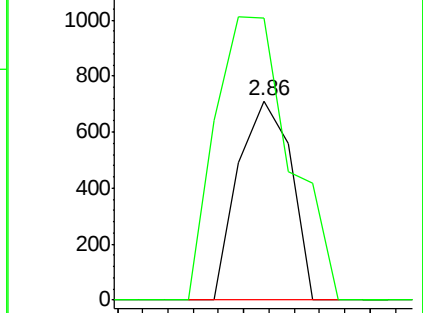
74 100

45 141.3 56.9 170.7



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.05 (44.75 to 45.75): VDC



#11

Tert butyl alcohol

Concen: 4.489 ug/l

RT: 4.03 min Scan# 265

Delta R.T. -0.07 min

Lab File: VD061864.D

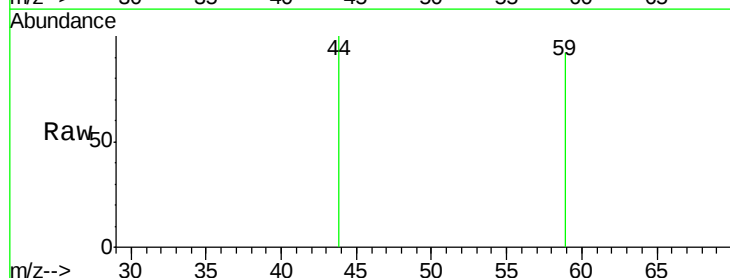
Acq: 17 Apr 2019 20:36

Tgt Ion: 59 Resp: 232

Ion Ratio Lower Upper

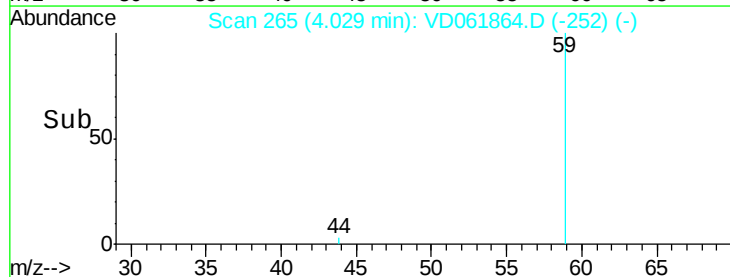
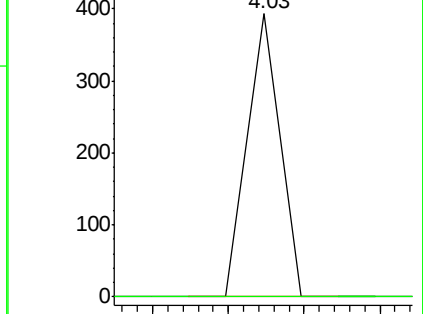
59 100

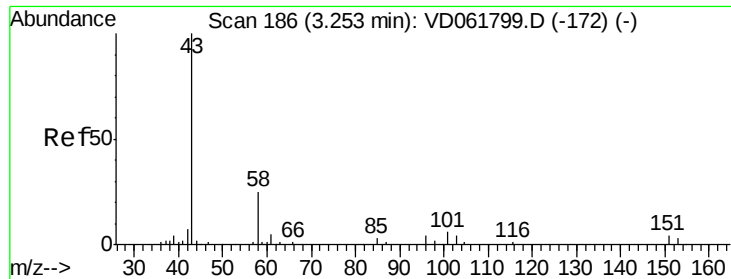
57 0.0 6.9 10.3#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

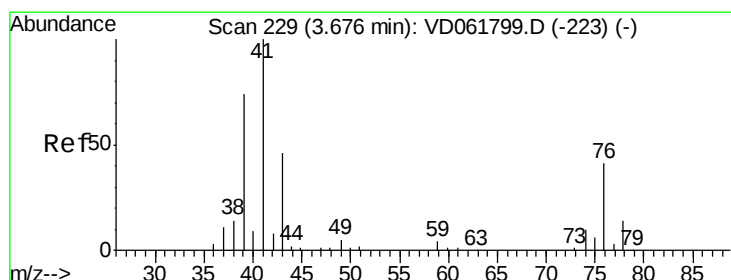
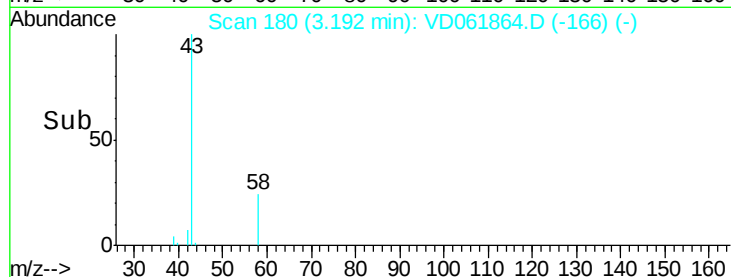
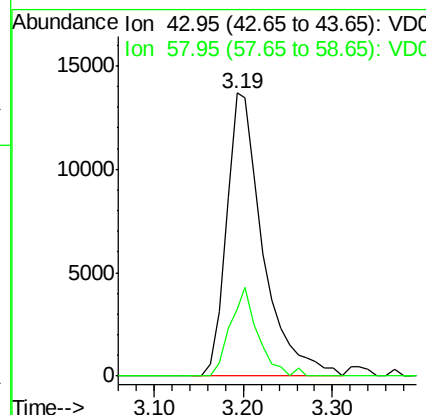
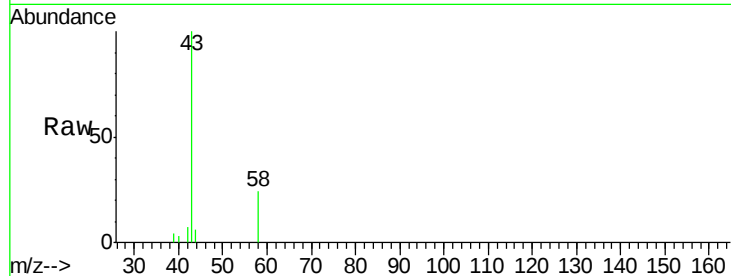




#16  
Acetone  
Concen: 180.388 ug/l  
RT: 3.19 min Scan# 180  
Delta R.T. -0.06 min  
Lab File: VD061864.D  
Acq: 17 Apr 2019 20:36

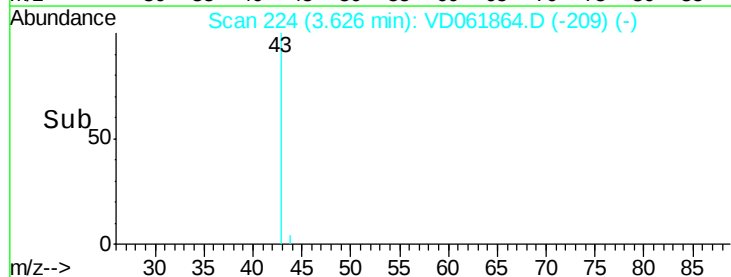
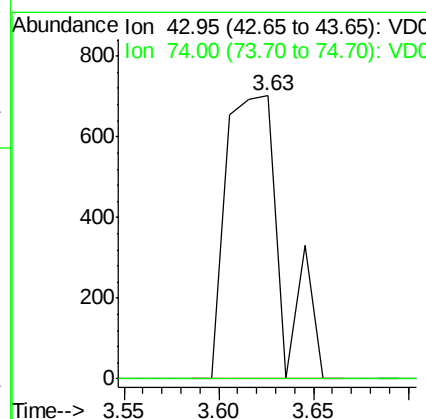
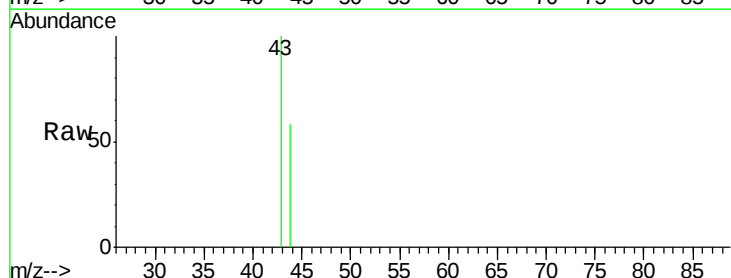
Instrument :  
MSVOA\_D  
ClientSampleId :

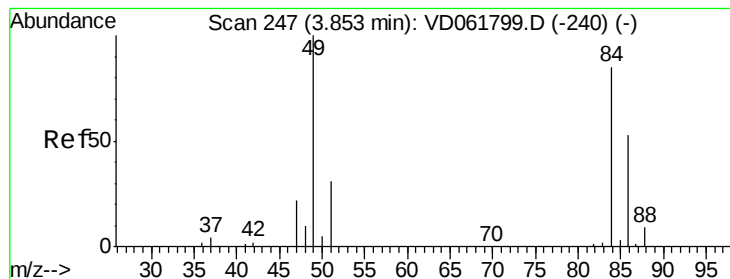
Tot Ion: 43 Resp: 38962  
Ion Ratio Lower Upper  
43 100  
58 23.8 19.9 29.9



#18  
Methyl Acetate  
Concen: 3.250 ug/l  
RT: 3.63 min Scan# 224  
Delta R.T. -0.05 min  
Lab File: VD061864.D  
Acq: 17 Apr 2019 20:36

Tgt Ion: 43 Resp: 1407  
Ion Ratio Lower Upper  
43 100  
74 0.0 18.0 27.0#





#20

Methylene Chloride

Concen: 17.040 ug/l

RT: 3.79 min Scan# 241

Delta R.T. -0.06 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 84 Resp: 21541

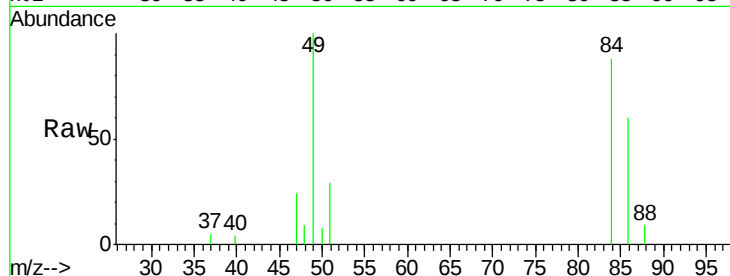
Ion Ratio Lower Upper

84 100

49 113.3 94.0 141.0

51 33.3 29.0 43.4

86 68.5 49.8 74.6

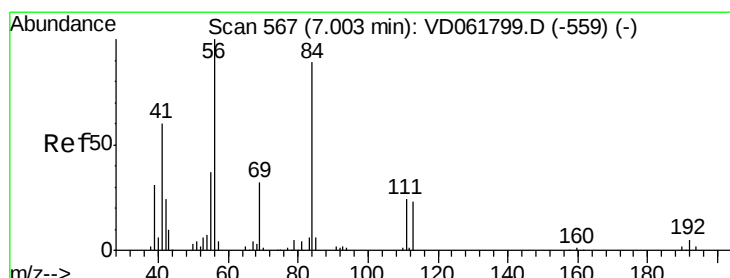
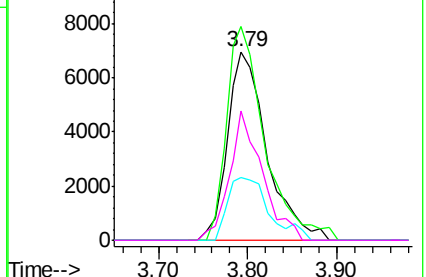
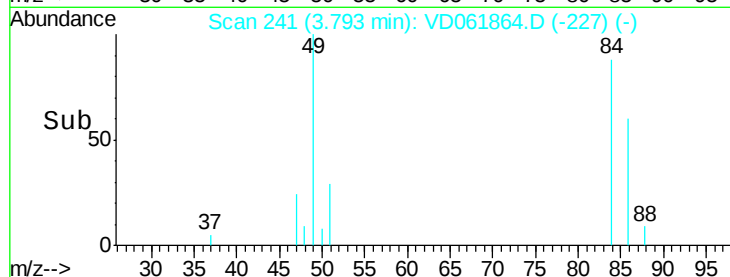


Abundance Ion 83.95 (83.65 to 84.65): VDC

Ion 48.90 (48.60 to 49.60): VDC

Ion 50.90 (50.60 to 51.60): VDC

Ion 85.90 (85.60 to 86.60): VDC



#31

Cyclohexane

Concen: 1.129 ug/l

RT: 7.01 min Scan# 568

Delta R.T. 0.01 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

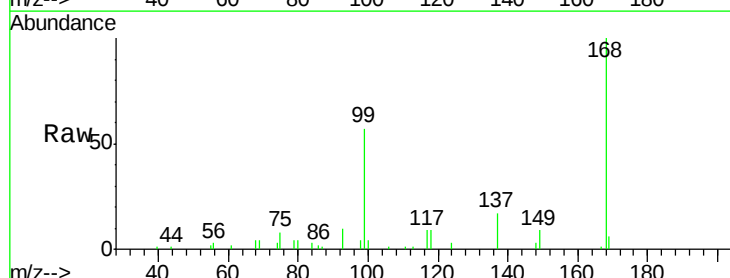
Tgt Ion: 56 Resp: 1498

Ion Ratio Lower Upper

56 100

69 154.0 25.8 38.6#

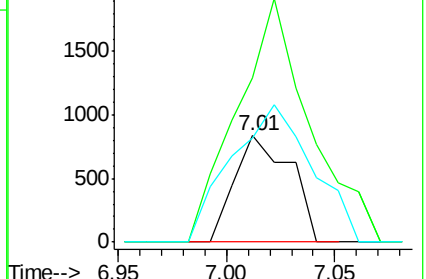
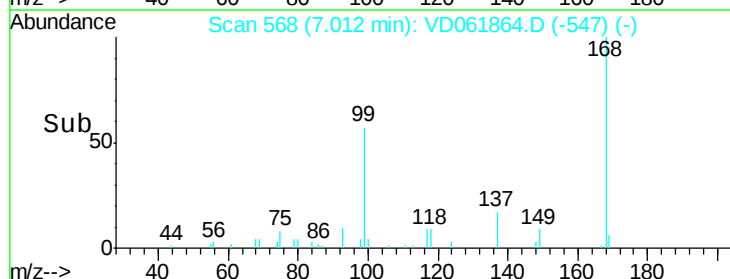
84 98.3 72.2 108.4

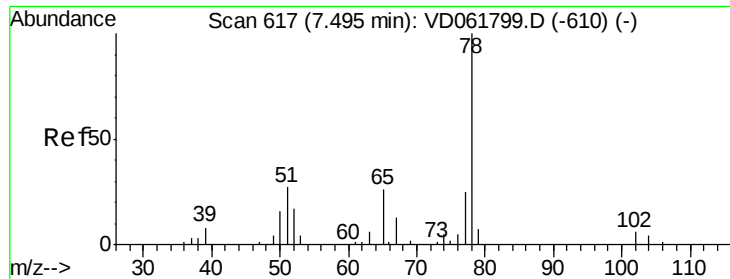


Abundance Ion 55.95 (55.65 to 56.65): VDC

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: 7.44 min Scan# 611

Delta R.T. -0.06 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

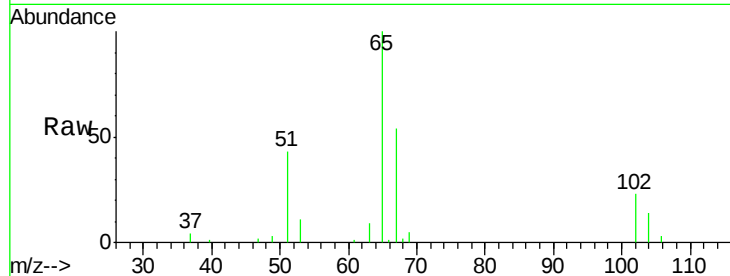
Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion: 65 Resp: 79069

Ion Ratio Lower Upper

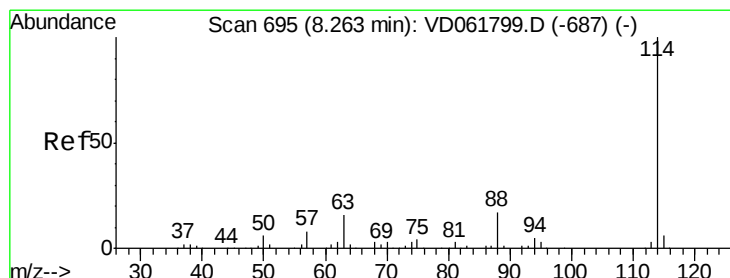
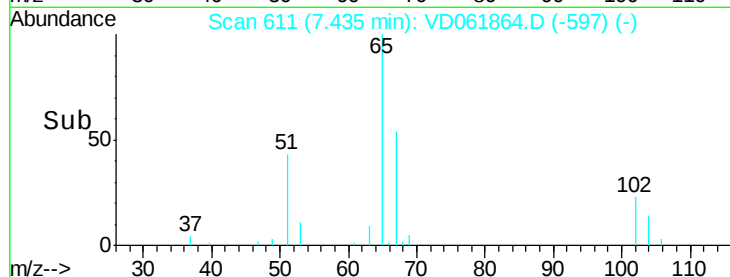
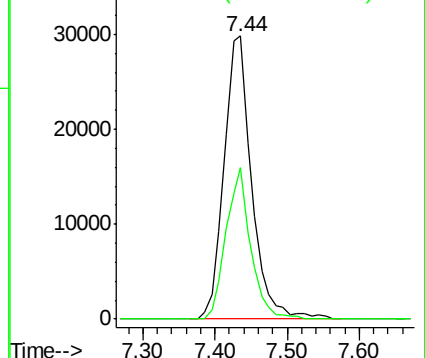
65 100

67 53.5 0.0 98.0



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: 8.20 min Scan# 689

Delta R.T. -0.06 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

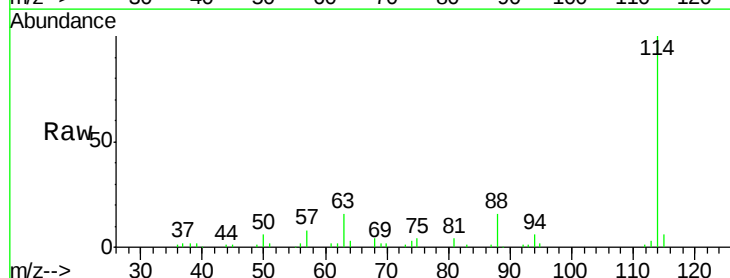
Tgt Ion: 114 Resp: 199846

Ion Ratio Lower Upper

114 100

63 16.2 0.0 32.4

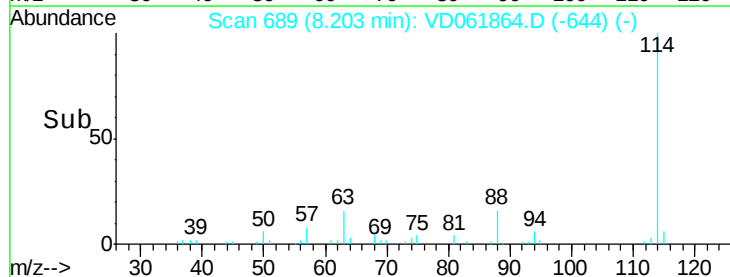
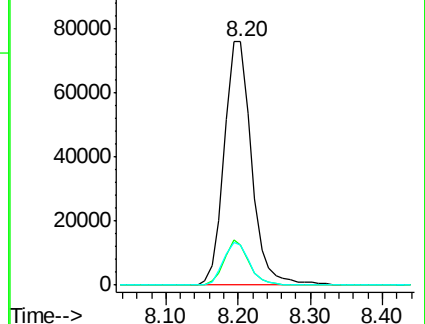
88 16.3 0.0 33.6

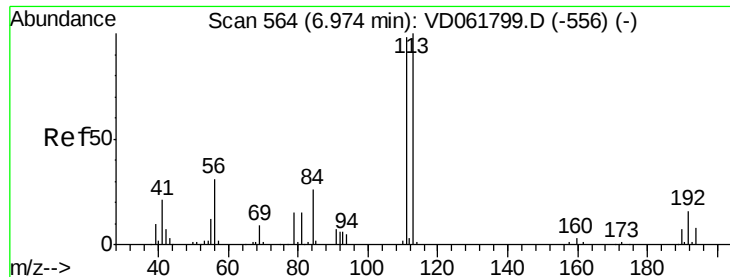


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

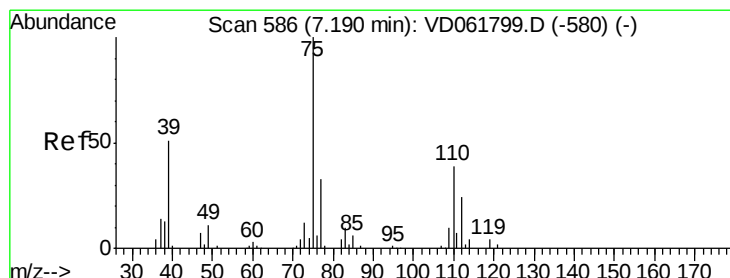
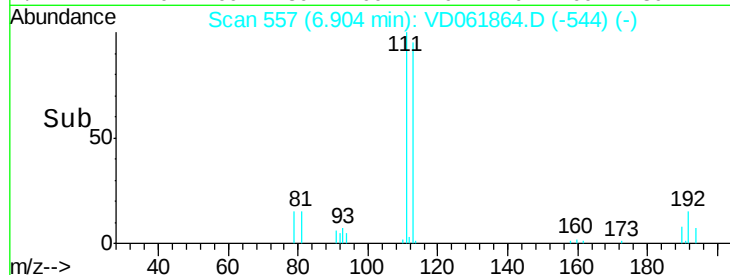
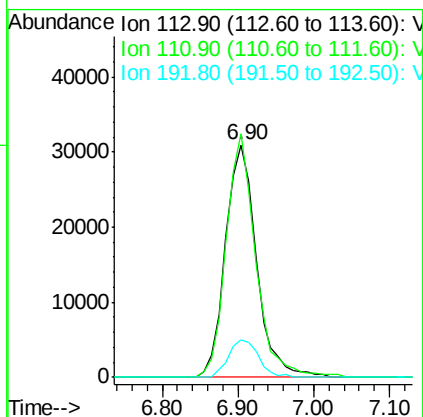
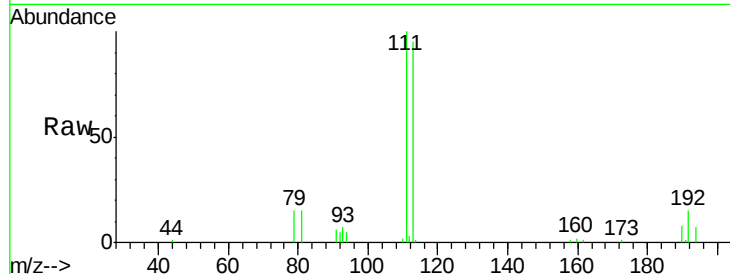




#35  
Dibromofluoromethane  
Concen: 50.000 ug/l  
RT: 6.90 min Scan# 557  
Delta R.T. -0.07 min  
Lab File: VD061864.D  
Acq: 17 Apr 2019 20:36

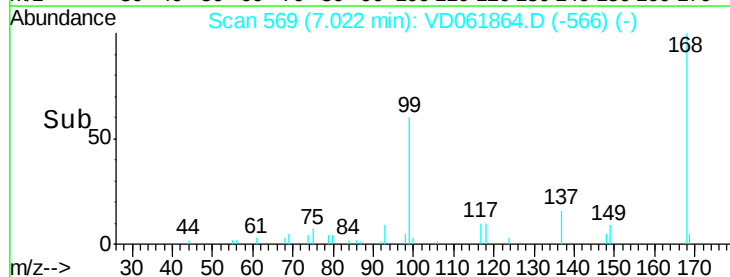
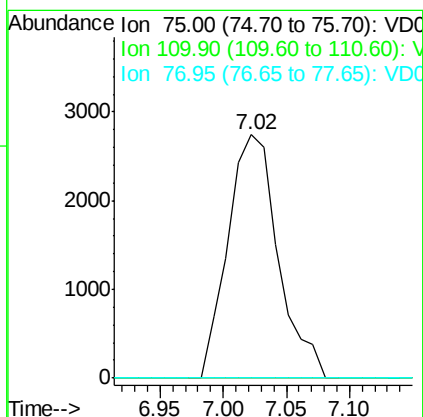
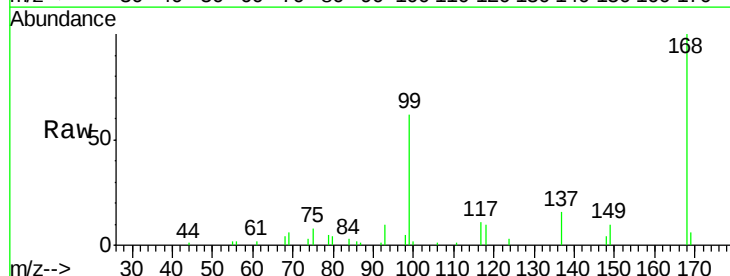
Instrument :  
MSVOA\_D  
ClientSampleId :

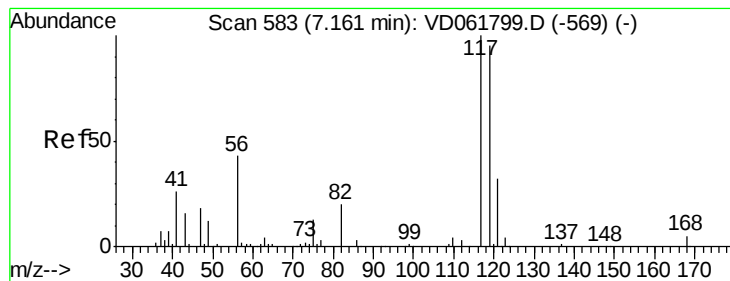
Tot Ion:113 Resp: 88181  
Ion Ratio Lower Upper  
113 100  
111 104.8 78.5 117.7  
192 16.1 13.0 19.4



#36  
1,1-Dichloropropene  
Concen: 4.649 ug/l  
RT: 7.02 min Scan# 569  
Delta R.T. -0.17 min  
Lab File: VD061864.D  
Acq: 17 Apr 2019 20:36

Tgt Ion: 75 Resp: 7592  
Ion Ratio Lower Upper  
75 100  
110 0.0 19.1 57.1#  
77 0.0 25.6 38.4#





#38

Carbon Tetrachloride

Concen: 4.781 ug/l

RT: 7.02 min Scan# 569

Delta R.T. -0.14 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

Instrument :

MSVOA\_D

ClientSampleId :

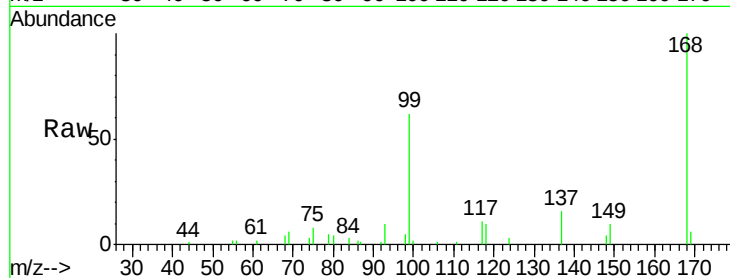
Tot Ion:117 Resp: 9858

Ion Ratio Lower Upper

117 100

119 0.0 75.8 113.8#

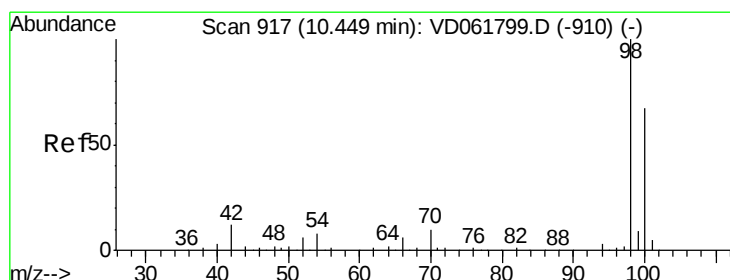
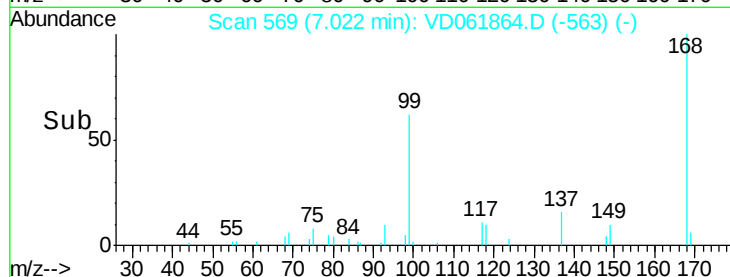
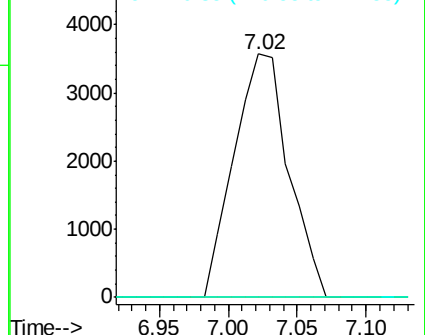
121 0.0 25.9 38.9#



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: 10.39 min Scan# 911

Delta R.T. -0.06 min

Lab File: VD061864.D

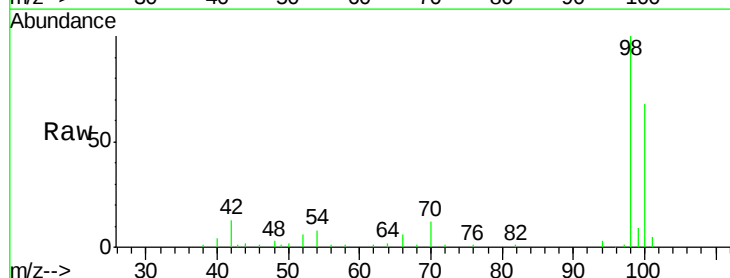
Acq: 17 Apr 2019 20:36

Tgt Ion: 98 Resp: 168540

Ion Ratio Lower Upper

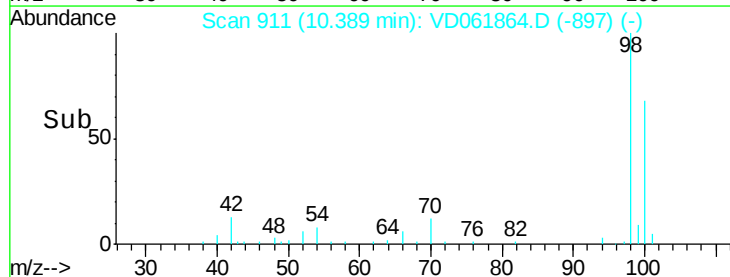
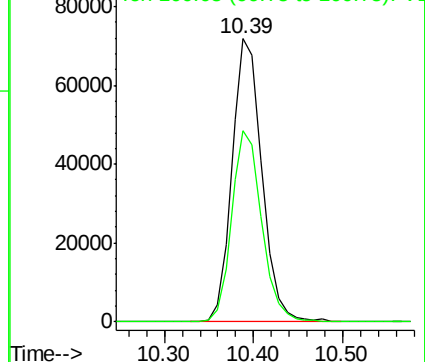
98 100

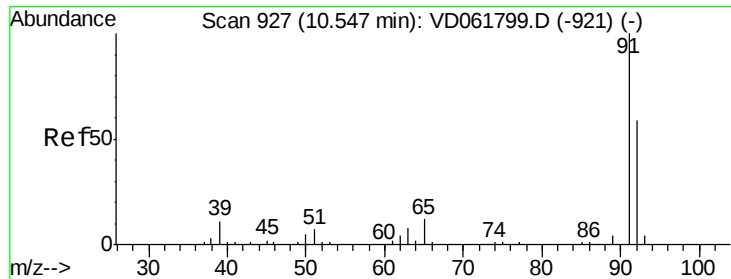
100 67.5 53.8 80.8



Abundance Ion 98.05 (97.75 to 98.75): V

Ion 100.05 (99.75 to 100.75): V





#52

Toluene

Concen: 3.333 ug/l

RT: 10.49 min Scan# 921

Delta R.T. -0.06 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

Instrument :

MSVOA\_D

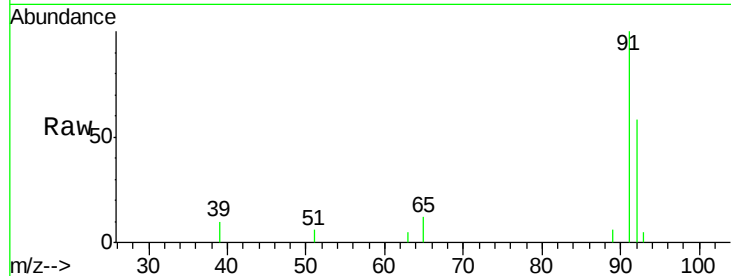
ClientSampled :

Tot Ion: 92 Resp: 8373

Ion Ratio Lower Upper

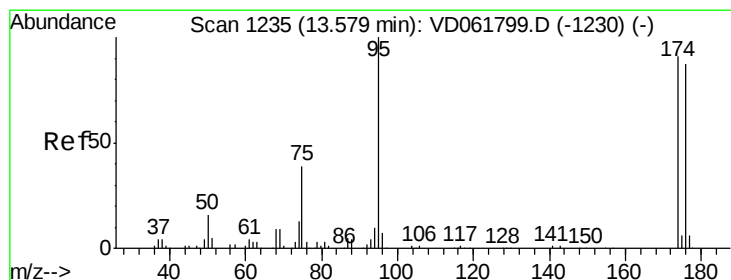
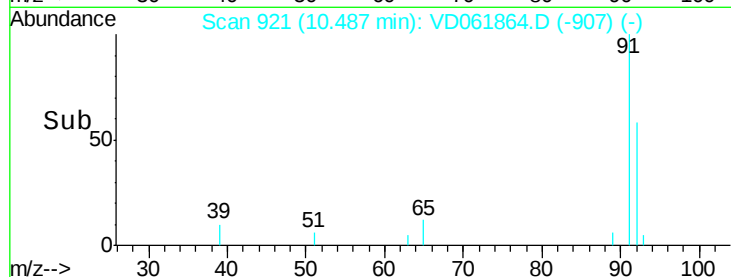
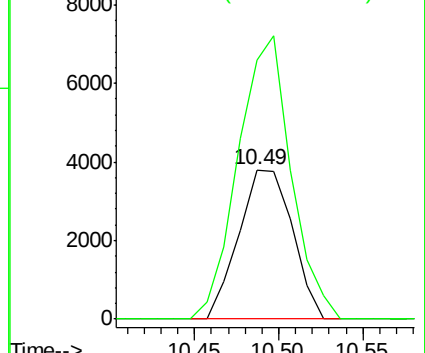
92 100

91 173.1 136.6 204.8



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: 13.55 min Scan# 1232

Delta R.T. -0.03 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

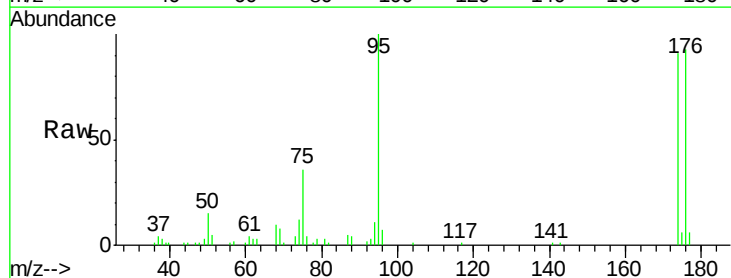
Tgt Ion: 95 Resp: 82065

Ion Ratio Lower Upper

95 100

174 91.0 0.0 181.8

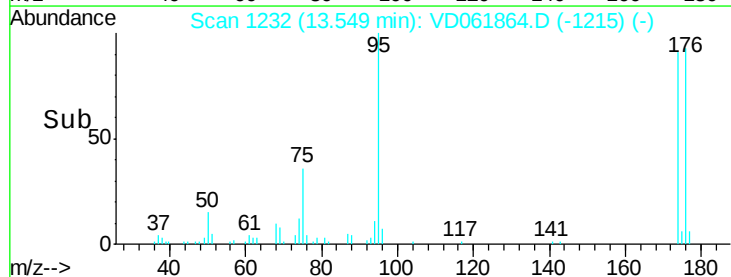
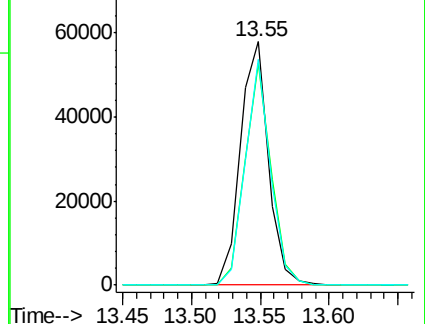
176 92.9 0.0 174.4

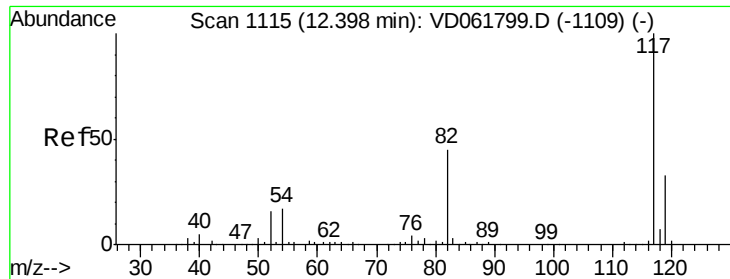


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V

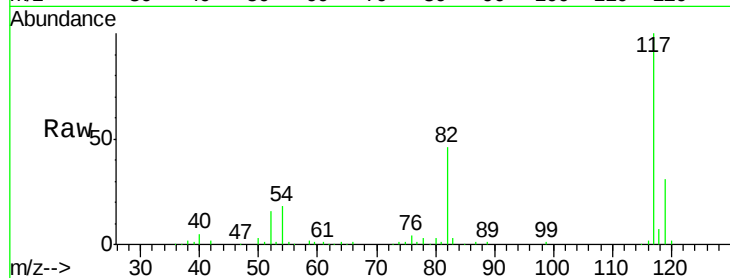




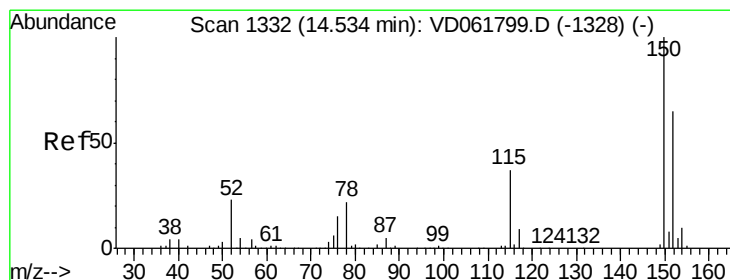
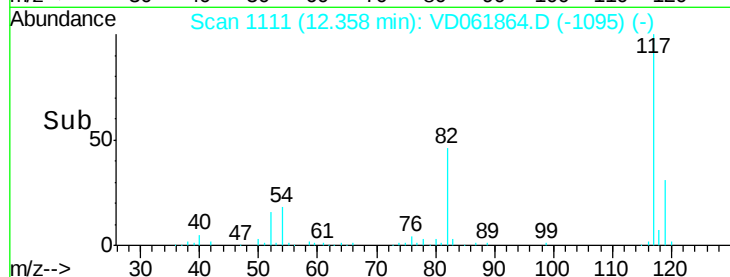
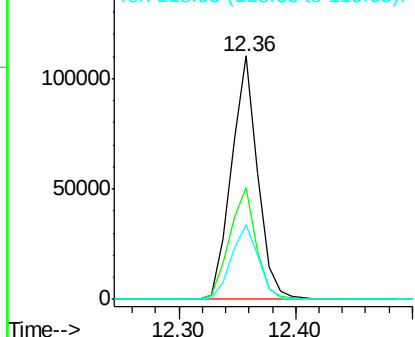
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.36 min Scan# 1111  
Delta R.T. -0.04 min  
Lab File: VD061864.D  
Acq: 17 Apr 2019 20:36

Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion:117 Resp: 171229  
Ion Ratio Lower Upper  
117 100  
82 46.1 36.2 54.2  
119 30.8 26.2 39.4

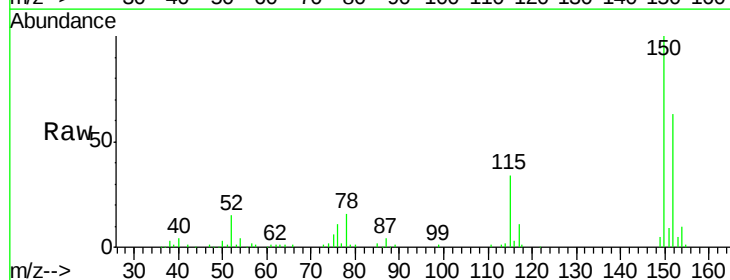


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

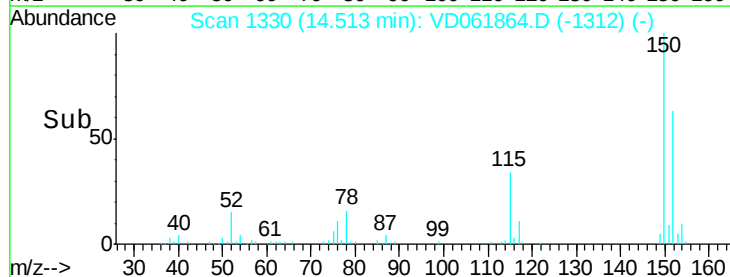
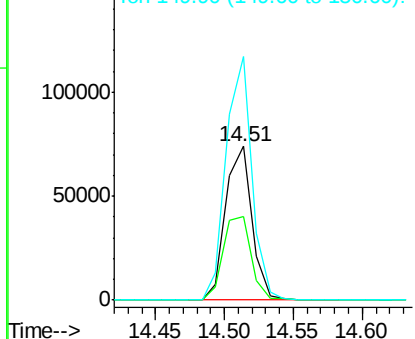


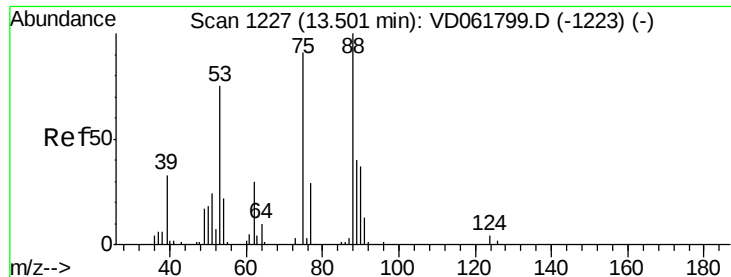
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.51 min Scan# 1330  
Delta R.T. -0.02 min  
Lab File: VD061864.D  
Acq: 17 Apr 2019 20:36

Tgt Ion:152 Resp: 98245  
Ion Ratio Lower Upper  
152 100  
115 54.2 30.9 92.7  
150 158.3 0.0 314.8



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: 71.762 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.05 min

Lab File: VD061864.D

Acq: 17 Apr 2019 20:36

Instrument :

MSVOA\_D

ClientSampleId :

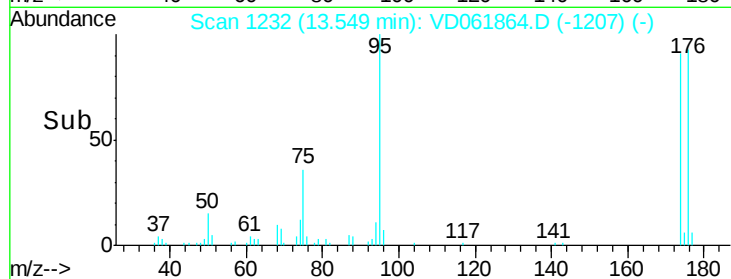
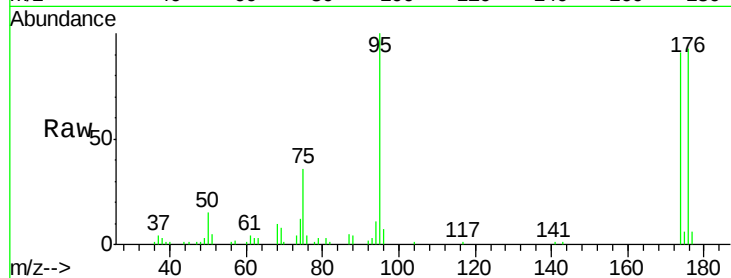
Tot Ion: 75 Resp: 30658

Ion Ratio Lower Upper

75 100

53 0.0 65.8 98.8#

89 0.0 35.0 52.6#



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

