

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD071919\  
 Data File : VD063161.D  
 Acq On : 19 Jul 2019 18:39  
 Operator : VA/AP  
 Sample : K3911-02  
 Misc : 5.02g/5ml/MSVOA D/SOIL  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 HJDC-G2

Quant Time: Jul 20 05:02:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D071519S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 16 08:11:56 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.04  | 168  | 798451   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.22  | 114  | 1125497  | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 847459   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 369598   | 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   | 428321   | 43.06 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 86.12% |          |
| 35) Dibromofluoromethane    | 6.92  | 113  | 397203   | 35.43 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 70.86% |          |
| 50) Toluene-d8              | 10.42 | 98   | 939835   | 39.03 | ug/l   | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 78.06% |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 364821   | 32.75 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 65.50% |          |

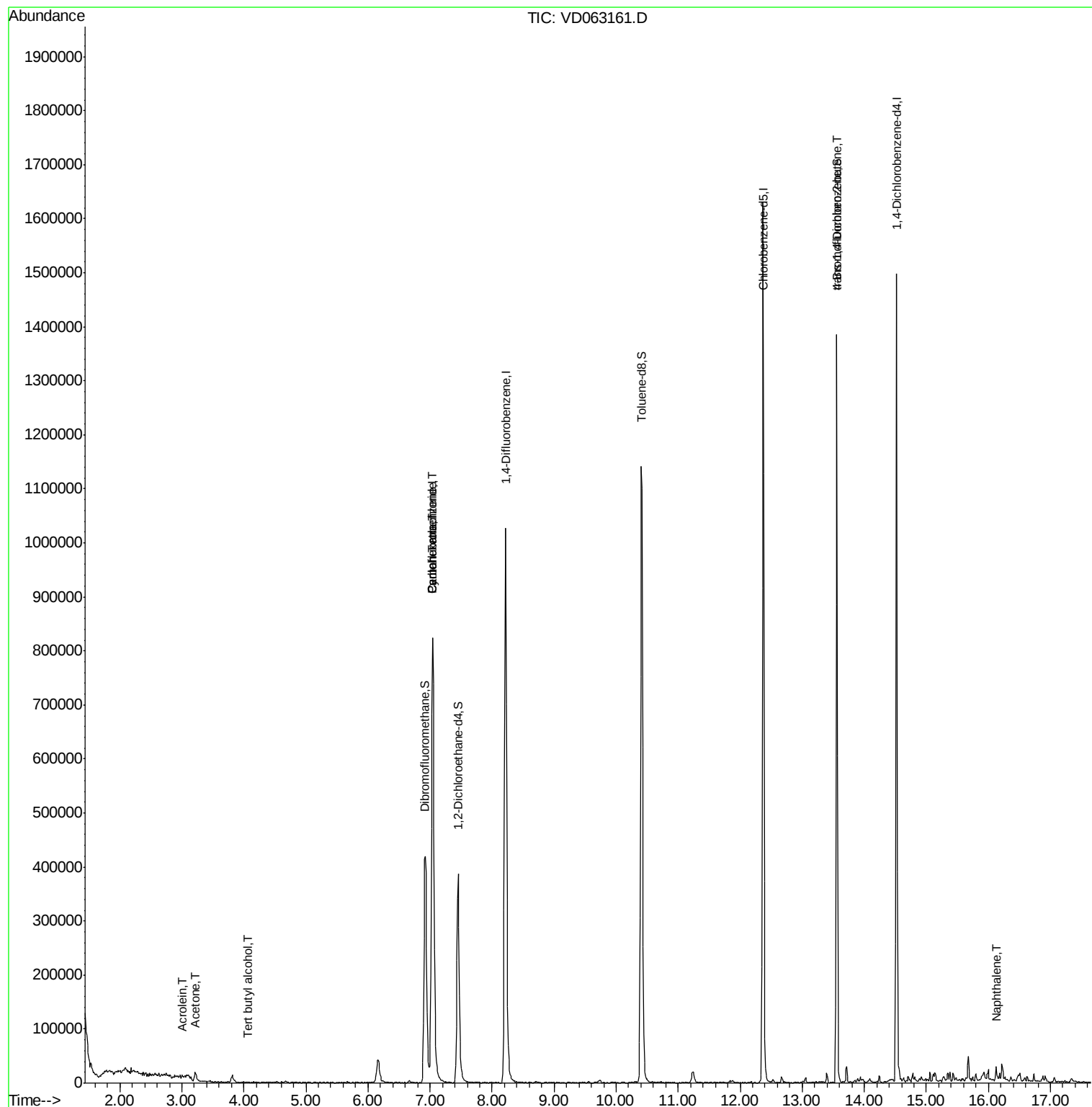
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.65  | 85   | 252      | Below Cal | #      | 43     |
| 3) Chloromethane               | 1.75  | 50   | 202      | Below Cal | #      | 48     |
| 5) Bromomethane                | 2.15  | 94   | 689      | Below Cal | #      | 16     |
| 11) Tert butyl alcohol         | 4.06  | 59   | 677      | 1.179     | ug/l # | 77     |
| 13) Acrolein                   | 3.03  | 56   | 285      | 1.645     | ug/l # | 1      |
| 16) Acetone                    | 3.21  | 43   | 33328    | 13.873    | ug/l # | 87     |
| 18) Methyl Acetate             | 3.65  | 43   | 545      | Below Cal | #      | 63     |
| 31) Cyclohexane                | 7.03  | 56   | 18007    | 1.902     | ug/l # | 17     |
| 38) Carbon Tetrachloride       | 7.04  | 117  | 80201    | 4.170     | ug/l # | 13     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 166989   | 111.534   | ug/l # | 1      |
| 95) Naphthalene                | 16.13 | 128  | 16401    | 1.159     | ug/l # | 91     |

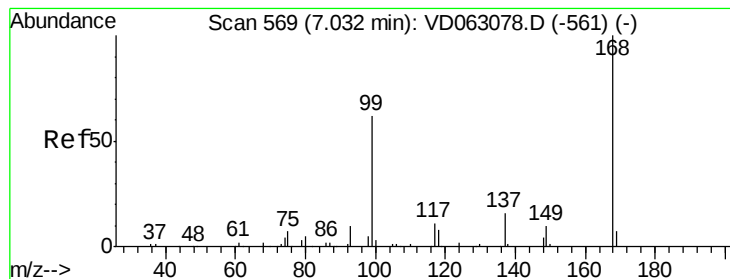
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : K3911-02  
Misc : 5.02g/5ml/MSVOA D/SOIL  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
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HJDC-G2

Quant Time: Jul 20 05:02:24 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D071519S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 16 08:11:56 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 570

Delta R.T. 0.01 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

Instrument :

MSVOA\_D

ClientSampleId :

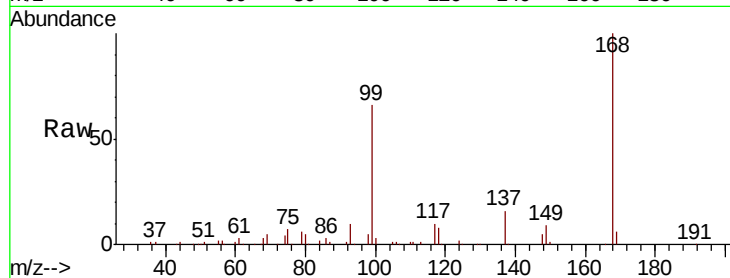
HJDC-G2

Tot Ion:168 Resp: 798451

Ion Ratio Lower Upper

168 100

99 66.2 50.8 76.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.04

300000

250000

200000

150000

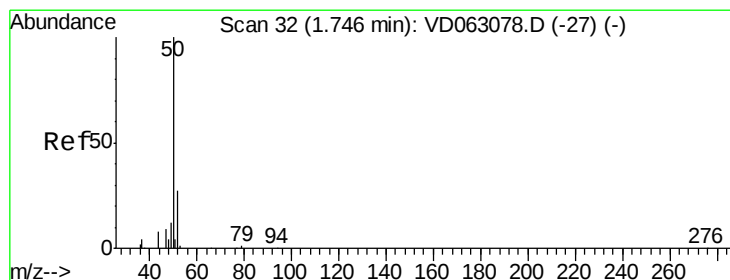
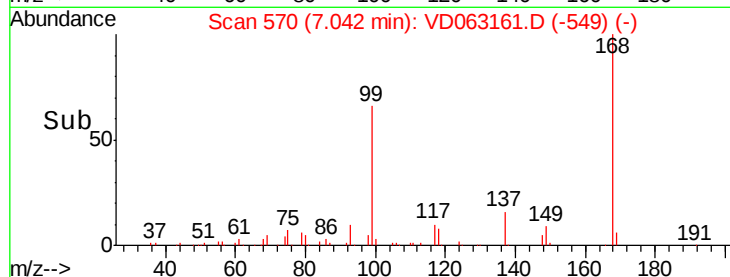
100000

50000

0

Time-->

6.90 7.00 7.10 7.20



#3

Chloromethane

Concen: Below Cal

RT: 1.75 min Scan# 32

Delta R.T. 0.00 min

Lab File: VD063161.D

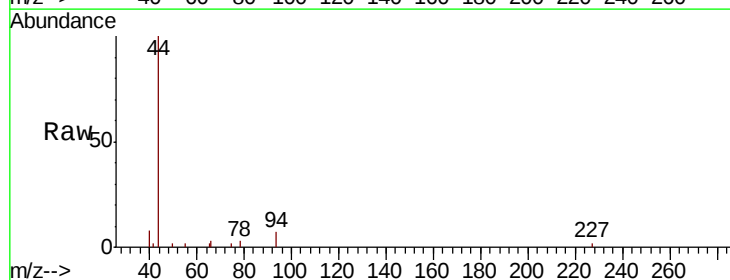
Acq: 19 Jul 2019 18:39

Tgt Ion: 50 Resp: 202

Ion Ratio Lower Upper

50 100

52 0.0 21.4 32.2#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC

1.75

400

300

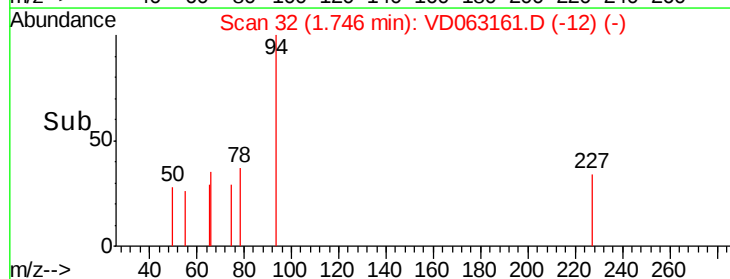
200

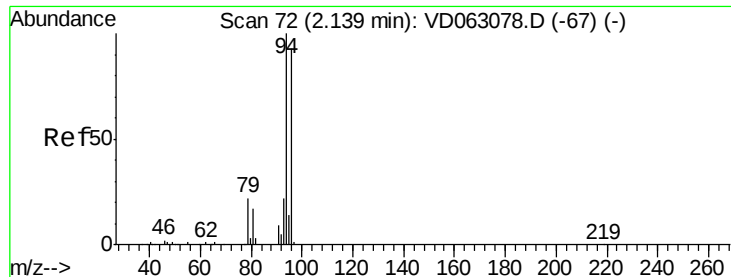
100

0

Time-->

1.73 1.74 1.75 1.76





#5

Bromomethane

Concen: Below Cal

RT: 2.15 min Scan# 73

Delta R.T. 0.01 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

Instrument :

MSVOA\_D

ClientSampleId :

HJDC-G2

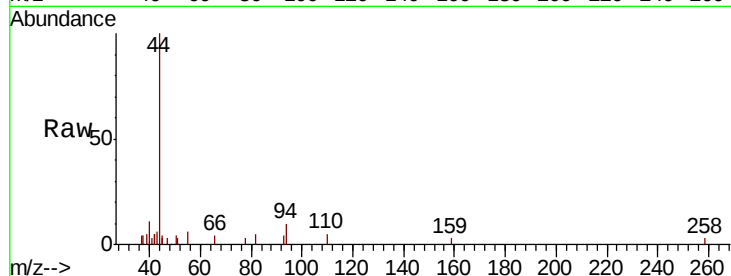
Tot Ion: 94 Resp: 689

Ion Ratio Lower Upper

94 100

96 0.0 74.2 111.2#

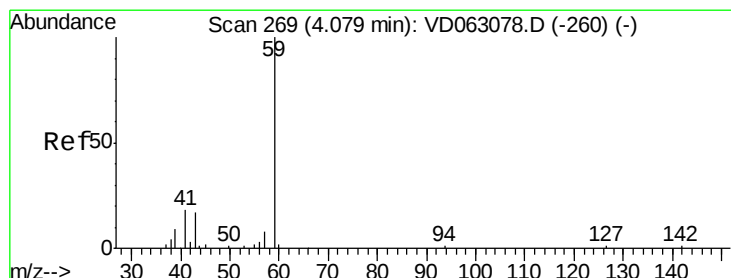
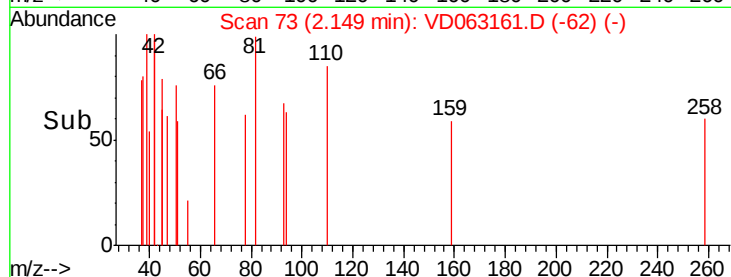
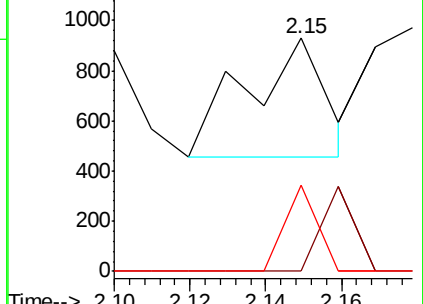
93 37.2 17.8 26.6#



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



#11

Tert butyl alcohol

Concen: 1.179 ug/l

RT: 4.06 min Scan# 267

Delta R.T. -0.02 min

Lab File: VD063161.D

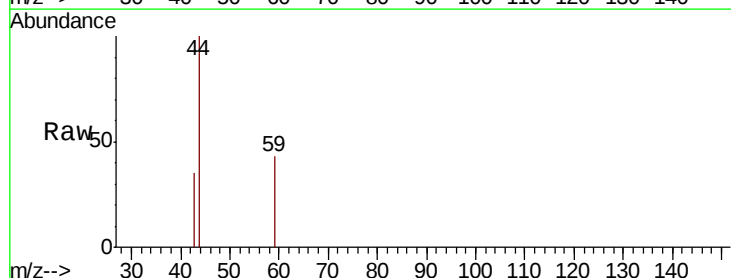
Acq: 19 Jul 2019 18:39

Tgt Ion: 59 Resp: 677

Ion Ratio Lower Upper

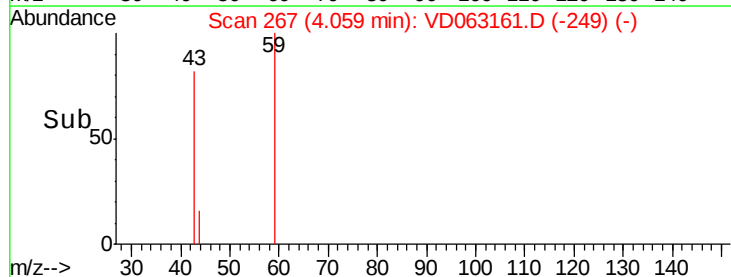
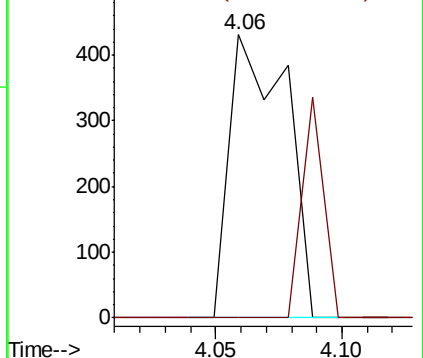
59 100

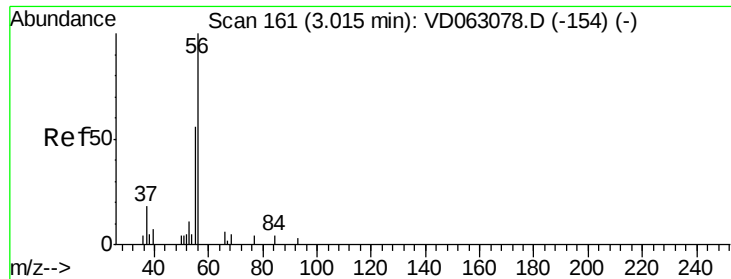
57 0.0 6.4 9.6#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#13

Acrolein

Concen: 1.645 ug/l

RT: 3.03 min Scan# 162

Delta R.T. 0.01 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

Instrument :

MSVOA\_D

ClientSampleId :

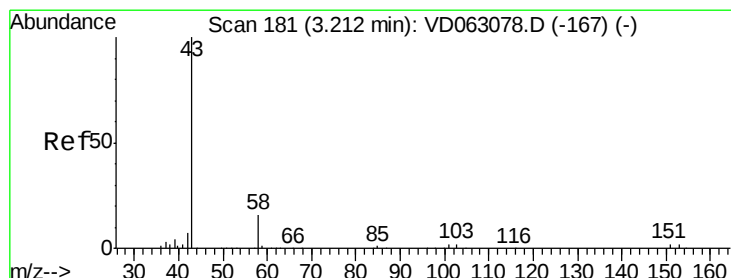
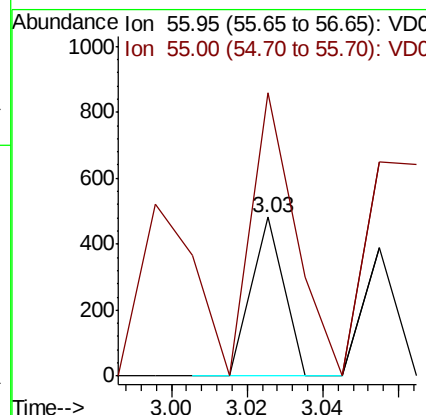
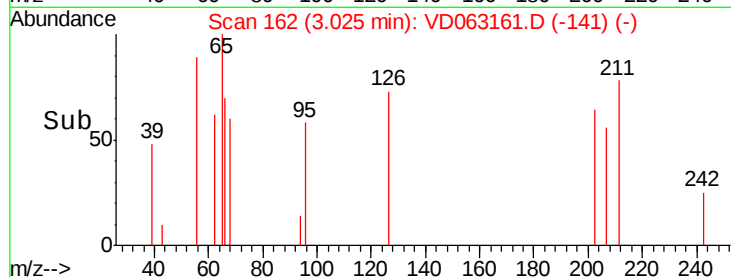
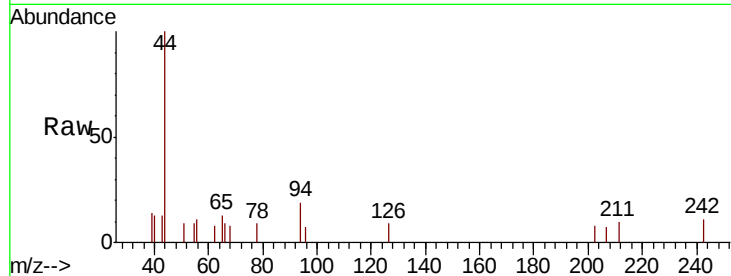
HJDC-G2

Tot Ion: 56 Resp: 285

Ion Ratio Lower Upper

56 100

55 178.0 53.0 79.4#



#16

Acetone

Concen: 13.873 ug/l

RT: 3.21 min Scan# 181

Delta R.T. 0.00 min

Lab File: VD063161.D

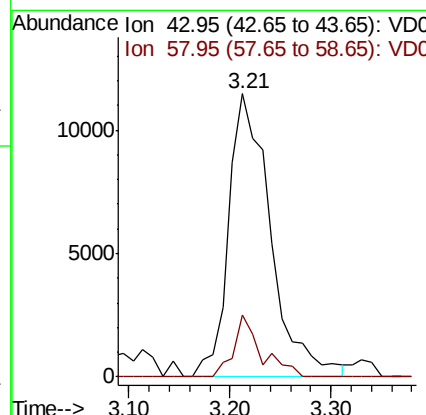
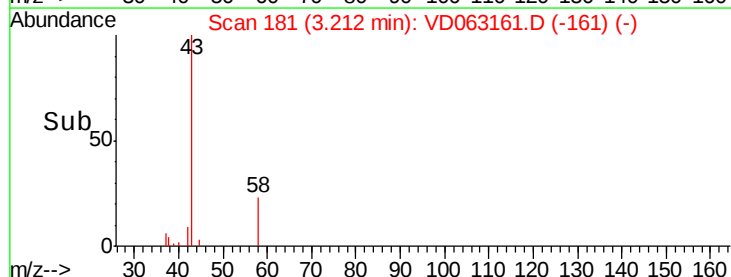
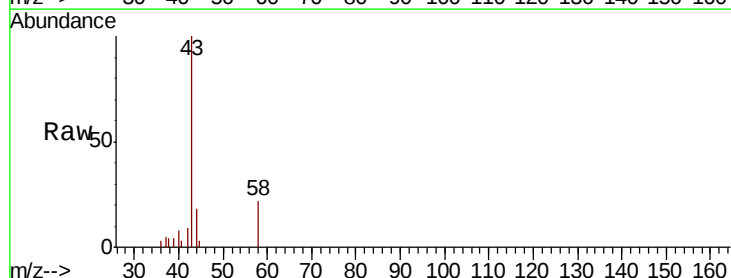
Acq: 19 Jul 2019 18:39

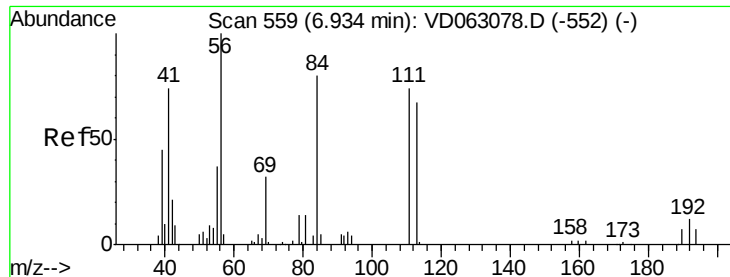
Tgt Ion: 43 Resp: 33328

Ion Ratio Lower Upper

43 100

58 21.9 13.0 19.4#

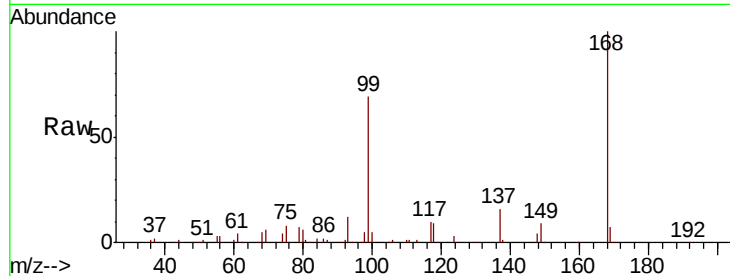




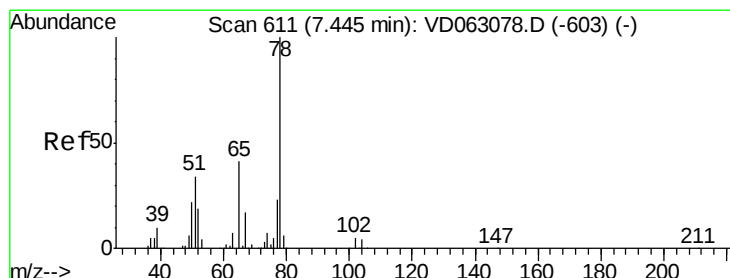
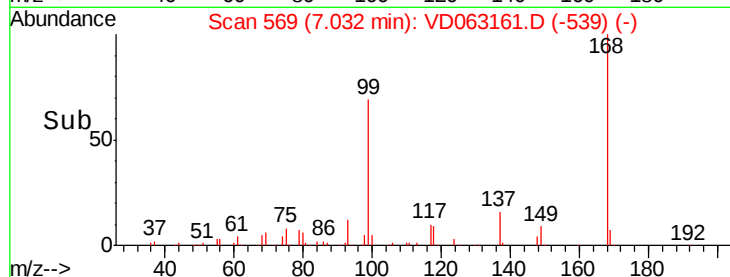
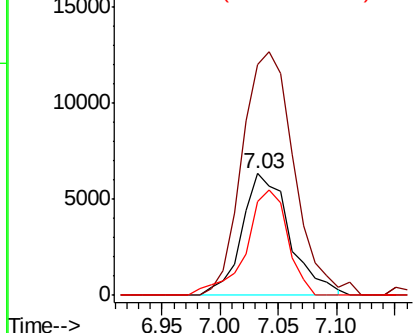
#31  
Cyclohexane  
Concen: 1.902 ug/l  
RT: 7.03 min Scan# 569  
Delta R.T. 0.10 min  
Lab File: VD063161.D  
Acq: 19 Jul 2019 18:39

Instrument :  
MSVOA\_D  
ClientSampleId :  
HJDC-G2

Tot Ion: 56 Resp: 18007  
Ion Ratio Lower Upper  
56 100  
69 189.5 25.3 37.9#  
84 77.6 64.2 96.4

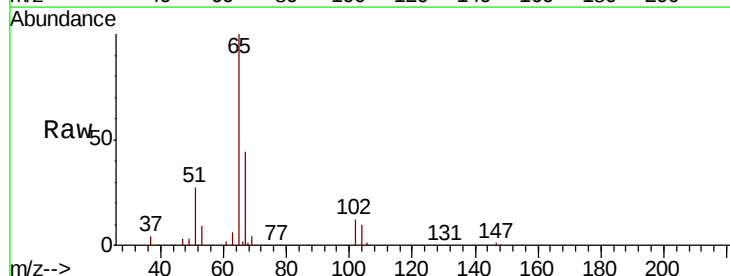


Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.05 (83.75 to 84.75): VDC

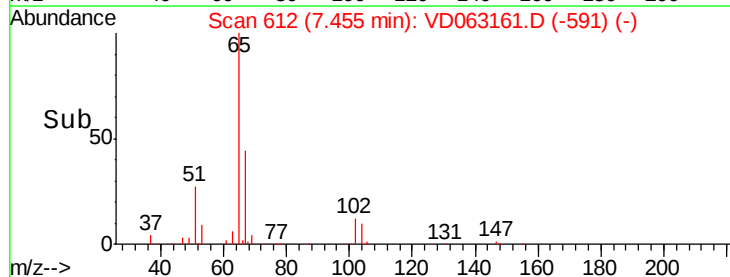
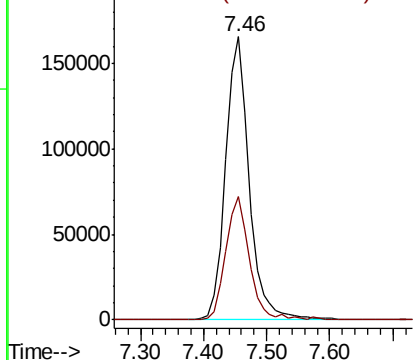


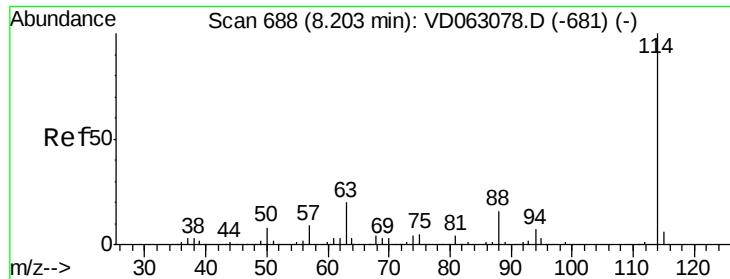
#33  
1,2-Dichloroethane-d4  
Concen: 43.064 ug/l  
RT: 7.46 min Scan# 612  
Delta R.T. 0.01 min  
Lab File: VD063161.D  
Acq: 19 Jul 2019 18:39

Tgt Ion: 65 Resp: 428321  
Ion Ratio Lower Upper  
65 100  
67 43.5 0.0 86.0



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

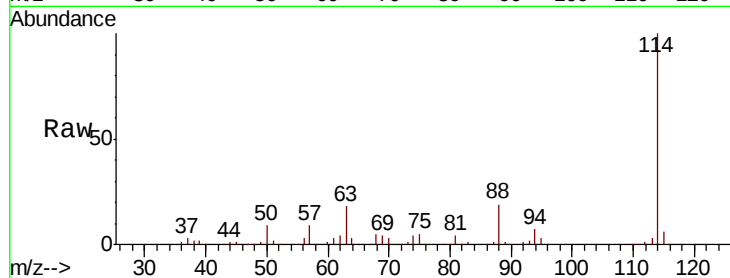




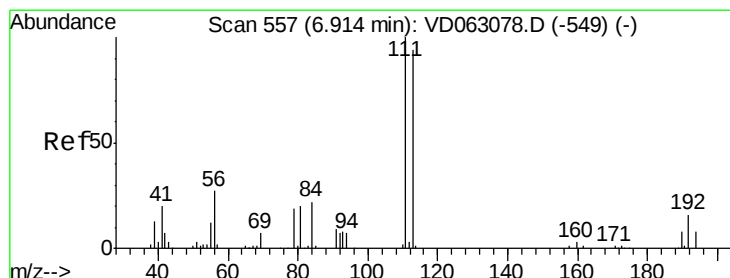
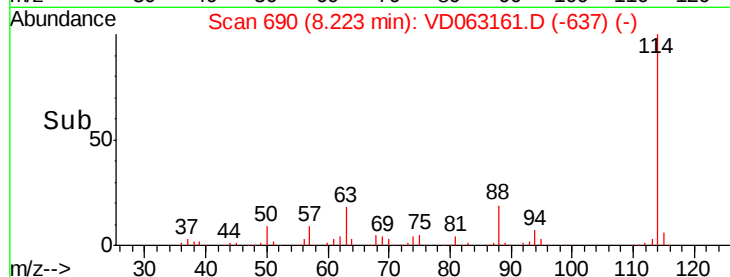
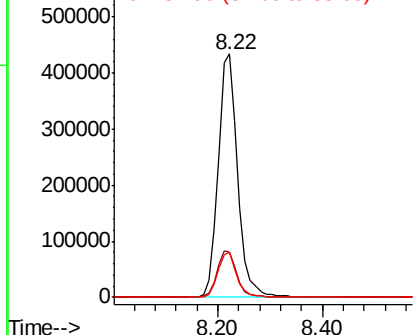
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.22 min Scan# 690  
 Delta R.T. 0.02 min  
 Lab File: VD063161.D  
 Acq: 19 Jul 2019 18:39

Instrument :  
 MSVOA\_D  
 ClientSampled :  
 HJDC-G2

Tot Ion:114 Resp: 1125497  
 Ion Ratio Lower Upper  
 114 100  
 63 18.4 0.0 40.6  
 88 18.7 0.0 32.6

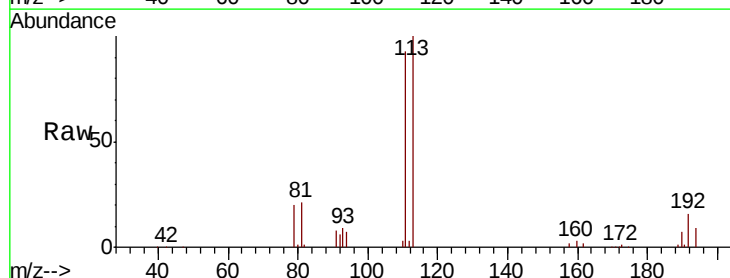


Abundance Ion 114.00 (113.70 to 114.70): V  
 Ion 62.95 (62.65 to 63.65): VDC  
 Ion 87.90 (87.60 to 88.60): VDC

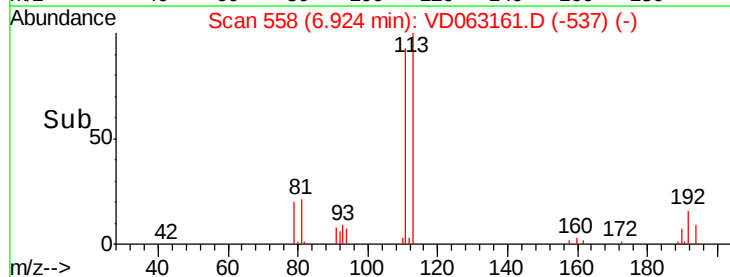
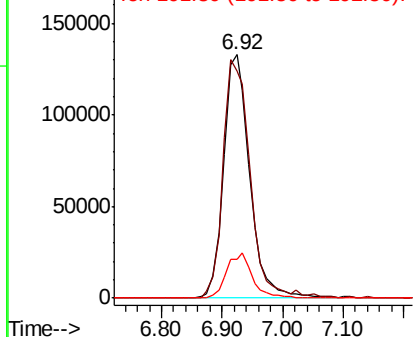


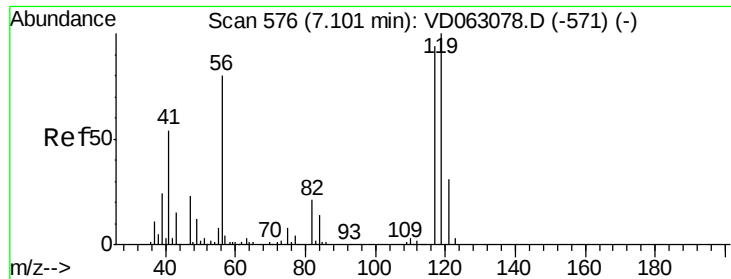
#35  
 Dibromofluoromethane  
 Concen: 35.432 ug/l  
 RT: 6.92 min Scan# 558  
 Delta R.T. 0.01 min  
 Lab File: VD063161.D  
 Acq: 19 Jul 2019 18:39

Tgt Ion:113 Resp: 397203  
 Ion Ratio Lower Upper  
 113 100  
 111 93.3 84.8 127.2  
 192 16.0 13.4 20.0



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

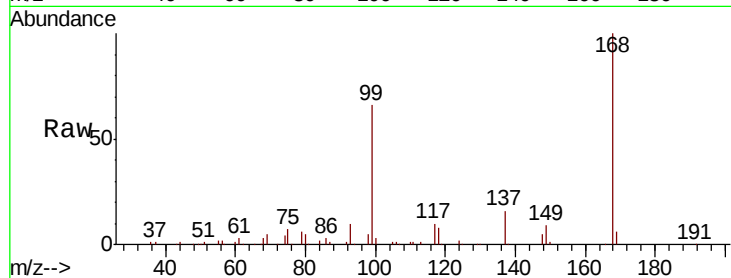




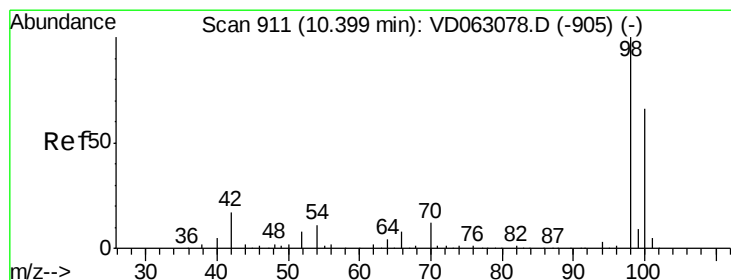
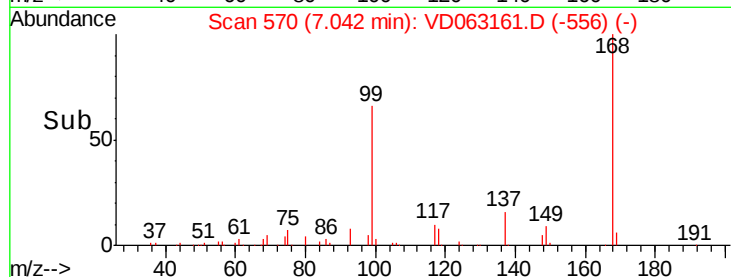
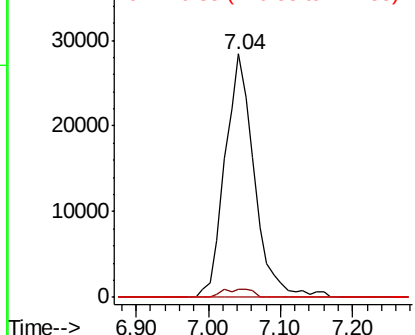
#38  
Carbon Tetrachloride  
Concen: 4.170 ug/l  
RT: 7.04 min Scan# 570  
Delta R.T. -0.06 min  
Lab File: VD063161.D  
Acq: 19 Jul 2019 18:39

Instrument :  
MSVOA\_D  
ClientSampleId :  
HJDC-G2

Tot Ion:117 Resp: 80201  
Ion Ratio Lower Upper  
117 100  
119 3.3 80.0 120.0#  
121 0.0 25.0 37.4#

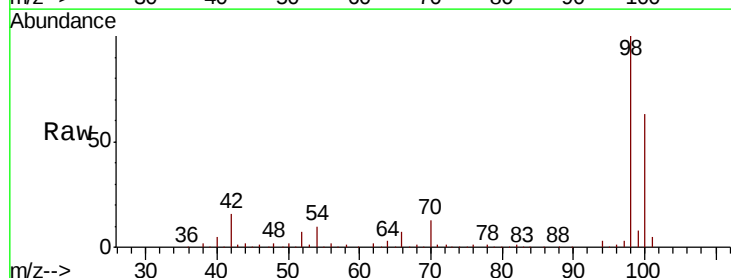


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

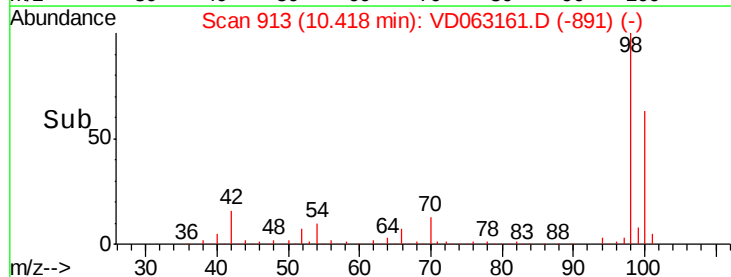
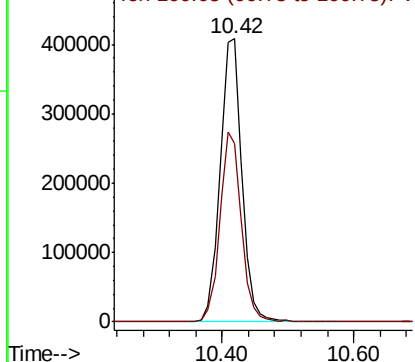


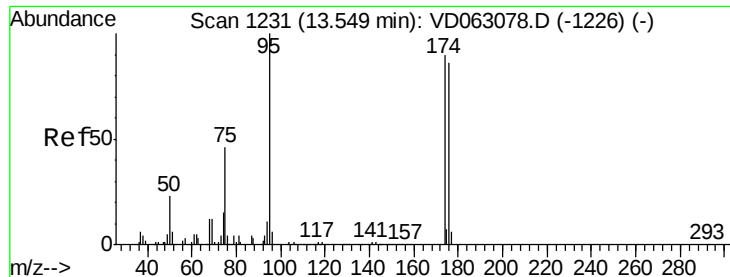
#50  
Toluene-d8  
Concen: 39.030 ug/l  
RT: 10.42 min Scan# 913  
Delta R.T. 0.02 min  
Lab File: VD063161.D  
Acq: 19 Jul 2019 18:39

Tgt Ion: 98 Resp: 939835  
Ion Ratio Lower Upper  
98 100  
100 62.9 53.5 80.3



Abundance Ion 98.05 (97.75 to 98.75): VDC  
Ion 100.05 (99.75 to 100.75): VD





#62

4-Bromofluorobenzene

Concen: 32.748 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.01 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

Instrument :

MSVOA\_D

ClientSampleId :

HJDC-G2

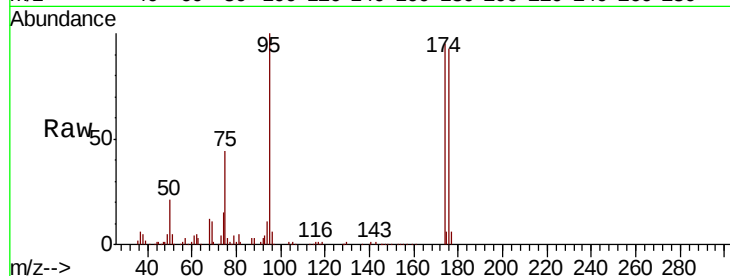
Tot Ion: 95 Resp: 364821

Ion Ratio Lower Upper

95 100

174 95.1 0.0 180.6

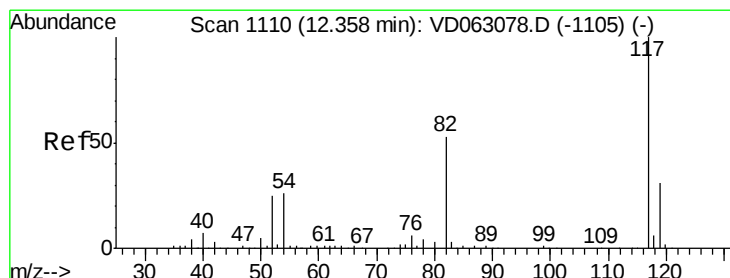
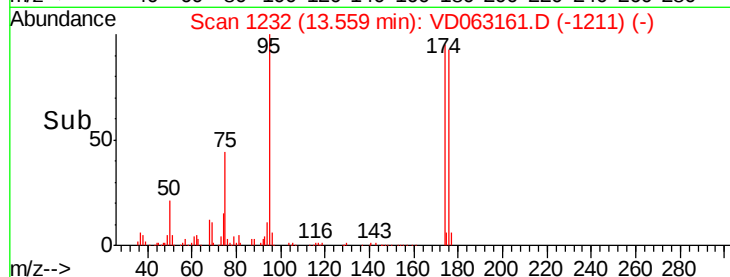
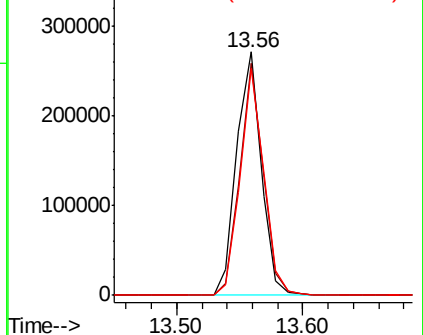
176 93.4 0.0 172.2



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# 1111

Delta R.T. 0.01 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

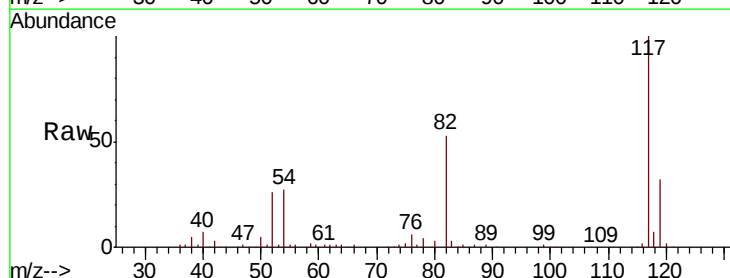
Tgt Ion: 117 Resp: 847459

Ion Ratio Lower Upper

117 100

82 52.8 42.3 63.5

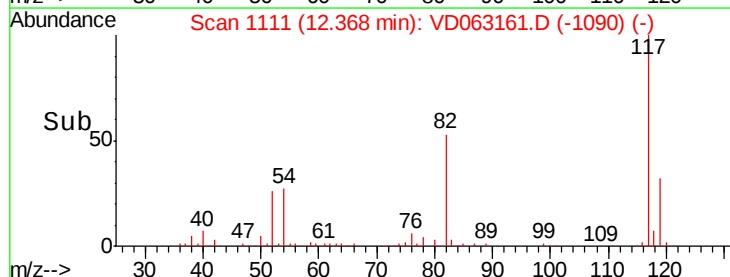
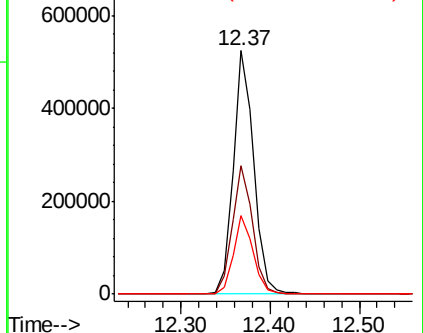
119 32.5 25.2 37.8

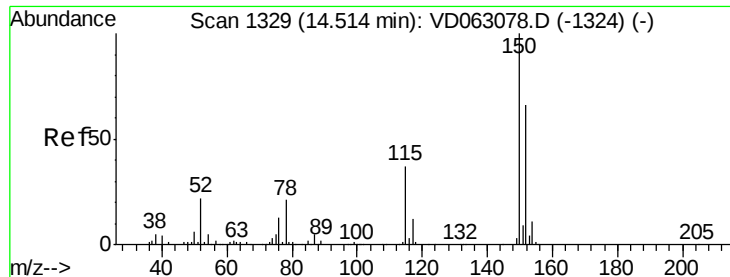


Abundance Ion 116.95 (116.65 to 117.65): V

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. 0.01 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

Instrument :

MSVOA\_D

ClientSampleId :

HJDC-G2

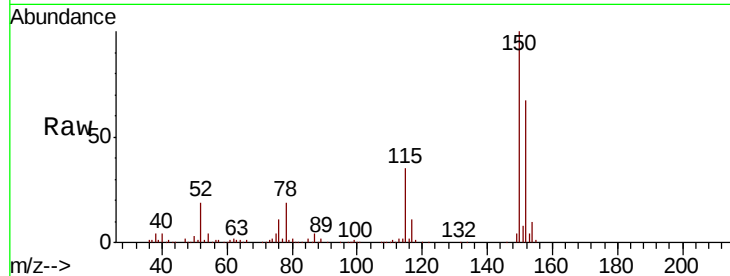
Tot Ion:152 Resp: 369598

Ion Ratio Lower Upper

152 100

115 51.5 28.9 86.8

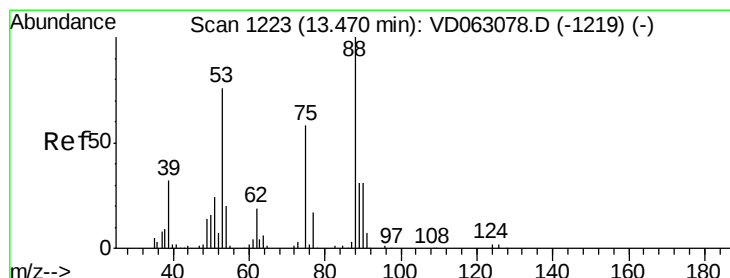
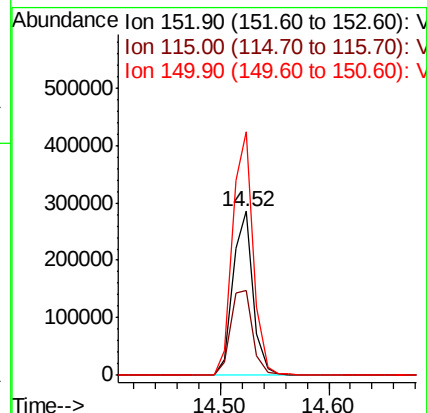
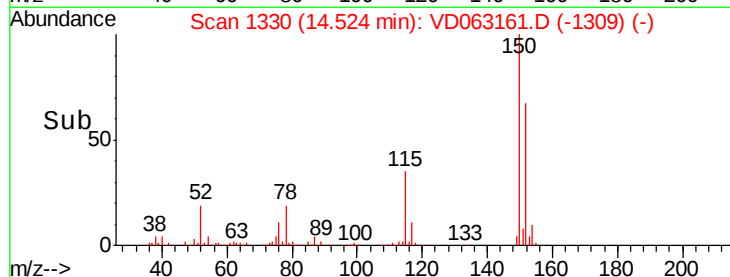
150 148.7 0.0 313.8



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: 111.534 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.09 min

Lab File: VD063161.D

Acq: 19 Jul 2019 18:39

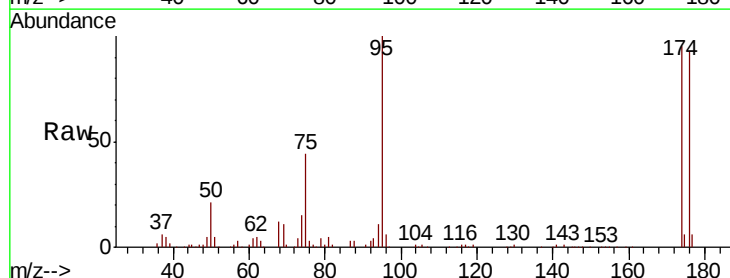
Tgt Ion: 75 Resp: 166989

Ion Ratio Lower Upper

75 100

53 0.0 104.4 156.6#

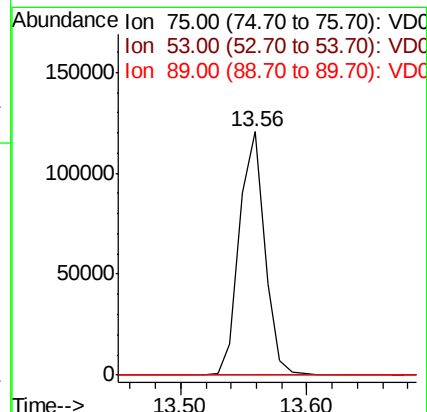
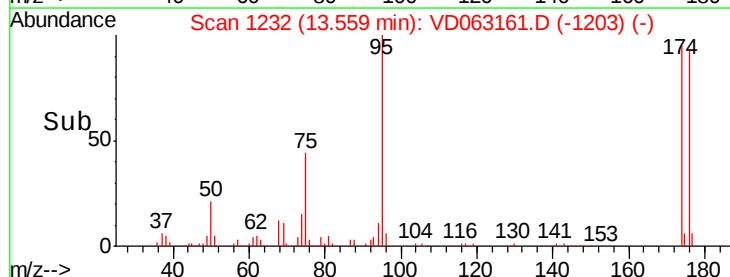
89 0.0 43.1 64.7#

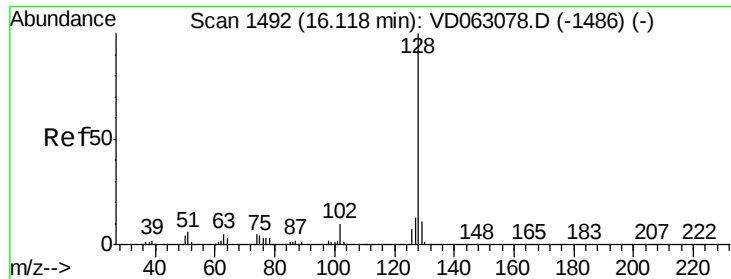


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC





#95  
Naphthalene  
Concen: 1.159 ug/l  
RT: 16.13 min Scan# 1493  
Delta R.T. 0.01 min  
Lab File: VD063161.D  
Acq: 19 Jul 2019 18:39

Instrument :  
MSVOA\_D  
ClientSampleId :  
HJDC-G2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 16.8  | 10.7  | 16.1# |
| 129     | 14.3  | 8.7   | 13.1# |

