

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD071619\  
 Data File : VD063110.D  
 Acq On : 16 Jul 2019 16:54  
 Operator : VA/AP  
 Sample : K3623-01  
 Misc : 6.10g/5ml/MSVOA D/SOIL  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 EO-02-071519-A

Quant Time: Jul 17 07:36:53 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  | 572371   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.21  | 114  | 825947   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.36 | 117  | 687832   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 317536   | 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   | 358362   | 50.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.52% |          |
| 35) Dibromofluoromethane    | 6.92  | 113  | 386417   | 46.97 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.94%  |          |
| 50) Toluene-d8              | 10.40 | 98   | 817133   | 46.24 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.48%  |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 348745   | 42.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.32%  |          |

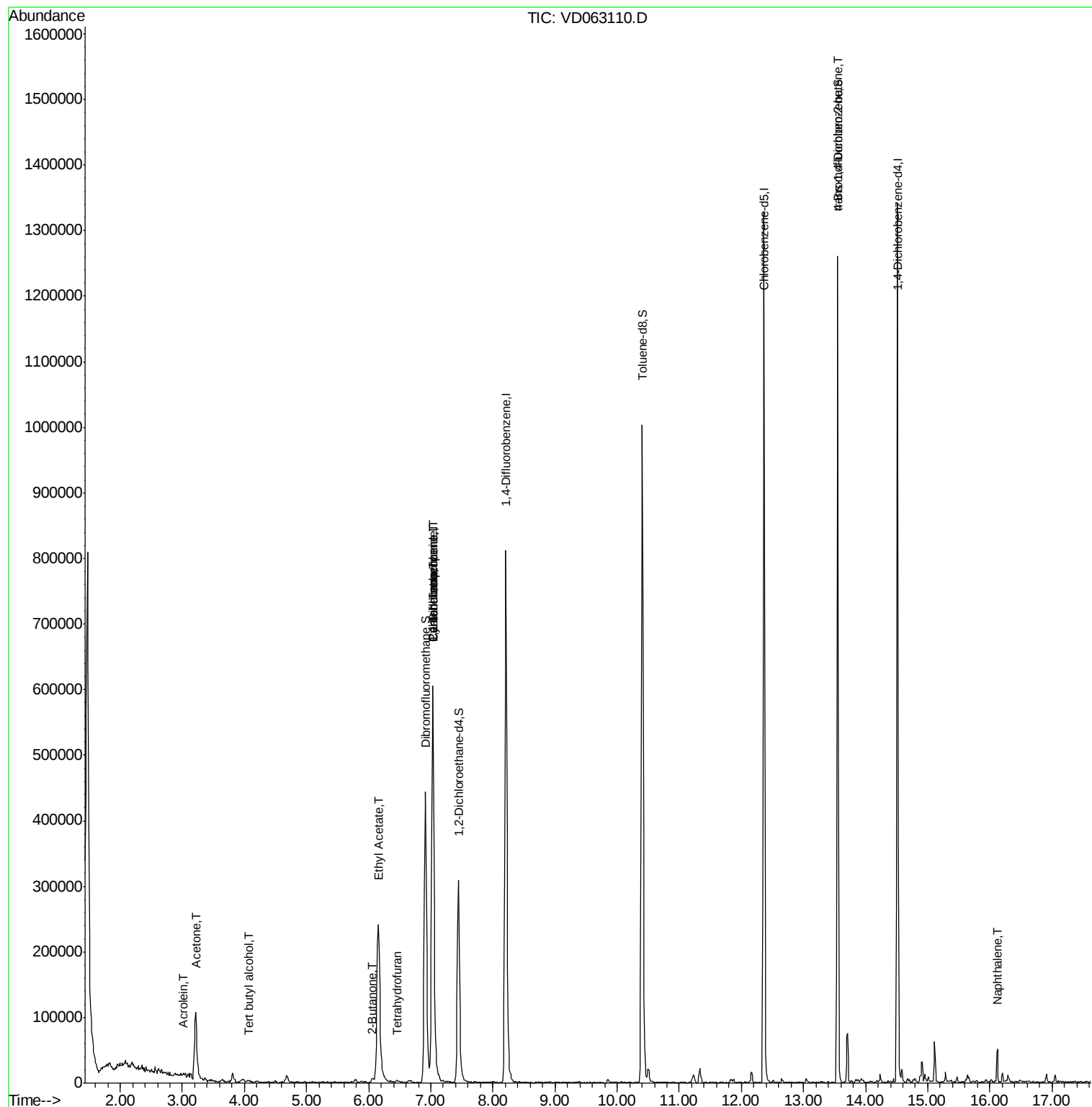
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.56  | 85   | 481      | Below Cal | #      | 43     |
| 3) Chloromethane               | 1.73  | 50   | 584      | Below Cal | #      | 54     |
| 5) Bromomethane                | 2.13  | 94   | 3034     | Below Cal | #      | 38     |
| 11) Tert butyl alcohol         | 4.05  | 59   | 5543     | 13.471    | ug/l # | 77     |
| 13) Acrolein                   | 3.01  | 56   | 183      | 1.474     | ug/l # | 17     |
| 16) Acetone                    | 3.22  | 43   | 217262   | 126.161   | ug/l   | 97     |
| 18) Methyl Acetate             | 3.63  | 43   | 8868     | Below Cal | #      | 92     |
| 25) 2-Butanone                 | 6.07  | 43   | 13365    | 8.127     | ug/l # | 75     |
| 29) Tetrahydrofuran            | 6.45  | 42   | 1681     | 2.255     | ug/l # | 67     |
| 31) Cyclohexane                | 7.04  | 56   | 13735    | 2.024     | ug/l # | 4      |
| 36) 1,1-Dichloropropene        | 7.03  | 75   | 44833    | 4.826     | ug/l # | 46     |
| 37) Ethyl Acetate              | 6.16  | 43   | 19670    | 4.948     | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.03  | 117  | 55935    | 3.963     | ug/l # | 14     |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 161712   | 125.719   | ug/l # | 1      |
| 95) Naphthalene                | 16.12 | 128  | 30736    | 2.529     | ug/l   | 99     |

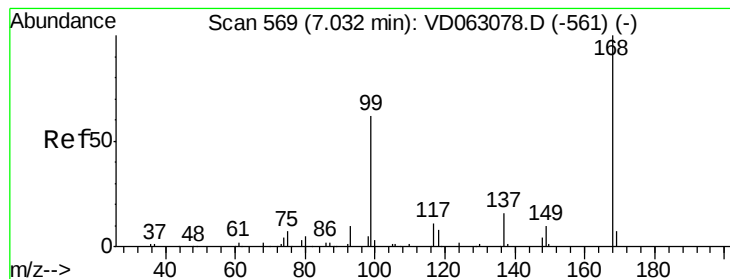
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD071619\  
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Instrument :  
MSVOA\_D  
ClientSampleId :  
EO-02-071519-A

Quant Time: Jul 17 07:36:53 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. 0.00 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

Instrument :

MSVOA\_D

ClientSampleId :

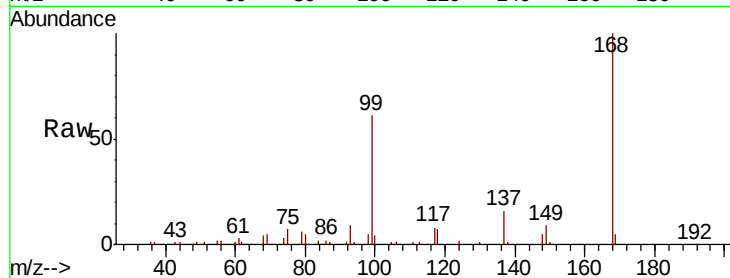
EO-02-071519-A

Tot Ion:168 Resp: 572371

Ion Ratio Lower Upper

168 100

99 60.9 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

250000

200000

150000

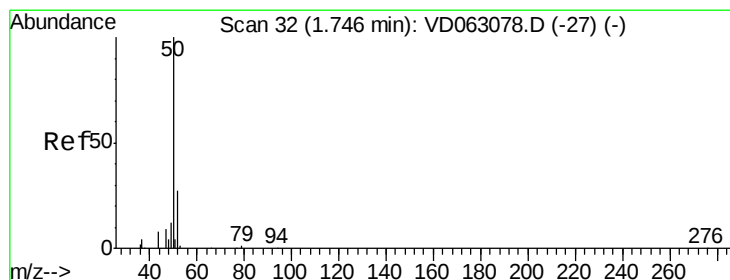
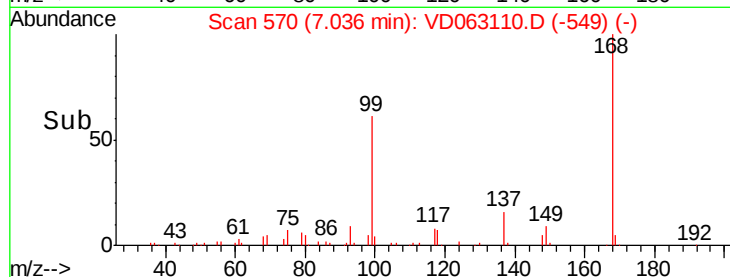
100000

50000

0

6.90 7.00 7.10 7.20

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.73 min Scan# 31

Delta R.T. -0.02 min

Lab File: VD063110.D

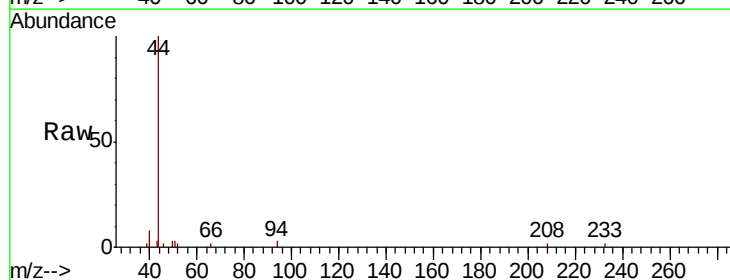
Acq: 16 Jul 2019 16:54

Tgt Ion: 50 Resp: 584

Ion Ratio Lower Upper

50 100

52 50.6 21.4 32.2#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC

1.73

600

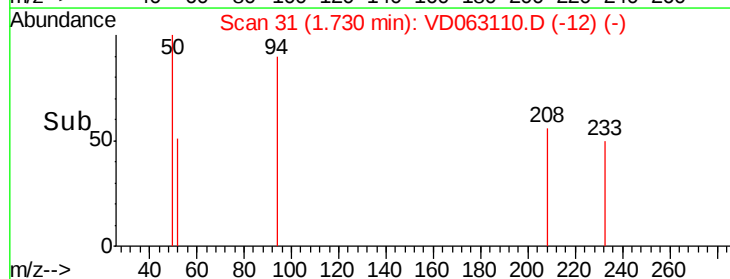
400

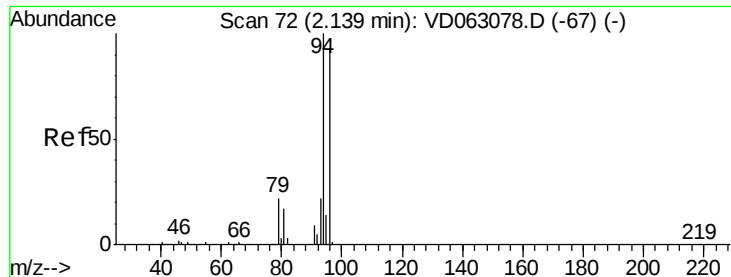
200

0

1.70 1.72 1.74 1.76

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 2.13 min Scan# 72

Delta R.T. -0.01 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

Instrument :

MSVOA\_D

ClientSampleId :

EO-02-071519-A

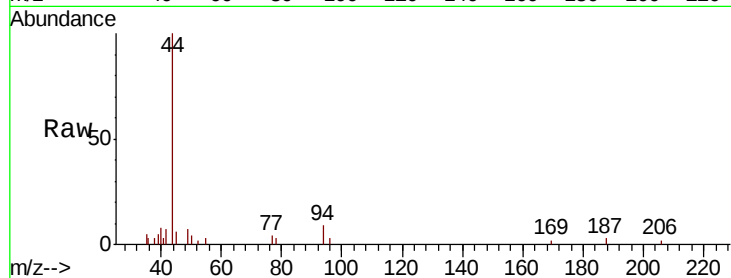
Tot Ion: 94 Resp: 3034

Ion Ratio Lower Upper

94 100

96 30.3 74.2 111.2#

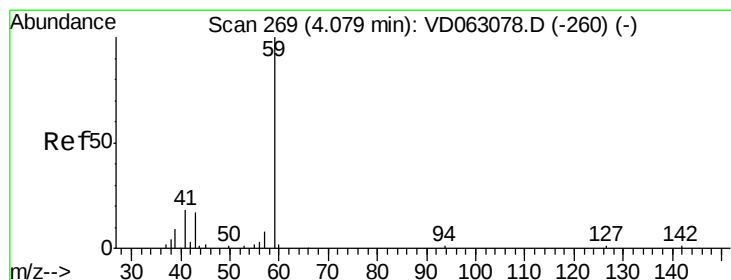
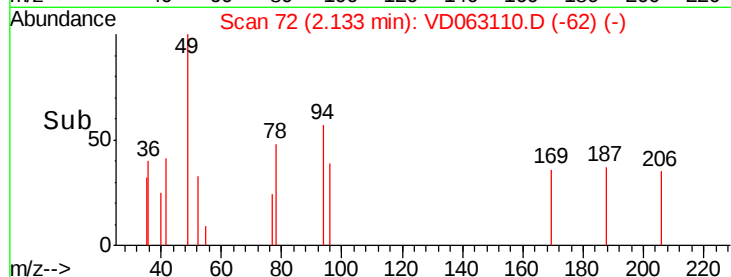
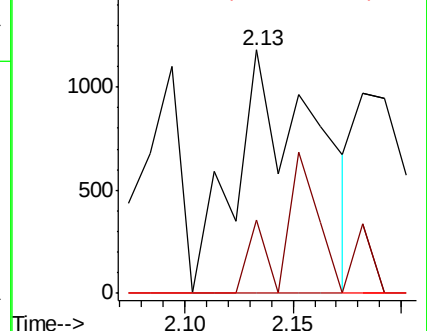
93 0.0 17.8 26.6#



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: 13.471 ug/l

RT: 4.05 min Scan# 267

Delta R.T. -0.03 min

Lab File: VD063110.D

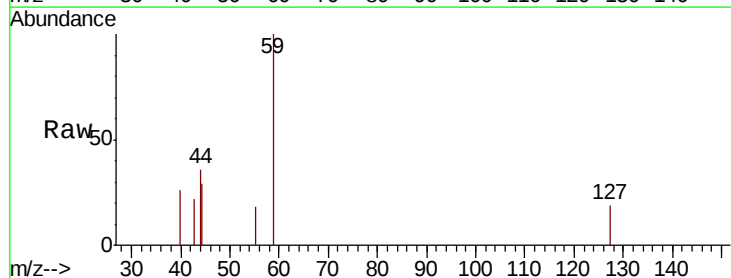
Acq: 16 Jul 2019 16:54

Tgt Ion: 59 Resp: 5543

Ion Ratio Lower Upper

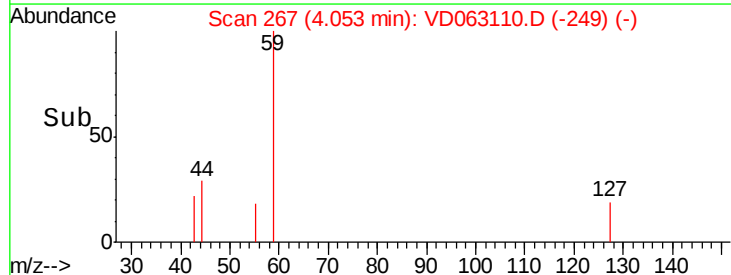
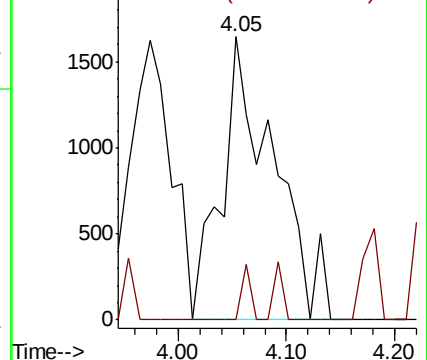
59 100

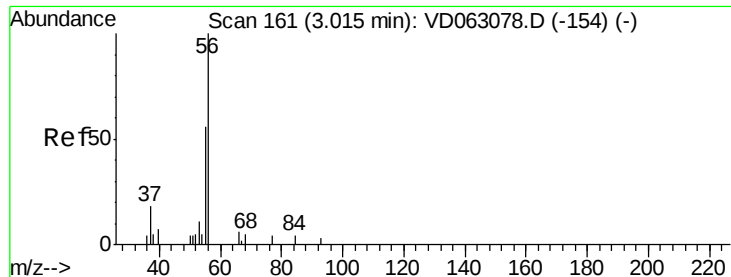
57 0.0 6.4 9.6#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#13

Acrolein

Concen: 1.474 ug/l

RT: 3.01 min Scan# 161

Delta R.T. -0.01 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

Instrument :

MSVOA\_D

ClientSampleId :

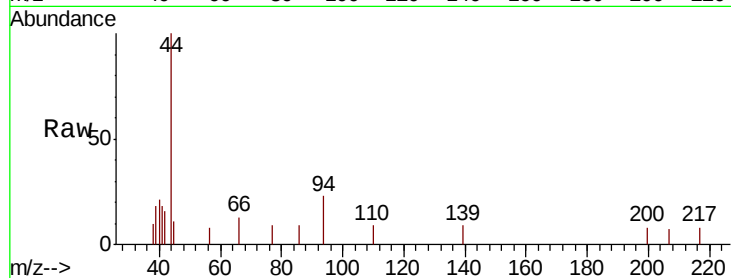
EO-02-071519-A

Tot Ion: 56 Resp: 183

Ion Ratio Lower Upper

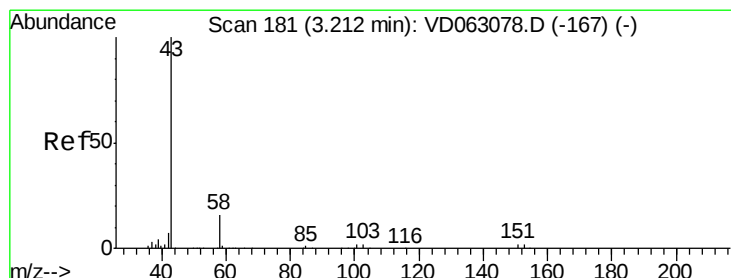
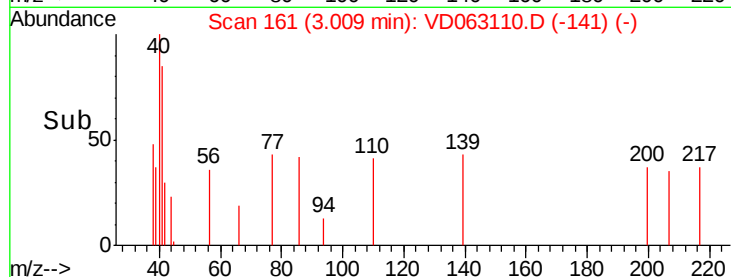
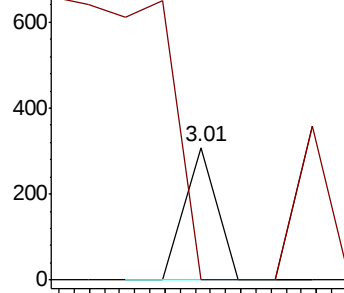
56 100

55 0.0 53.0 79.4#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



#16

Acetone

Concen: 126.161 ug/l

RT: 3.22 min Scan# 182

Delta R.T. 0.00 min

Lab File: VD063110.D

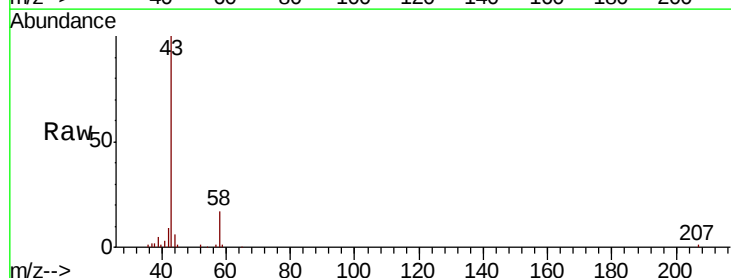
Acq: 16 Jul 2019 16:54

Tgt Ion: 43 Resp: 217262

Ion Ratio Lower Upper

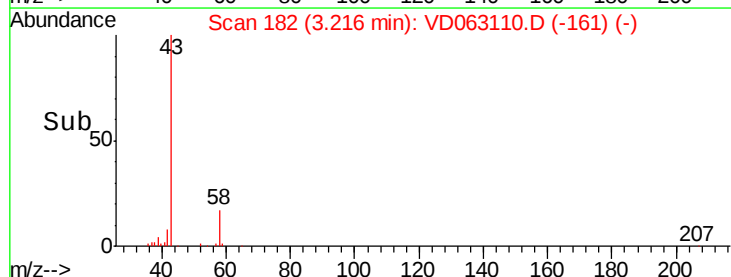
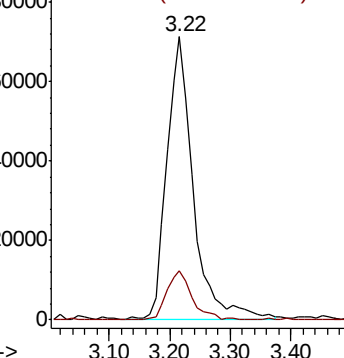
43 100

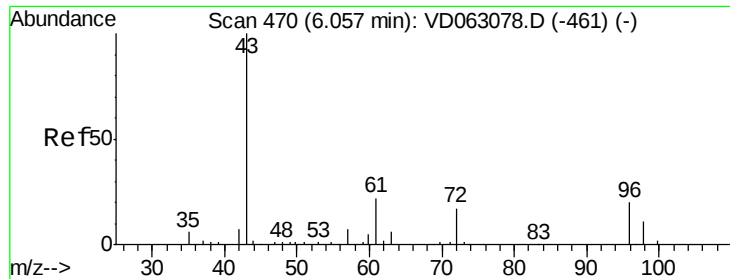
58 17.3 13.0 19.4



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC





#25

2-Butanone

Concen: 8.127 ug/l

RT: 6.07 min Scan# 472

Delta R.T. 0.01 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

Instrument :

MSVOA\_D

ClientSampleId :

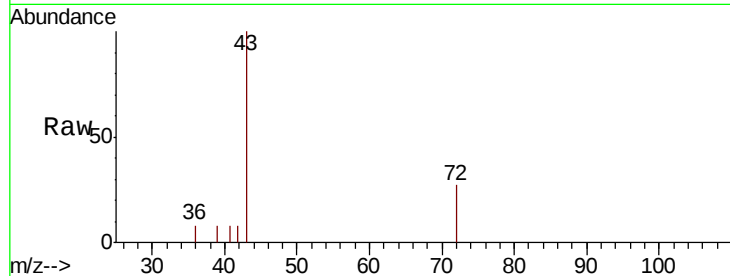
EO-02-071519-A

Tot Ion: 43 Resp: 13365

Ion Ratio Lower Upper

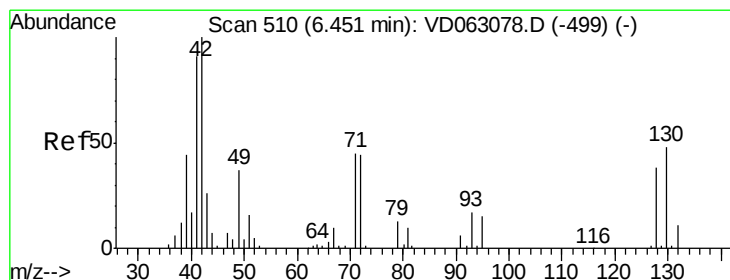
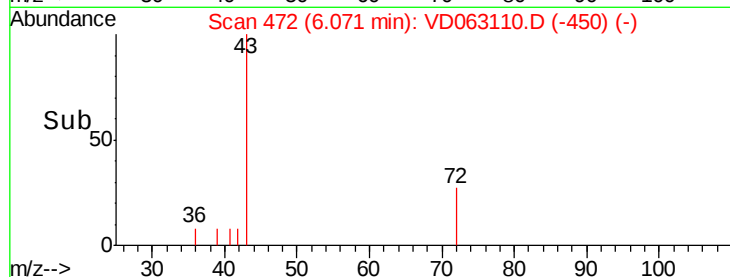
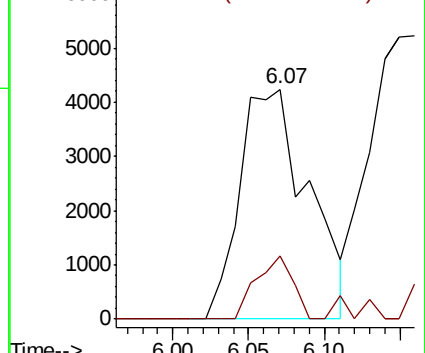
43 100

72 27.5 13.4 20.0#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC



#29

Tetrahydrofuran

Concen: 2.255 ug/l

RT: 6.45 min Scan# 511

Delta R.T. 0.00 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

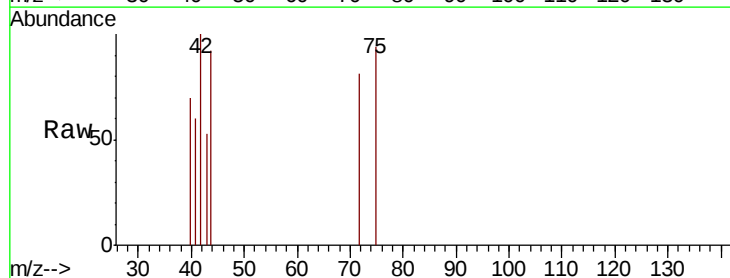
Tgt Ion: 42 Resp: 1681

Ion Ratio Lower Upper

42 100

72 25.6 33.7 50.5#

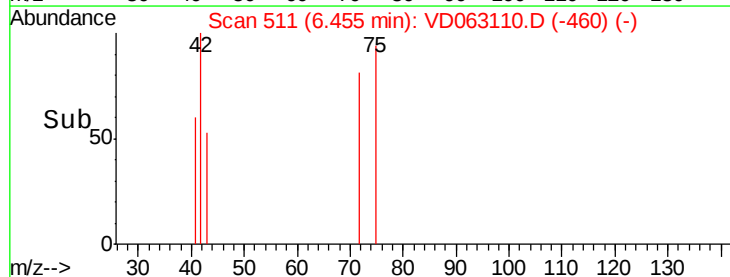
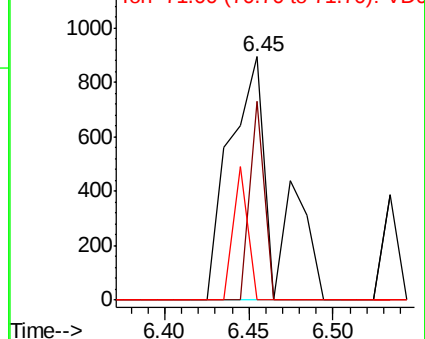
71 17.2 34.2 51.2#

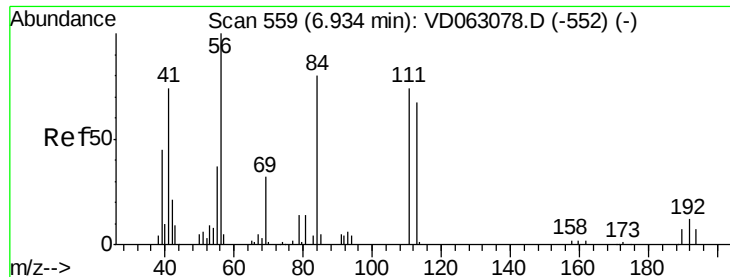


Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC

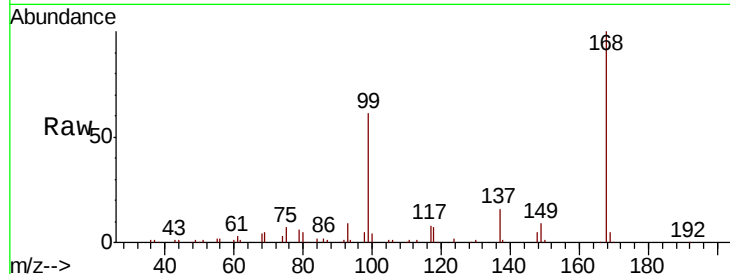




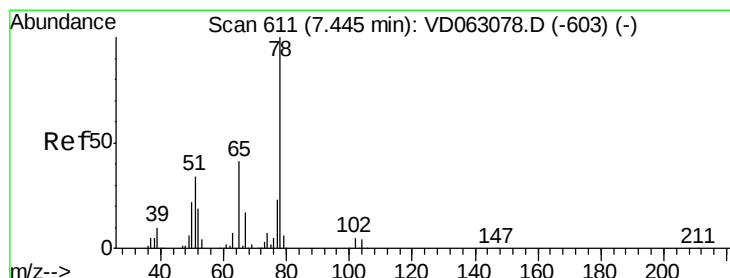
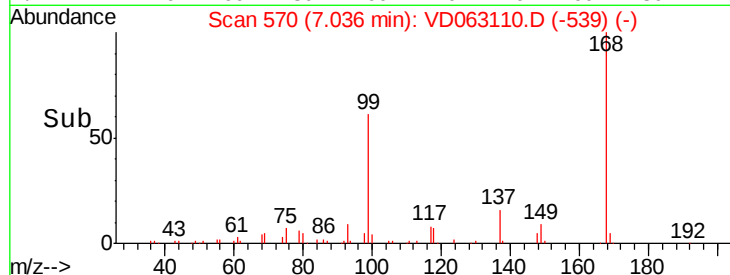
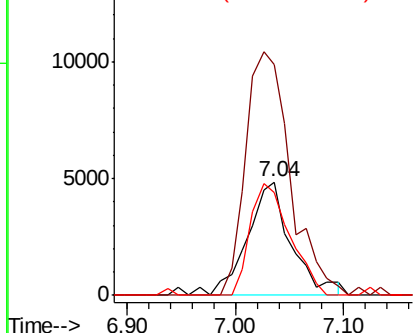
#31  
Cyclohexane  
Concen: 2.024 ug/l  
RT: 7.04 min Scan# 570  
Delta R.T. 0.10 min  
Lab File: VD063110.D  
Acq: 16 Jul 2019 16:54

Instrument :  
MSVOA\_D  
ClientSampleId :  
EO-02-071519-A

Tot Ion: 56 Resp: 13735  
Ion Ratio Lower Upper  
56 100  
69 203.7 25.3 37.9#  
84 90.4 64.2 96.4

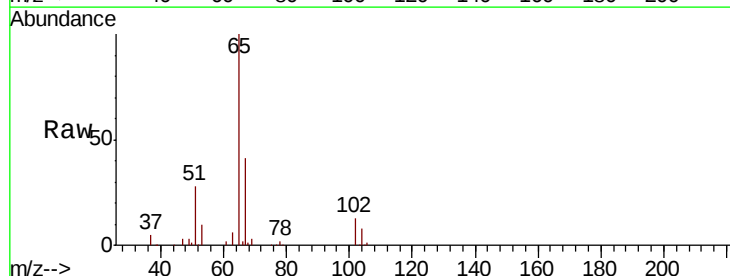


Abundance Ion 55.95 (55.65 to 56.65): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.05 (83.75 to 84.75): VDC

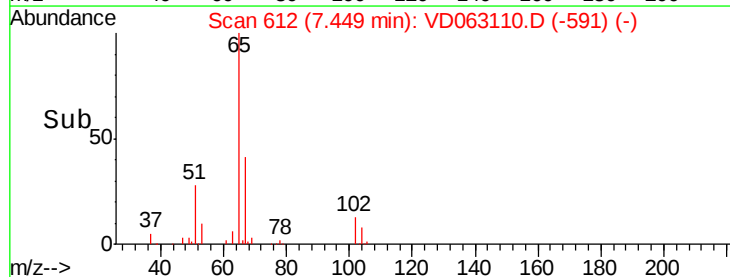
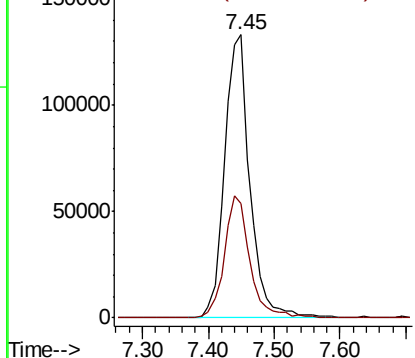


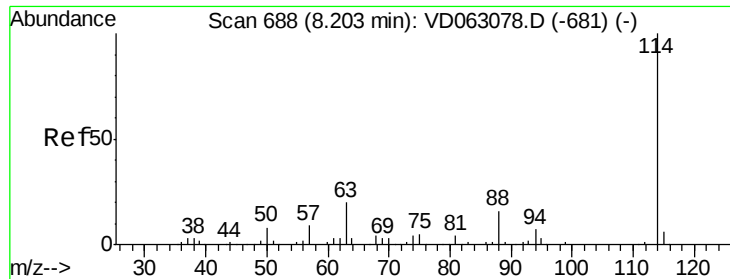
#33  
1,2-Dichloroethane-d4  
Concen: 50.261 ug/l  
RT: 7.45 min Scan# 612  
Delta R.T. 0.00 min  
Lab File: VD063110.D  
Acq: 16 Jul 2019 16:54

Tgt Ion: 65 Resp: 358362  
Ion Ratio Lower Upper  
65 100  
67 40.5 0.0 86.0



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

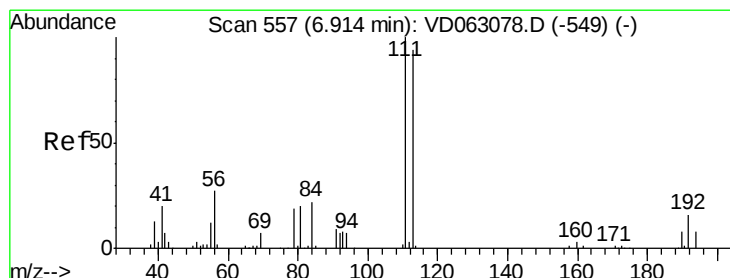
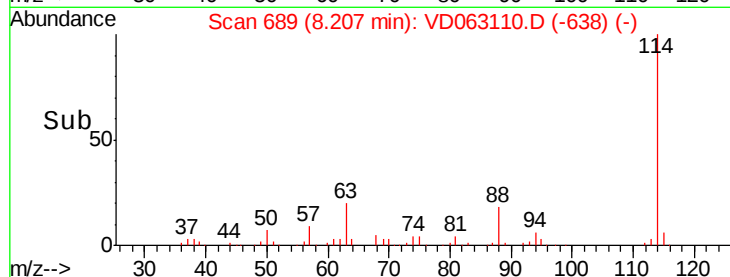
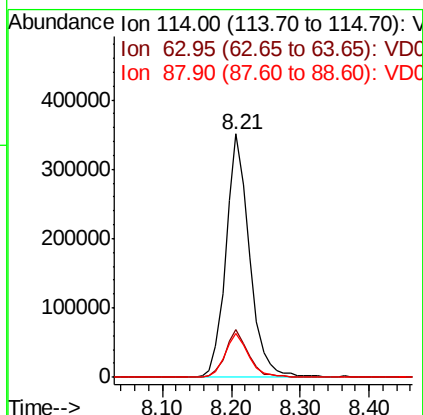
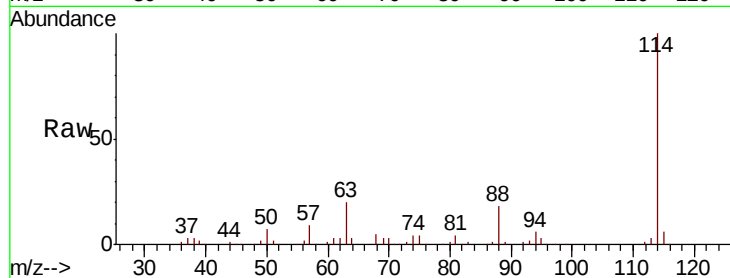




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.21 min Scan# 689  
 Delta R.T. 0.00 min  
 Lab File: VD063110.D  
 Acq: 16 Jul 2019 16:54

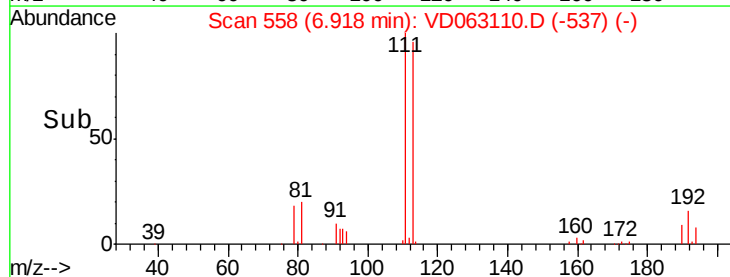
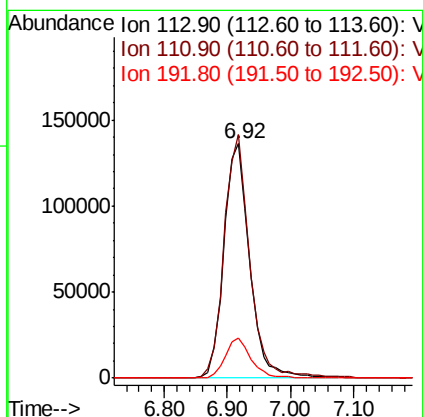
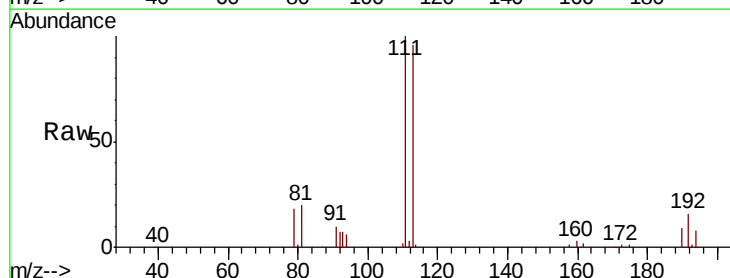
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 EO-02-071519-A

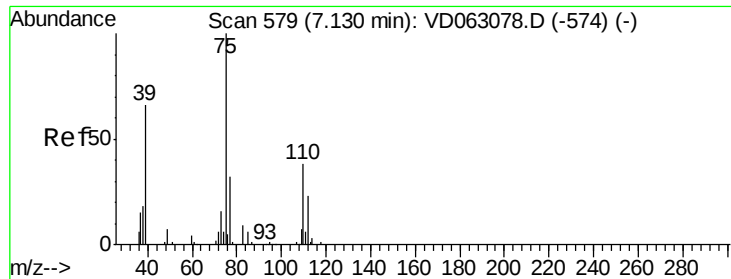
Tot Ion:114 Resp: 825947  
 Ion Ratio Lower Upper  
 114 100  
 63 19.6 0.0 40.6  
 88 17.8 0.0 32.6



#35  
 Dibromofluoromethane  
 Concen: 46.971 ug/l  
 RT: 6.92 min Scan# 558  
 Delta R.T. 0.00 min  
 Lab File: VD063110.D  
 Acq: 16 Jul 2019 16:54

Tgt Ion:113 Resp: 386417  
 Ion Ratio Lower Upper  
 113 100  
 111 103.9 84.8 127.2  
 192 17.0 13.4 20.0

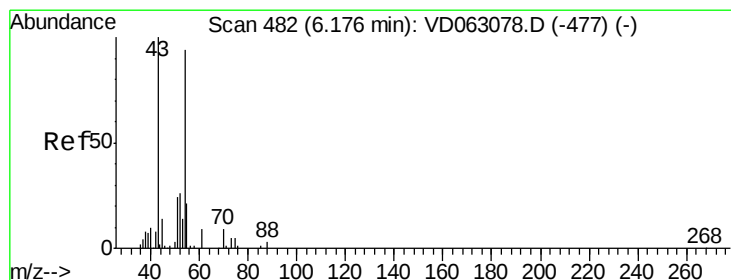
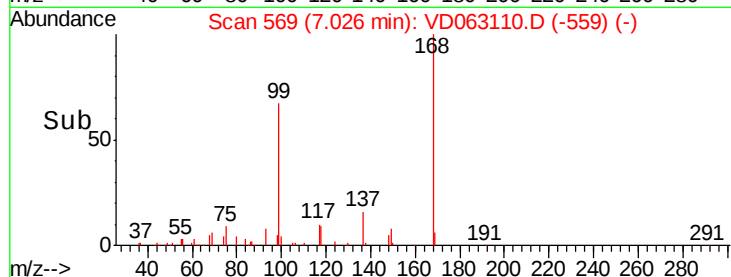
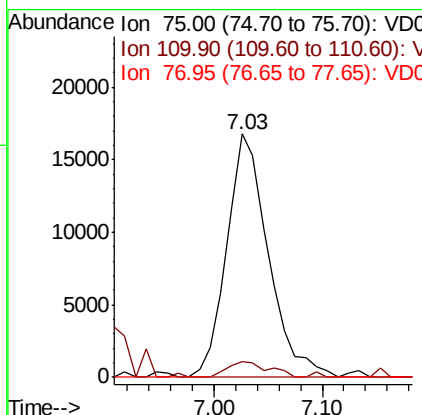
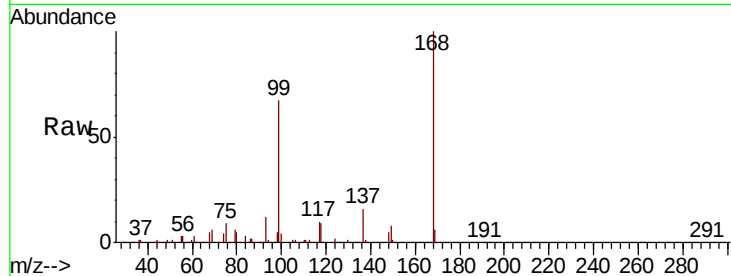




#36  
 1,1-Dichloropropene  
 Concen: 4.826 ug/l  
 RT: 7.03 min Scan# 569  
 Delta R.T. -0.10 min  
 Lab File: VD063110.D  
 Acq: 16 Jul 2019 16:54

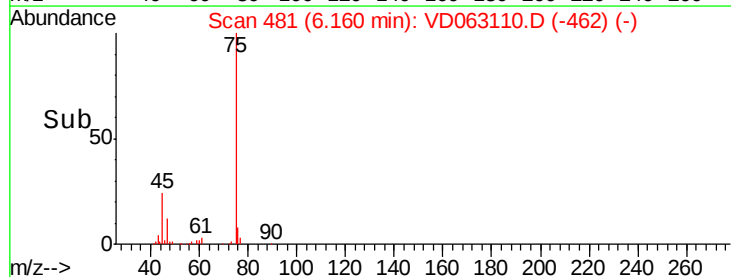
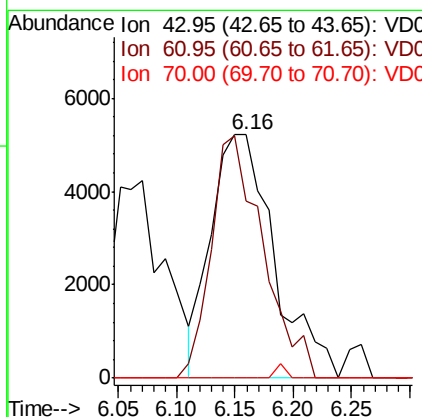
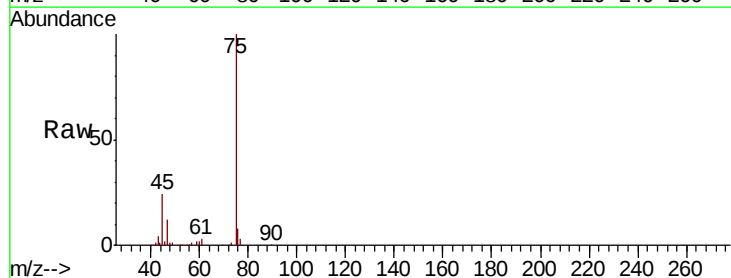
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 EO-02-071519-A

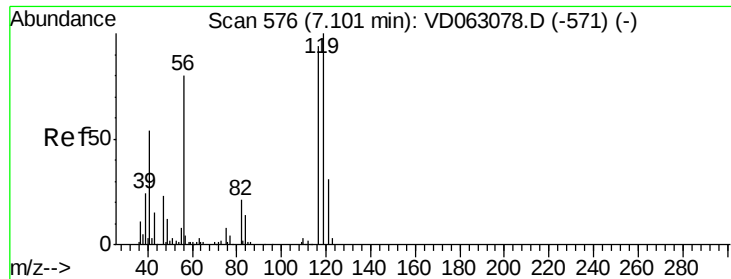
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 6.4   | 18.9  | 56.5# |
| 77      | 0.0   | 25.2  | 37.8# |



#37  
 Ethyl Acetate  
 Concen: 4.948 ug/l  
 RT: 6.16 min Scan# 481  
 Delta R.T. -0.02 min  
 Lab File: VD063110.D  
 Acq: 16 Jul 2019 16:54

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 61      | 72.5  | 10.6  | 16.0# |
| 70      | 0.0   | 6.6   | 9.8#  |





#38

Carbon Tetrachloride

Concen: 3.963 ug/l

RT: 7.03 min Scan# 569

Delta R.T. -0.08 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

Instrument :

MSVOA\_D

ClientSampleId :

EO-02-071519-A

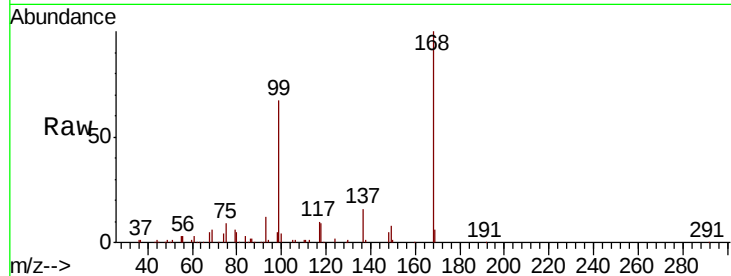
Tot Ion:117 Resp: 55935

Ion Ratio Lower Upper

117 100

119 4.7 80.0 120.0#

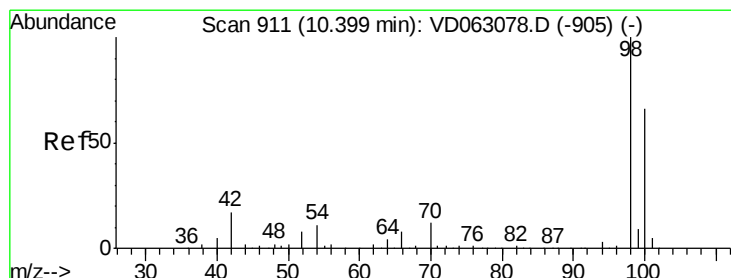
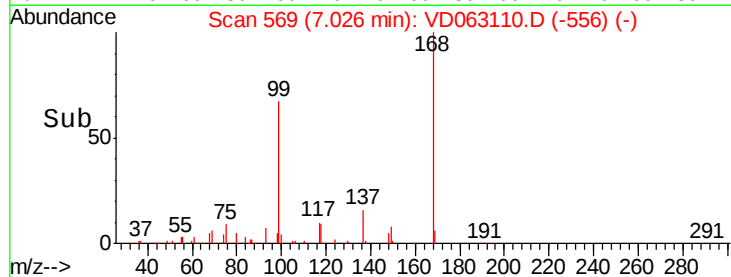
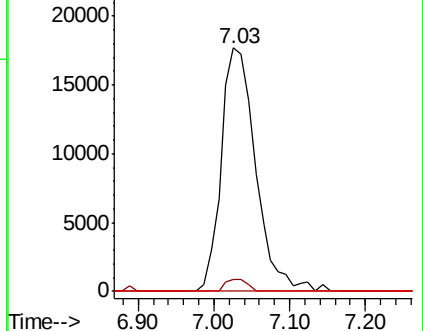
121 0.0 25.0 37.4#



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: 46.242 ug/l

RT: 10.40 min Scan# 912

Delta R.T. 0.00 min

Lab File: VD063110.D

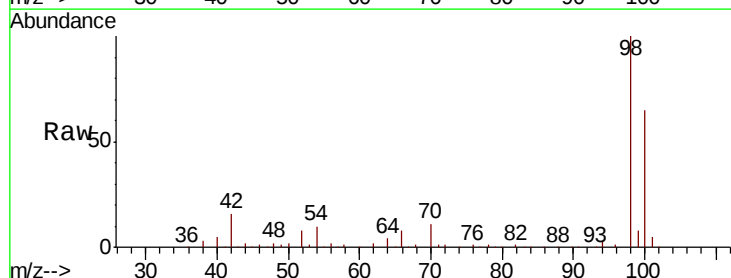
Acq: 16 Jul 2019 16:54

Tgt Ion: 98 Resp: 817133

Ion Ratio Lower Upper

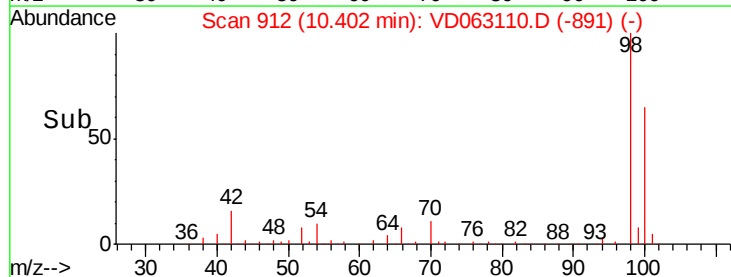
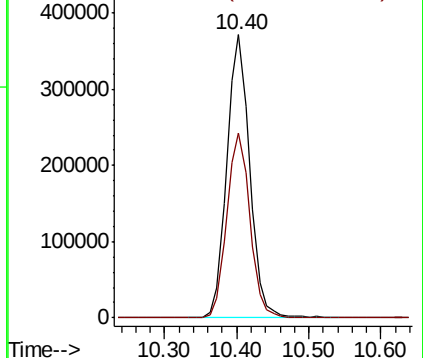
98 100

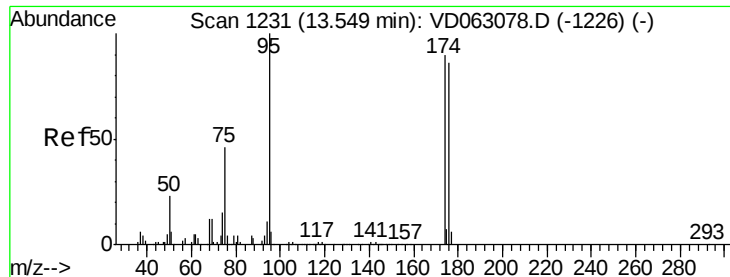
100 65.3 53.5 80.3



Abundance Ion 98.05 (97.75 to 98.75): V

Ion 100.05 (99.75 to 100.75): V

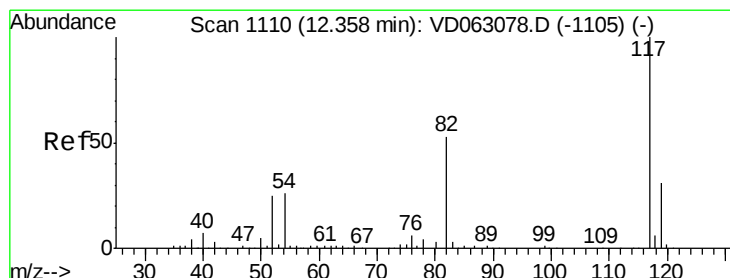
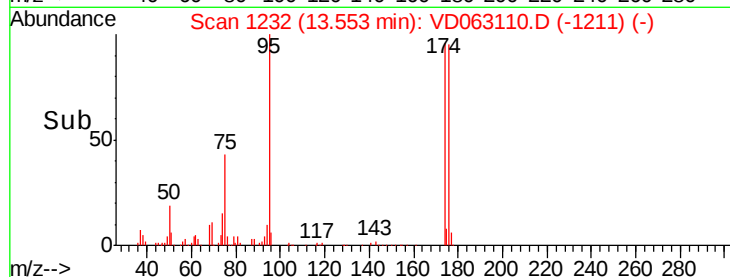
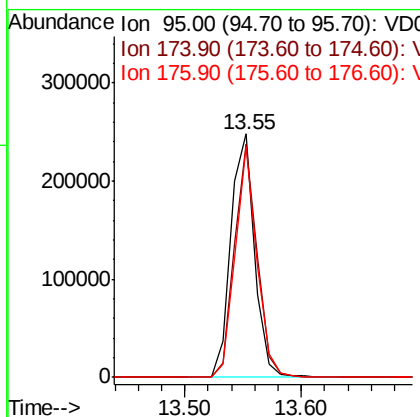
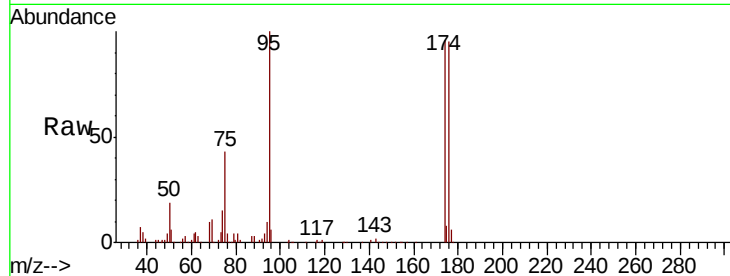




#62  
4-Bromofluorobenzene  
Concen: 42.659 ug/l  
RT: 13.55 min Scan# 1232  
Delta R.T. 0.00 min  
Lab File: VD063110.D  
Acq: 16 Jul 2019 16:54

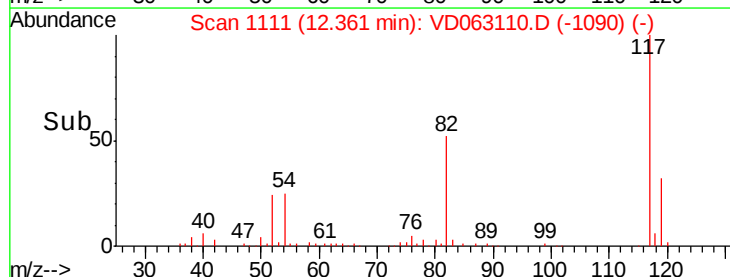
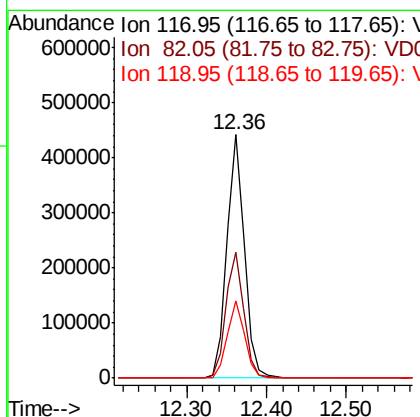
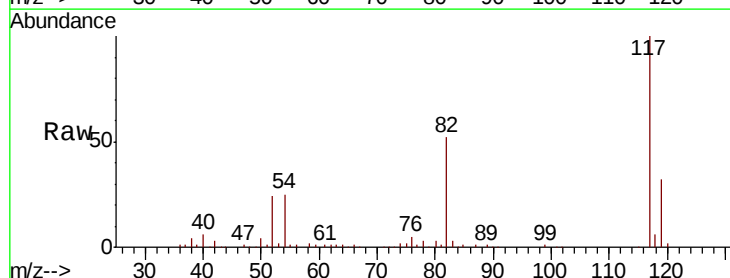
Instrument :  
MSVOA\_D  
ClientSampleId :  
EO-02-071519-A

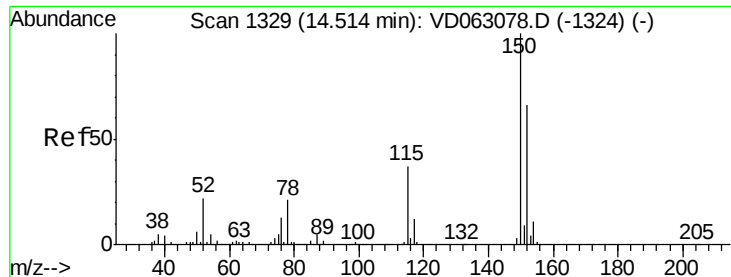
Tot Ion: 95 Resp: 348745  
Ion Ratio Lower Upper  
95 100  
174 95.7 0.0 180.6  
176 94.6 0.0 172.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.36 min Scan# 1111  
Delta R.T. 0.00 min  
Lab File: VD063110.D  
Acq: 16 Jul 2019 16:54

Tgt Ion: 117 Resp: 687832  
Ion Ratio Lower Upper  
117 100  
82 51.7 42.3 63.5  
119 31.8 25.2 37.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.52 min Scan# 1330

Delta R.T. 0.00 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

Instrument :

MSVOA\_D

ClientSampleId :

EO-02-071519-A

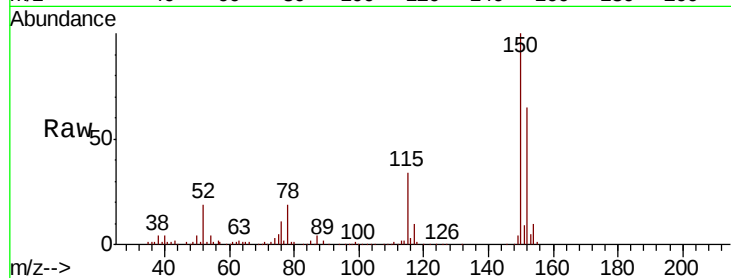
Tot Ion:152 Resp: 317536

Ion Ratio Lower Upper

152 100

115 53.1 28.9 86.8

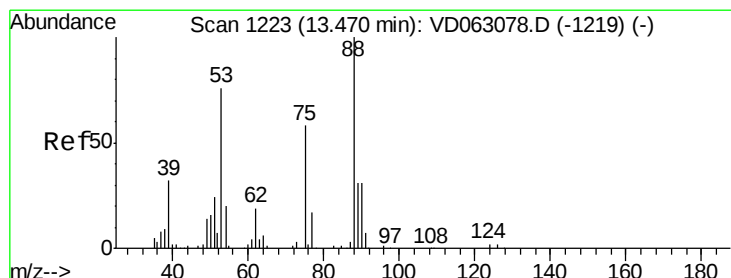
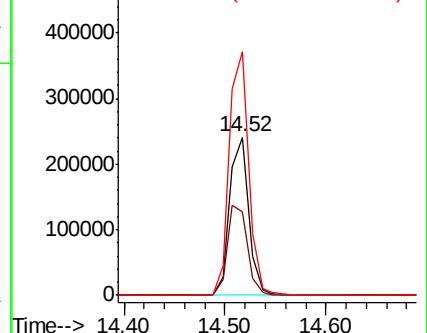
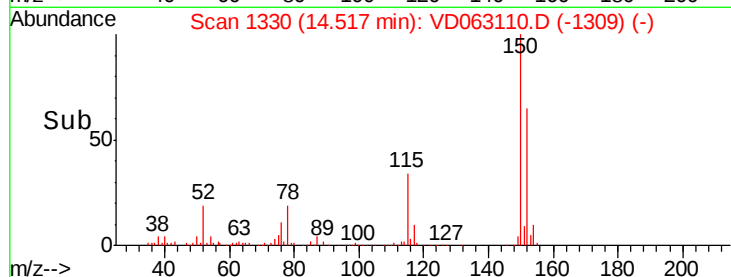
150 154.1 0.0 313.8



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: 125.719 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.08 min

Lab File: VD063110.D

Acq: 16 Jul 2019 16:54

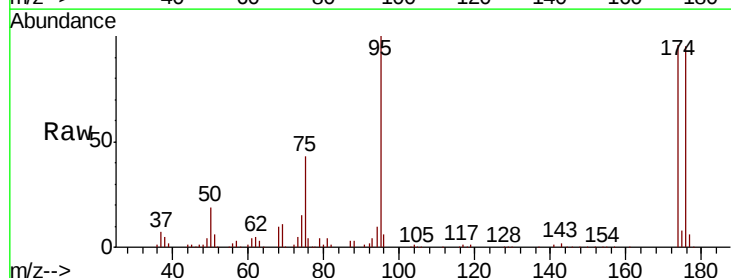
Tgt Ion: 75 Resp: 161712

Ion Ratio Lower Upper

75 100

53 0.0 104.4 156.6#

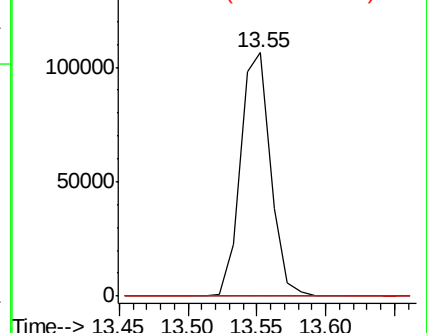
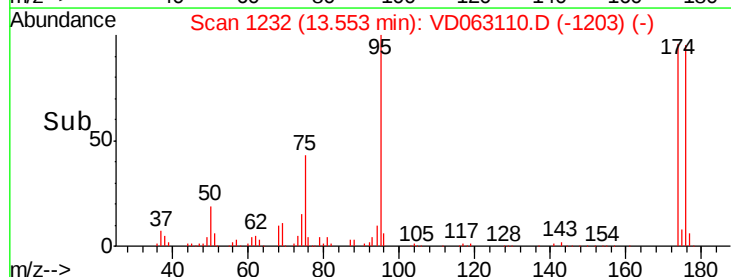
89 0.0 43.1 64.7#

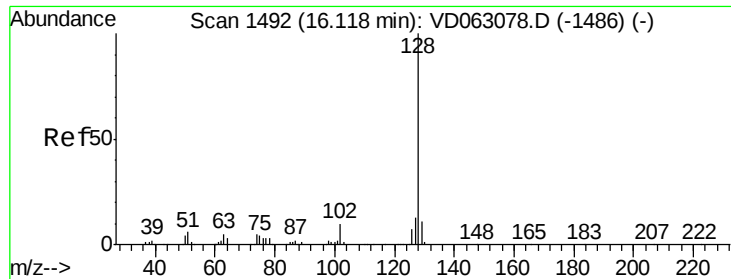


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC





#95  
 Naphthalene  
 Concen: 2.529 ug/l  
 RT: 16.12 min Scan# 1493  
 Delta R.T. 0.00 min  
 Lab File: VD063110.D  
 Acq: 16 Jul 2019 16:54

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 EO-02-071519-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.7  | 10.7  | 16.1  |
| 129     | 10.7  | 8.7   | 13.1  |

