

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD051619\  
 Data File : VD062417.D  
 Acq On : 16 May 2019 15:04  
 Operator : FY/SY  
 Sample : K2848-02RE  
 Misc : 5.04g/5mL/MSVOA D/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 FK-GF-02-040-ARE

Quant Time: May 17 02:29:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D050719S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 14:26:29 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.04  | 168  | 558591   | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 8.22  | 114  | 765723   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 592013   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 206912   | 50.00 | ug/l  | 0.01     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.45  | 65   | 270733   | 52.15 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 104.30% |          |
| 35) Dibromofluoromethane    | 6.92  | 113  | 296492   | 46.67 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 93.34%  |          |
| 50) Toluene-d8              | 10.41 | 98   | 549162   | 35.85 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 71.70%  |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 226772   | 36.87 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 73.74%  |          |

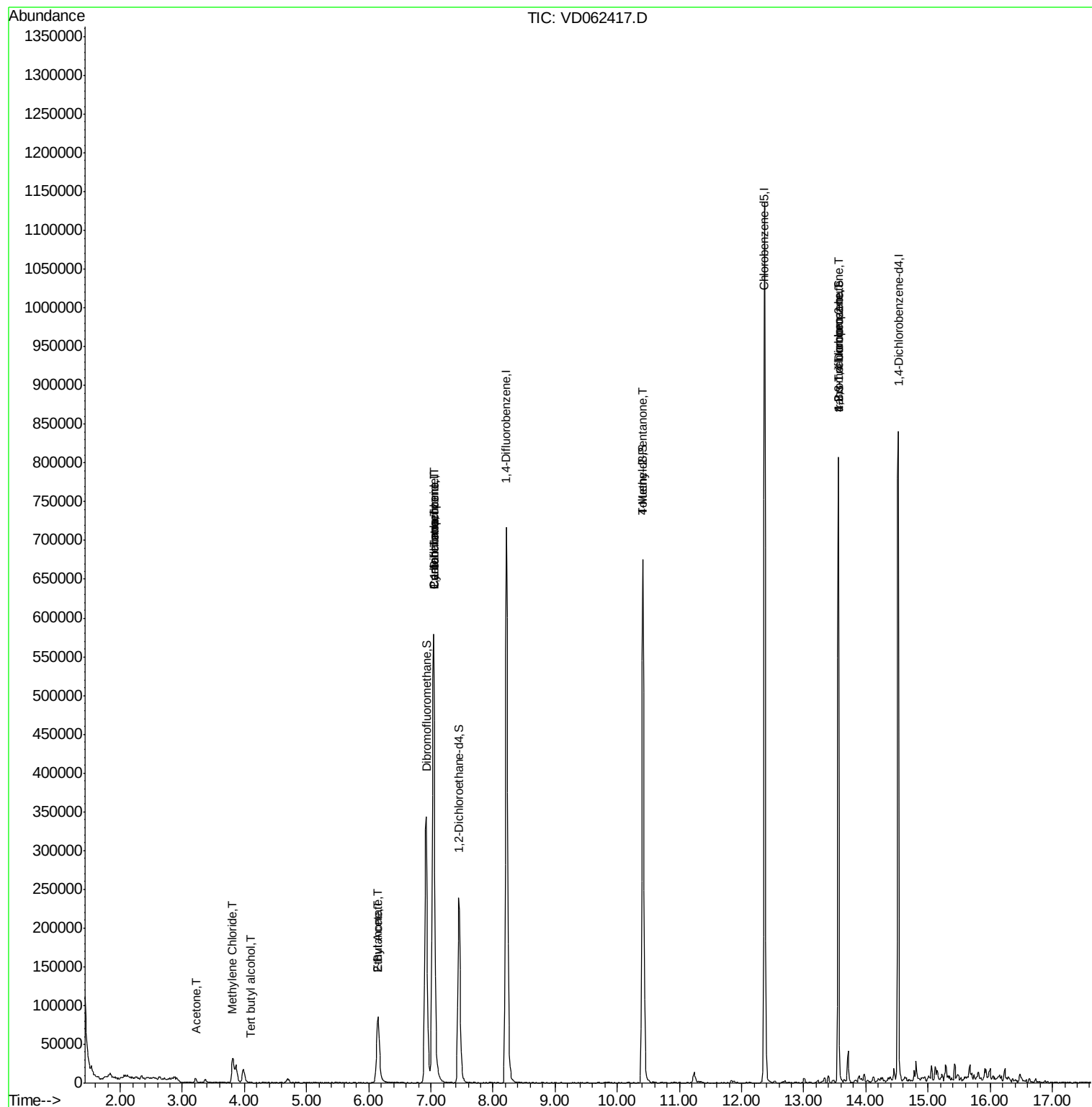
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.10  | 59   | 487      | 1.838     | ug/l # | 76     |
| 16) Acetone                    | 3.22  | 43   | 9316     | 8.558     | ug/l # | 71     |
| 18) Methyl Acetate             | 3.63  | 43   | 217      | Below Cal | #      | 53     |
| 20) Methylene Chloride         | 3.82  | 84   | 22687    | 4.991     | ug/l   | 93     |
| 25) 2-Butanone                 | 6.14  | 43   | 5673     | 4.778     | ug/l # | 56     |
| 31) Cyclohexane                | 7.04  | 56   | 11868    | 2.179     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.04  | 75   | 42166    | 6.716     | ug/l # | 47     |
| 37) Ethyl Acetate              | 6.14  | 43   | 5673     | 2.131     | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.04  | 117  | 56661    | 6.521     | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 10.42 | 43   | 2981     | 1.228     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 13.56 | 75   | 90223    | 36.691    | ug/l # | 43     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 96825    | 139.480   | ug/l # | 16     |

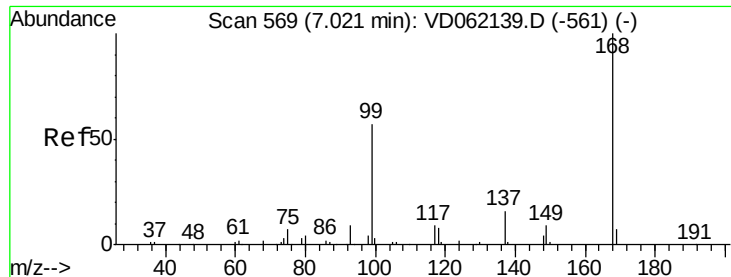
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD051619\  
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ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
FK-GF-02-040-ARE

Quant Time: May 17 02:29:12 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D050719S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 07 14:26:29 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 571

Delta R.T. 0.02 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Instrument :

MSVOA\_D

ClientSampleId :

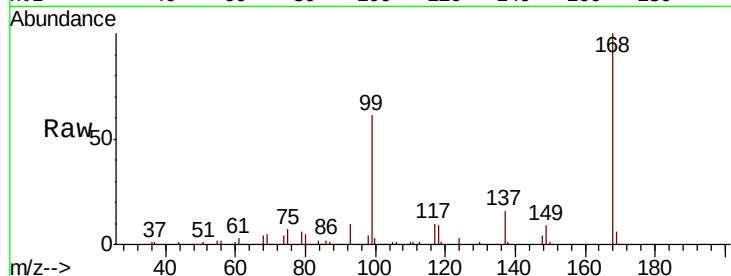
FK-GF-02-040-ARE

Tot Ion:168 Resp: 558591

Ion Ratio Lower Upper

168 100

99 61.4 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.04

200000

150000

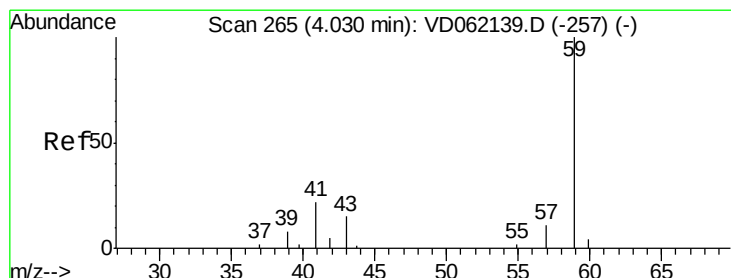
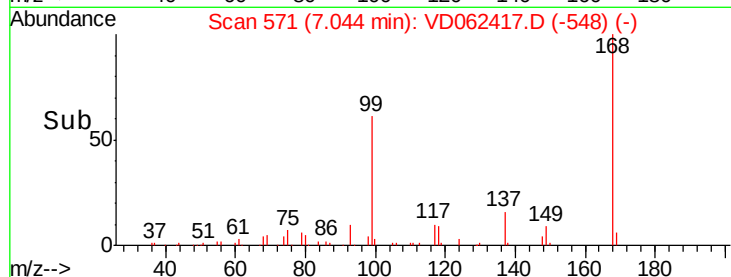
100000

50000

0

6.90 7.00 7.10 7.20

Time-->



#11

Tert butyl alcohol

Concen: 1.838 ug/l

RT: 4.10 min Scan# 272

Delta R.T. 0.07 min

Lab File: VD062417.D

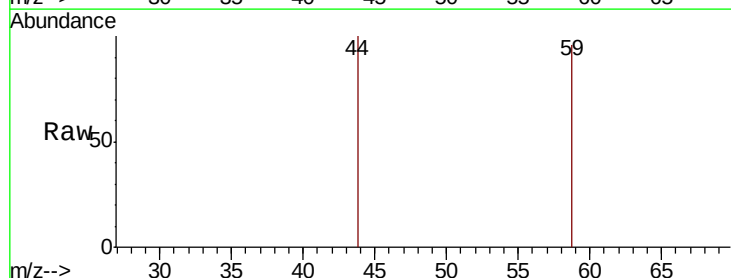
Acq: 16 May 2019 15:04

Tgt Ion: 59 Resp: 487

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

800

600

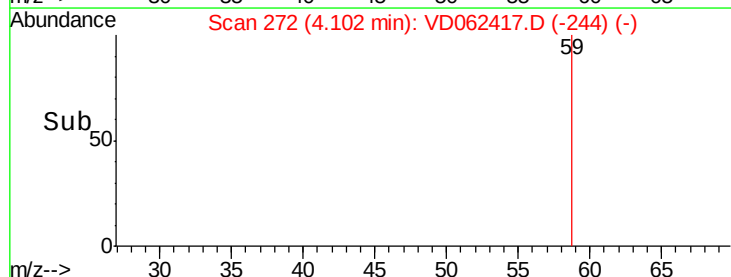
400

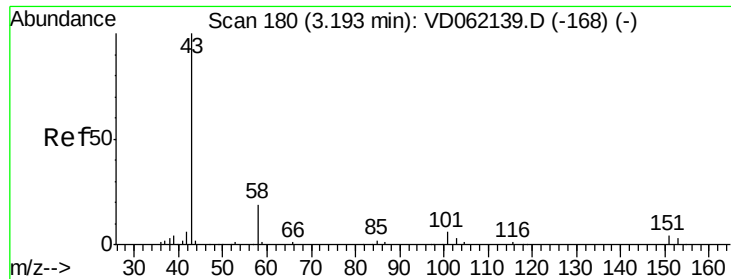
200

0

4.08 4.10 4.12

Time-->





#16

Acetone

Concen: 8.558 ug/l

RT: 3.22 min Scan# 182

Delta R.T. 0.02 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Instrument :

MSVOA\_D

ClientSampleId :

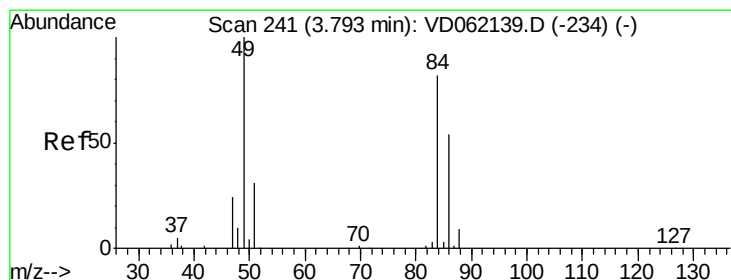
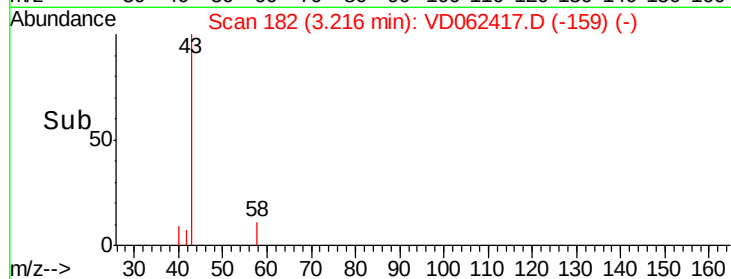
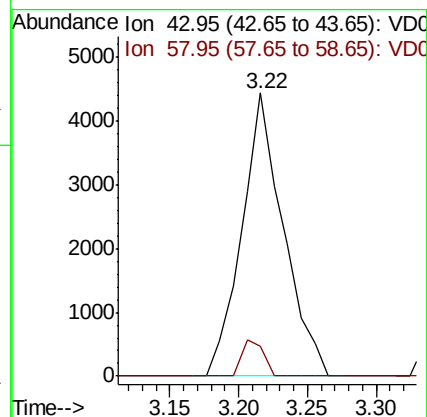
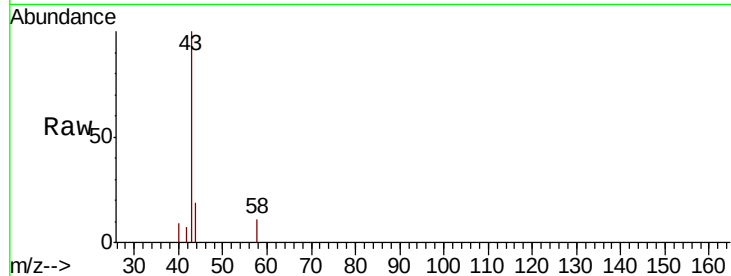
FK-GF-02-040-ARE

Tot Ion: 43 Resp: 9316

Ion Ratio Lower Upper

43 100

58 10.5 19.9 29.9#



#20

Methylene Chloride

Concen: 4.991 ug/l

RT: 3.82 min Scan# 243

Delta R.T. 0.02 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Tgt Ion: 84 Resp: 22687

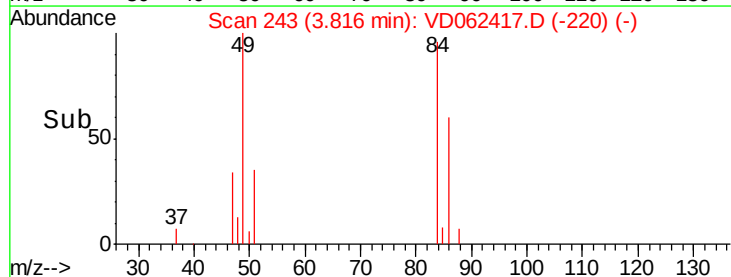
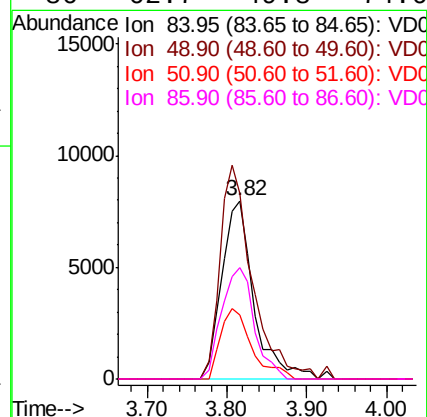
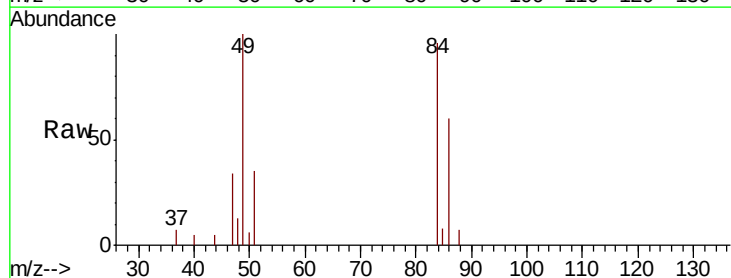
Ion Ratio Lower Upper

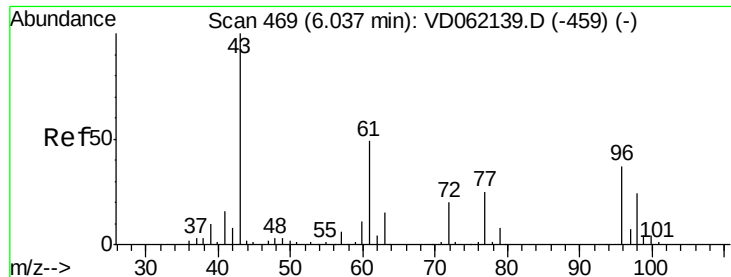
84 100

49 103.9 94.0 141.0

51 35.9 29.0 43.4

86 62.7 49.8 74.6





#25

2-Butanone

Concen: 4.778 ug/l

RT: 6.14 min Scan# 479

Delta R.T. 0.10 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Instrument :

MSVOA\_D

ClientSampleId :

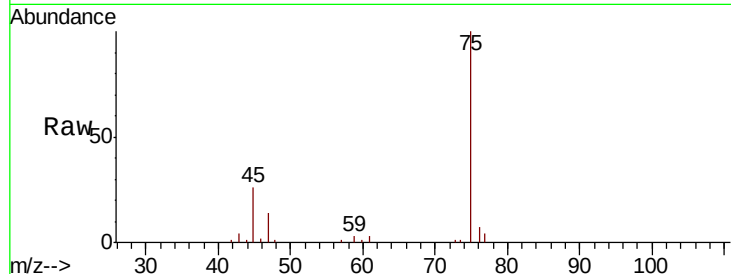
FK-GF-02-040-ARE

Tot Ion: 43 Resp: 5673

Ion Ratio Lower Upper

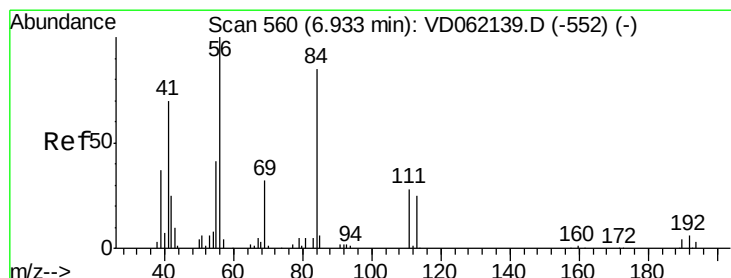
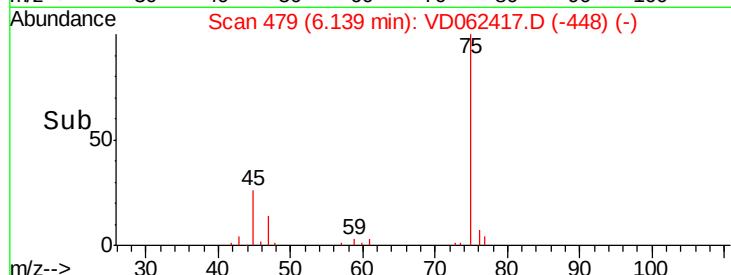
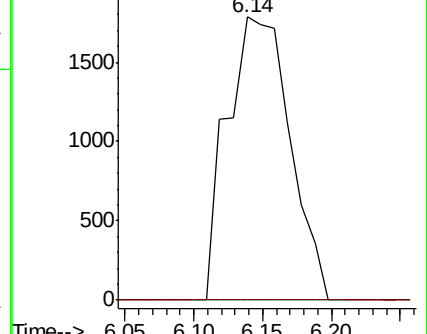
43 100

72 0.0 16.2 24.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC



#31

Cyclohexane

Concen: 2.179 ug/l

RT: 7.04 min Scan# 571

Delta R.T. 0.11 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

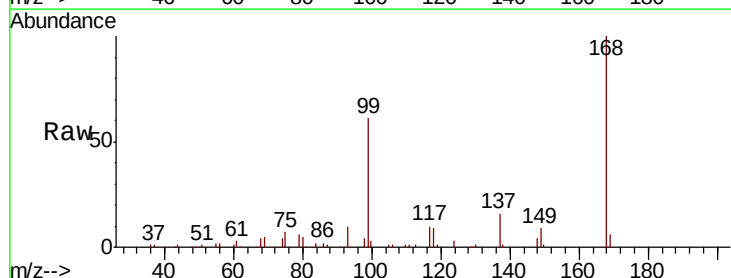
Tgt Ion: 56 Resp: 11868

Ion Ratio Lower Upper

56 100

69 262.9 25.8 38.6#

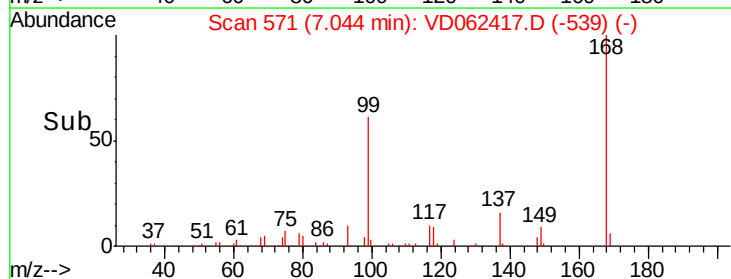
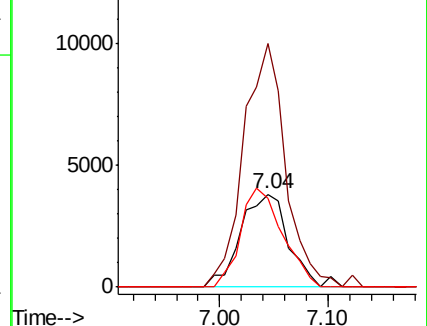
84 96.2 72.2 108.4

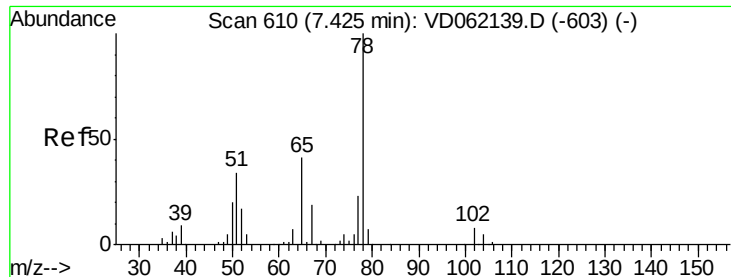


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.05 (83.75 to 84.75): VDC

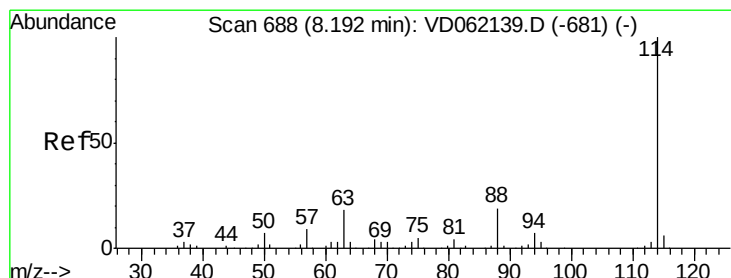
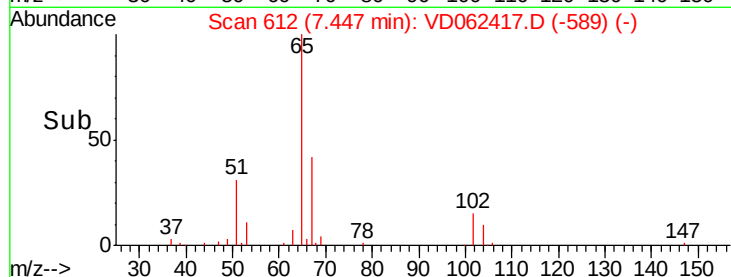
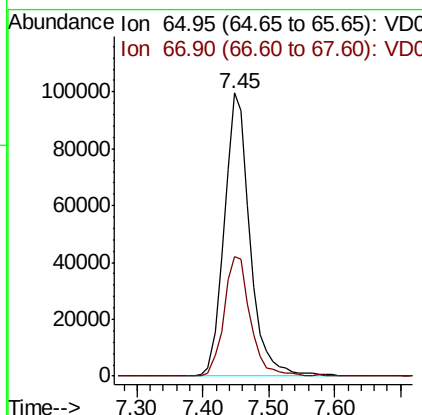
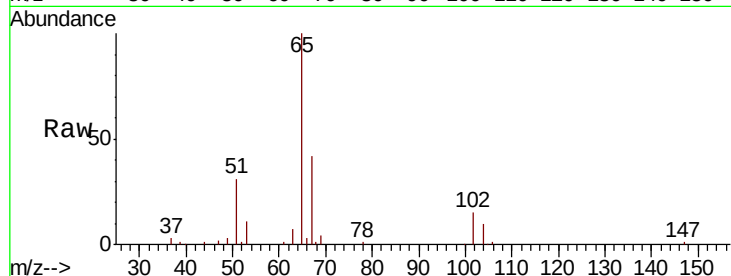




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.154 ug/l  
 RT: 7.45 min Scan# 612  
 Delta R.T. 0.02 min  
 Lab File: VD062417.D  
 Acq: 16 May 2019 15:04

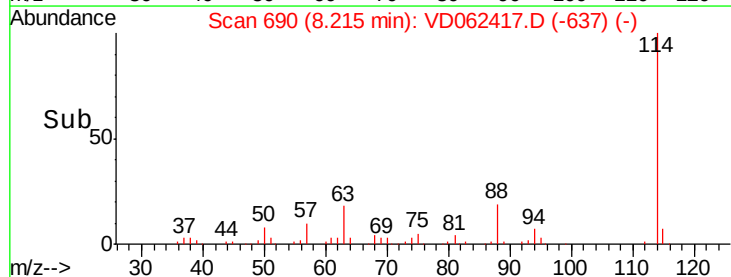
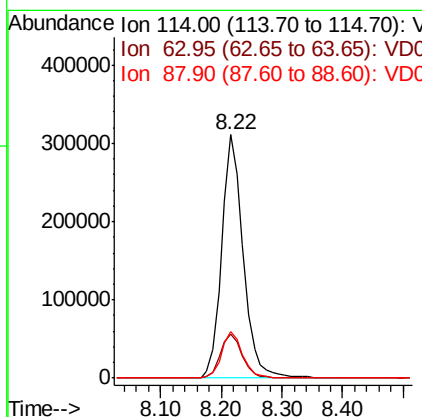
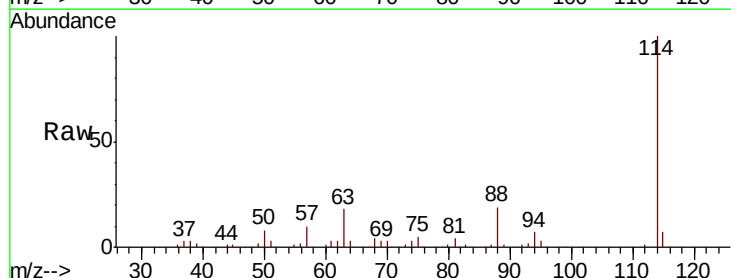
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 FK-GF-02-040-ARE

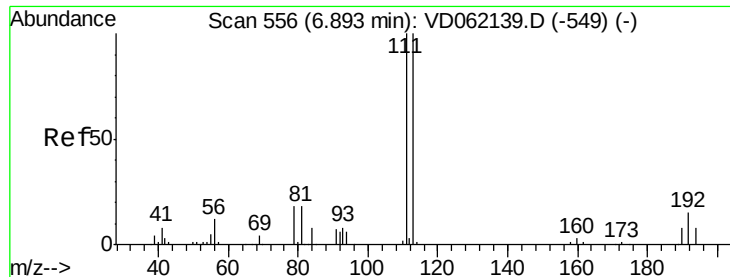
Tot Ion: 65 Resp: 270733  
 Ion Ratio Lower Upper  
 65 100  
 67 42.0 0.0 98.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.22 min Scan# 690  
 Delta R.T. 0.02 min  
 Lab File: VD062417.D  
 Acq: 16 May 2019 15:04

Tgt Ion: 114 Resp: 765723  
 Ion Ratio Lower Upper  
 114 100  
 63 18.2 0.0 32.4  
 88 18.9 0.0 33.6





#35

Dibromofluoromethane

Concen: 46.667 ug/l

RT: 6.92 min Scan# 558

Delta R.T. 0.02 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Instrument :

MSVOA\_D

ClientSampleId :

FK-GF-02-040-ARE

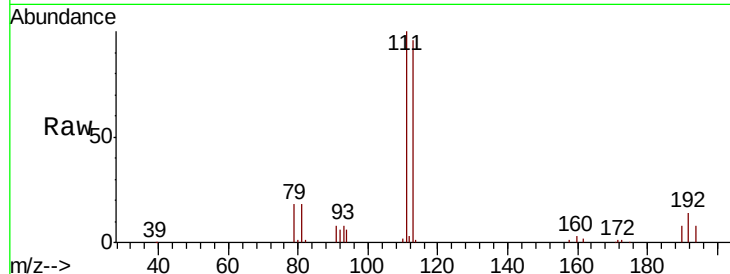
Tot Ion:113 Resp: 296492

Ion Ratio Lower Upper

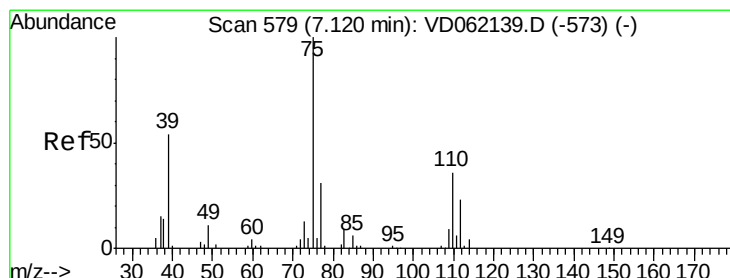
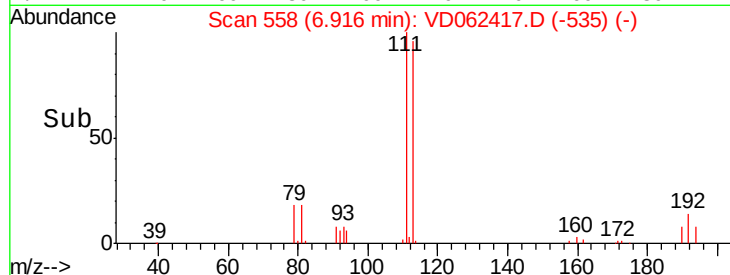
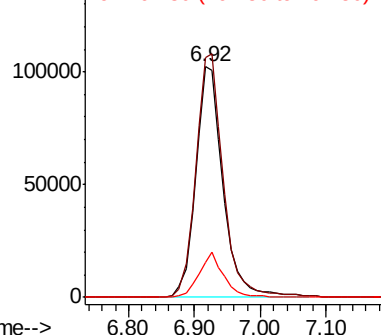
113 100

111 104.4 78.5 117.7

192 15.0 13.0 19.4



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: 6.716 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.08 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

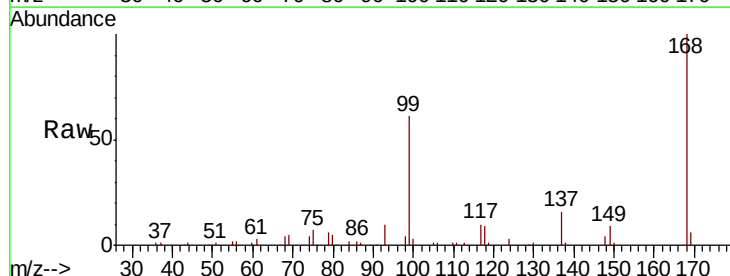
Tgt Ion: 75 Resp: 42166

Ion Ratio Lower Upper

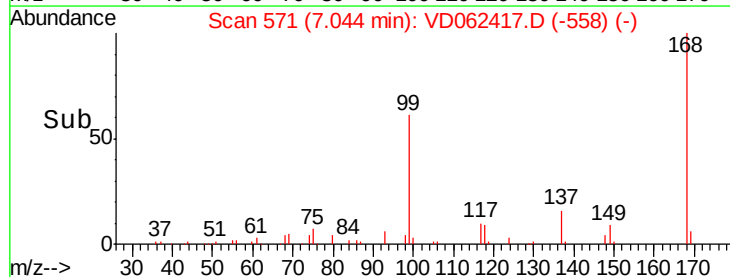
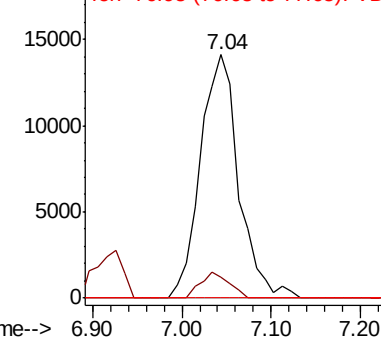
75 100

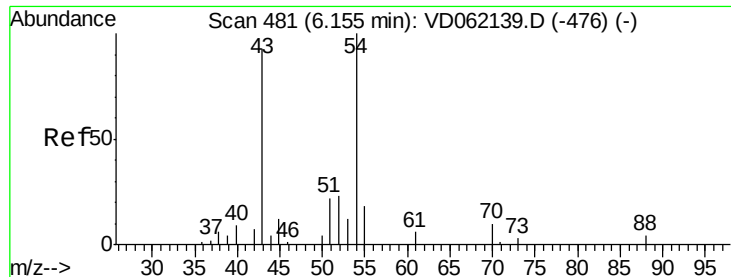
110 8.6 19.1 57.1#

77 0.0 25.6 38.4#



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





#37

Ethyl Acetate

Concen: 2.131 ug/l

RT: 6.14 min Scan# 479

Delta R.T. -0.02 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Instrument :

MSVOA\_D

ClientSampleId :

FK-GF-02-040-ARE

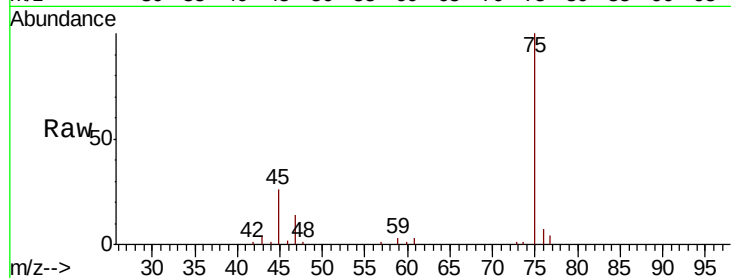
Tot Ion: 43 Resp: 5673

Ion Ratio Lower Upper

43 100

61 83.8 14.7 22.1#

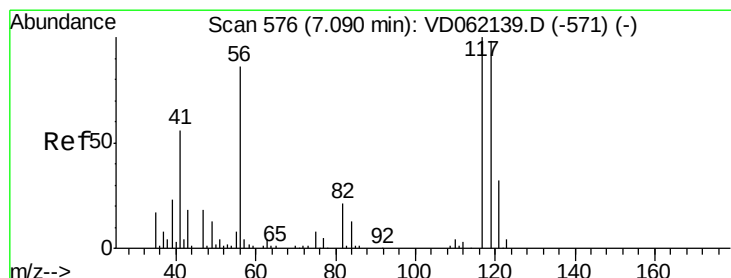
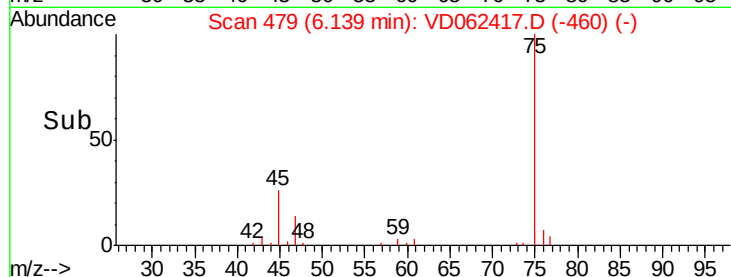
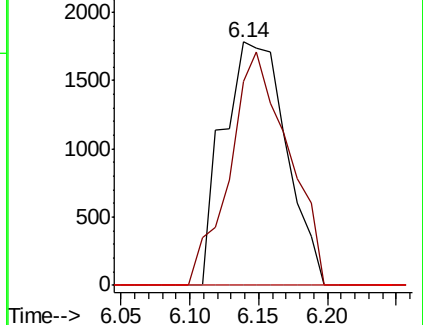
70 0.0 7.8 11.6#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 70.00 (69.70 to 70.70): VDC



#38

Carbon Tetrachloride

Concen: 6.521 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.05 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

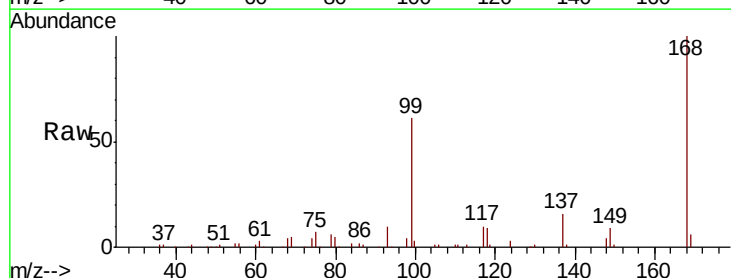
Tgt Ion: 117 Resp: 56661

Ion Ratio Lower Upper

117 100

119 5.8 75.8 113.8#

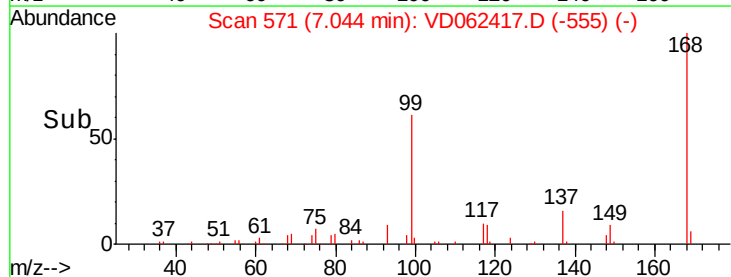
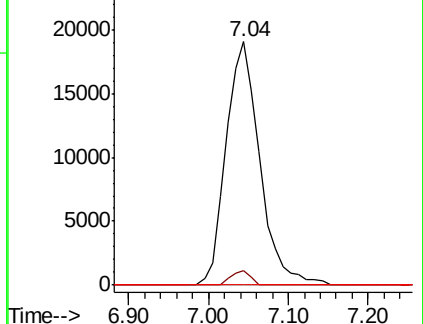
121 0.0 25.9 38.9#



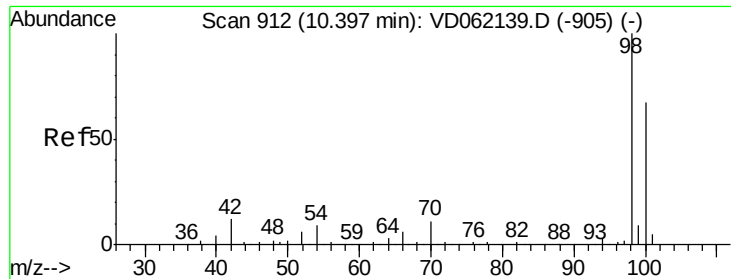
Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V



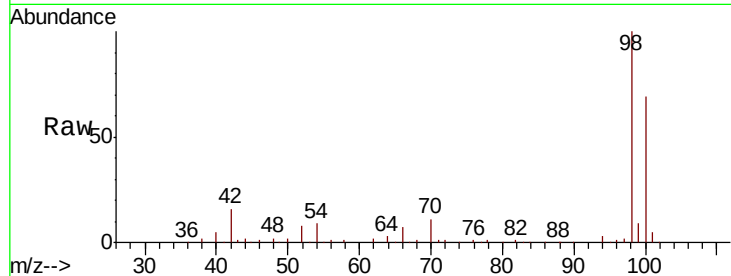




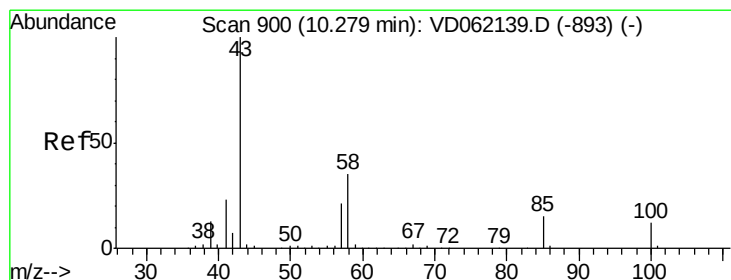
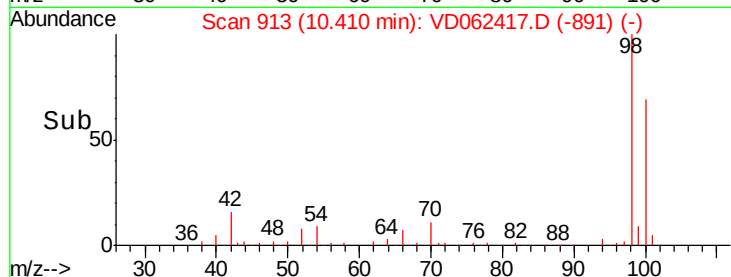
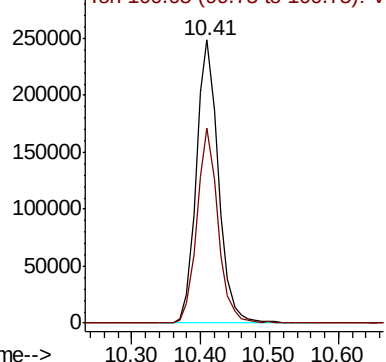
#50  
Toluene-d8  
Concen: 35.850 ug/l  
RT: 10.41 min Scan# 913  
Delta R.T. 0.01 min  
Lab File: VD062417.D  
Acq: 16 May 2019 15:04

Instrument :  
MSVOA\_D  
ClientSampleId :  
FK-GF-02-040-ARE

Tot Ion: 98 Resp: 549162  
Ion Ratio Lower Upper  
98 100  
100 68.8 53.8 80.8

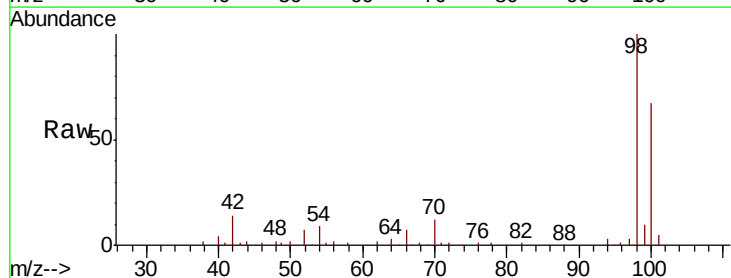


Abundance Ion 98.05 (97.75 to 98.75): VDC  
Ion 100.05 (99.75 to 100.75): VDC

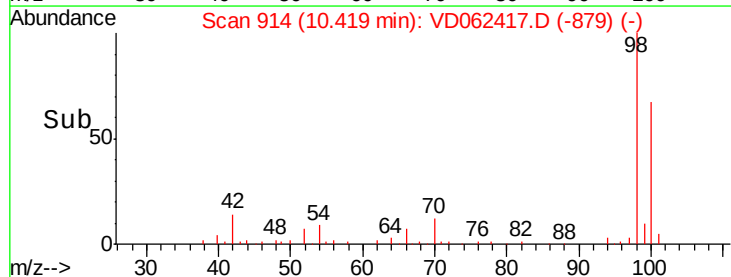
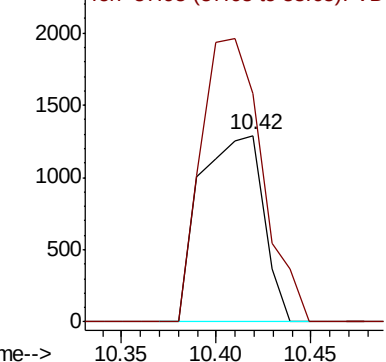


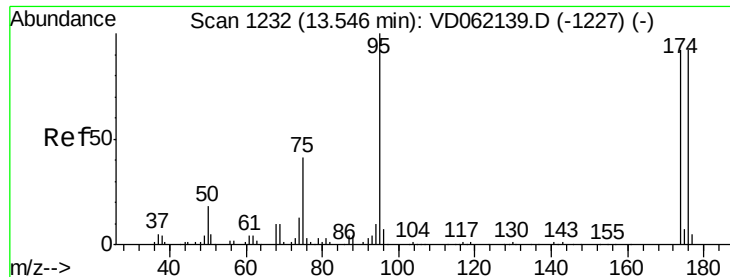
#51  
4-Methyl-2-Pentanone  
Concen: 1.228 ug/l  
RT: 10.42 min Scan# 914  
Delta R.T. 0.14 min  
Lab File: VD062417.D  
Acq: 16 May 2019 15:04

Tgt Ion: 43 Resp: 2981  
Ion Ratio Lower Upper  
43 100  
58 122.3 30.4 45.6#



Abundance Ion 42.95 (42.65 to 43.65): VDC  
Ion 57.95 (57.65 to 58.65): VDC

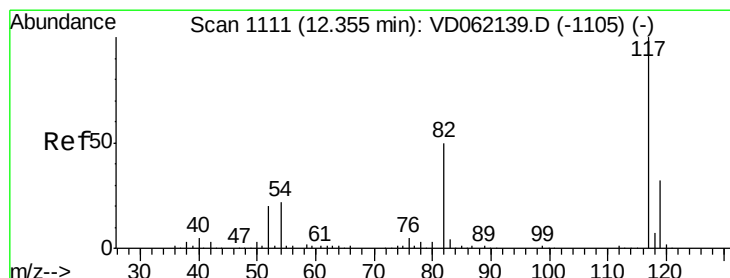
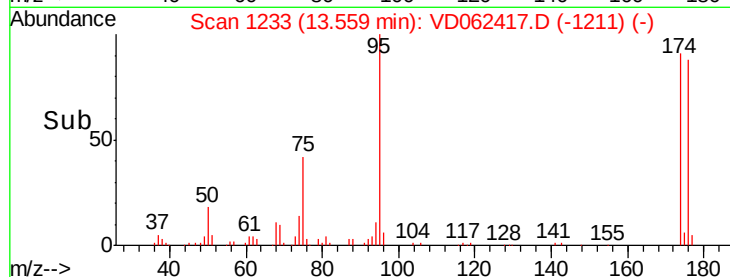
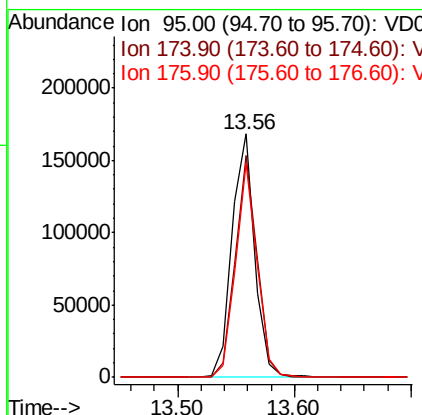
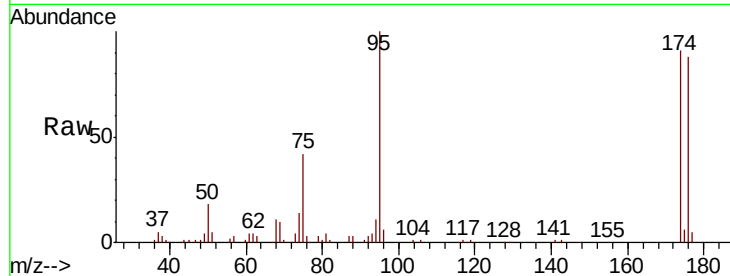




#62  
4-Bromofluorobenzene  
Concen: 36.866 ug/l  
RT: 13.56 min Scan# 1233  
Delta R.T. 0.01 min  
Lab File: VD062417.D  
Acq: 16 May 2019 15:04

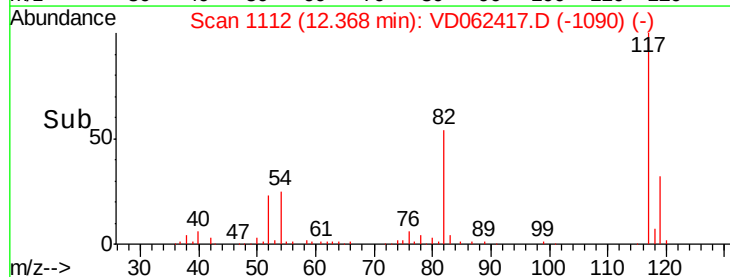
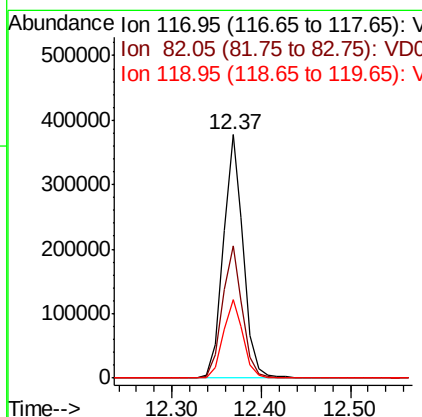
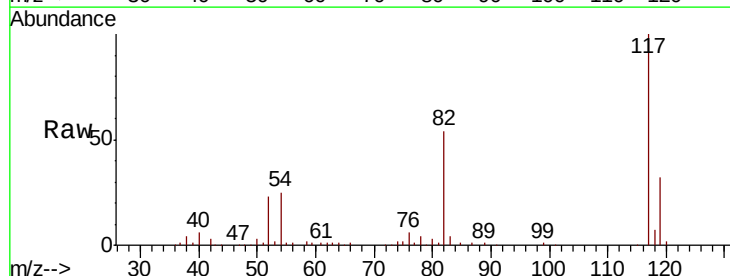
Instrument :  
MSVOA\_D  
ClientSampleId :  
FK-GF-02-040-ARE

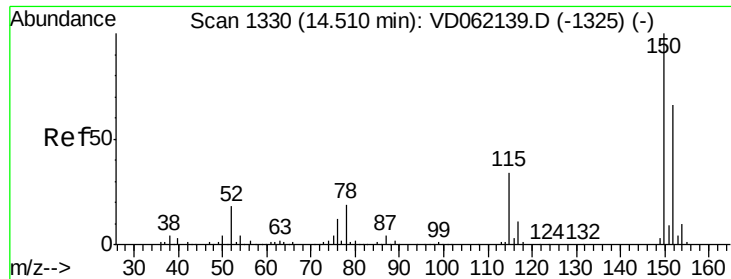
Tot Ion: 95 Resp: 226772  
Ion Ratio Lower Upper  
95 100  
174 91.3 0.0 181.8  
176 88.0 0.0 174.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.37 min Scan# 1112  
Delta R.T. 0.01 min  
Lab File: VD062417.D  
Acq: 16 May 2019 15:04

Tgt Ion: 117 Resp: 592013  
Ion Ratio Lower Upper  
117 100  
82 54.5 36.2 54.2#  
119 32.0 26.2 39.4

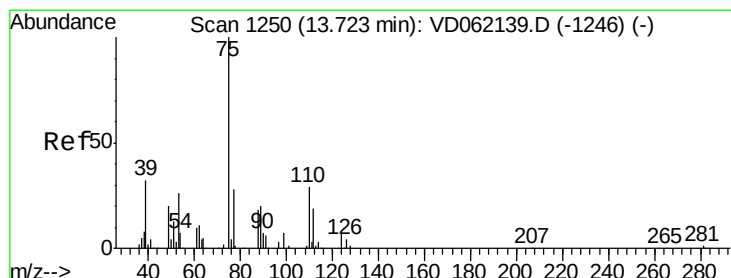
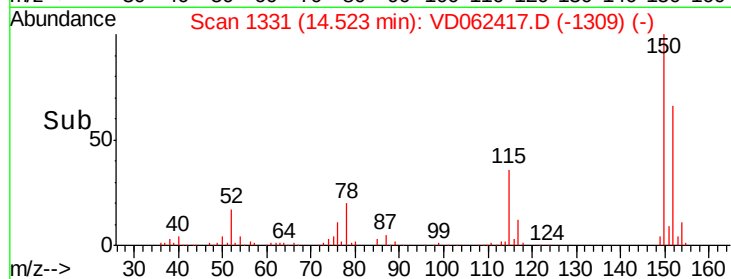
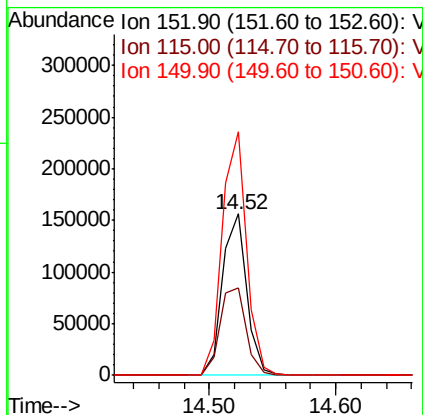
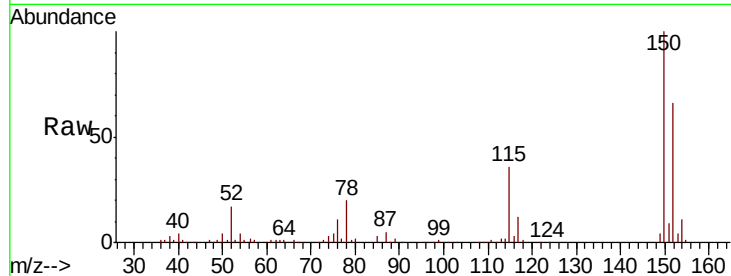




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 14.52 min Scan# 1331  
 Delta R.T. 0.01 min  
 Lab File: VD062417.D  
 Acq: 16 May 2019 15:04

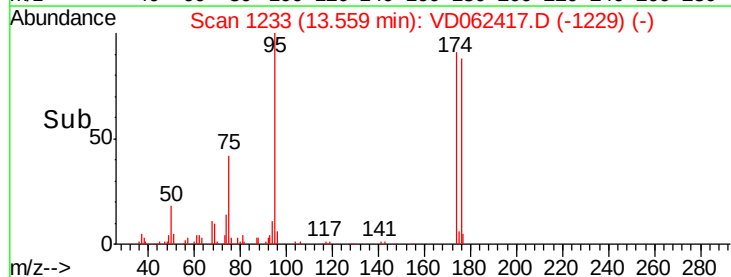
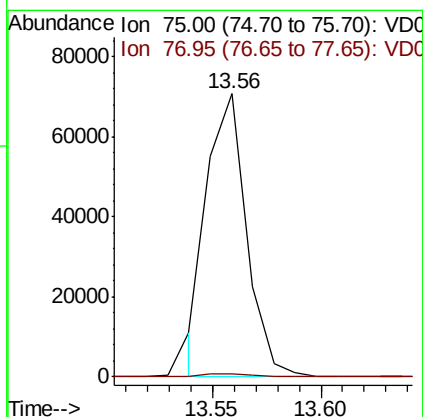
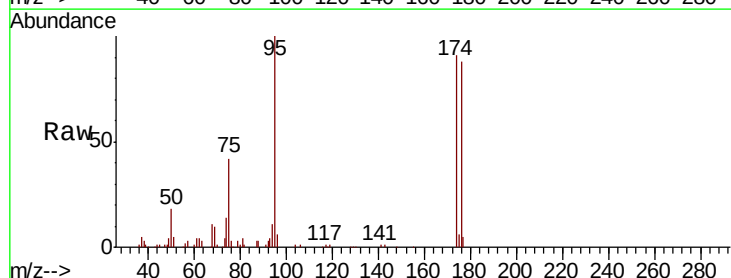
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 FK-GF-02-040-ARE

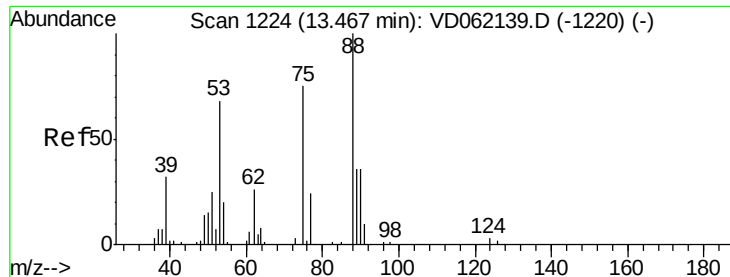
Tot Ion:152 Resp: 206912  
 Ion Ratio Lower Upper  
 152 100  
 115 54.2 30.9 92.7  
 150 150.9 0.0 314.8



#76  
 1,2,3-Trichloropropane  
 Concen: 36.691 ug/l  
 RT: 13.56 min Scan# 1233  
 Delta R.T. -0.16 min  
 Lab File: VD062417.D  
 Acq: 16 May 2019 15:04

Tgt Ion: 75 Resp: 90223  
 Ion Ratio Lower Upper  
 75 100  
 77 1.0 16.4 49.4#





#81

trans-1,4-Dichloro-2-butene

Concen: 139.480 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.09 min

Lab File: VD062417.D

Acq: 16 May 2019 15:04

Instrument :

MSVOA\_D

ClientSampleId :

FK-GF-02-040-ARE

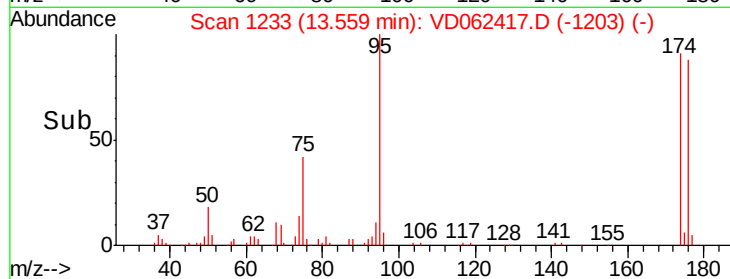
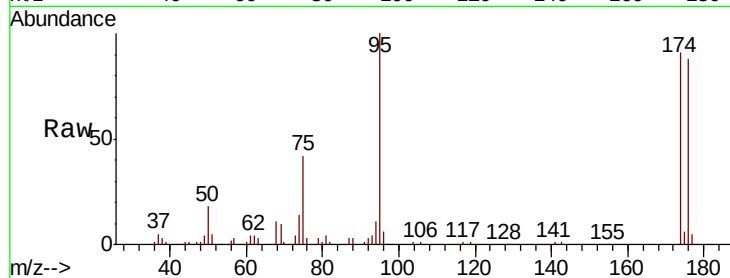
Tot Ion: 75 Resp: 96825

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

