

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD032019\  
 Data File : VD061207.D  
 Acq On : 20 Mar 2019 14:50  
 Operator : VA/AP  
 Sample : K1987-04RE  
 Misc : 5.06g/5ml/MSVOA D/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 20190146-COMPOSITE-ERE

Quant Time: Mar 22 02:00:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D030719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 08 02:35:39 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.05  | 168  | 412493   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.22  | 114  | 682396   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.36 | 117  | 456708   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 129821   | 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   | 197882   | 57.63 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 115.26% |          |
| 35) Dibromofluoromethane    | 6.92  | 113  | 312545   | 61.72 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 123.44% |          |
| 50) Toluene-d8              | 10.40 | 98   | 650410   | 51.14 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.28% |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 181948   | 36.87 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 73.74%  |          |

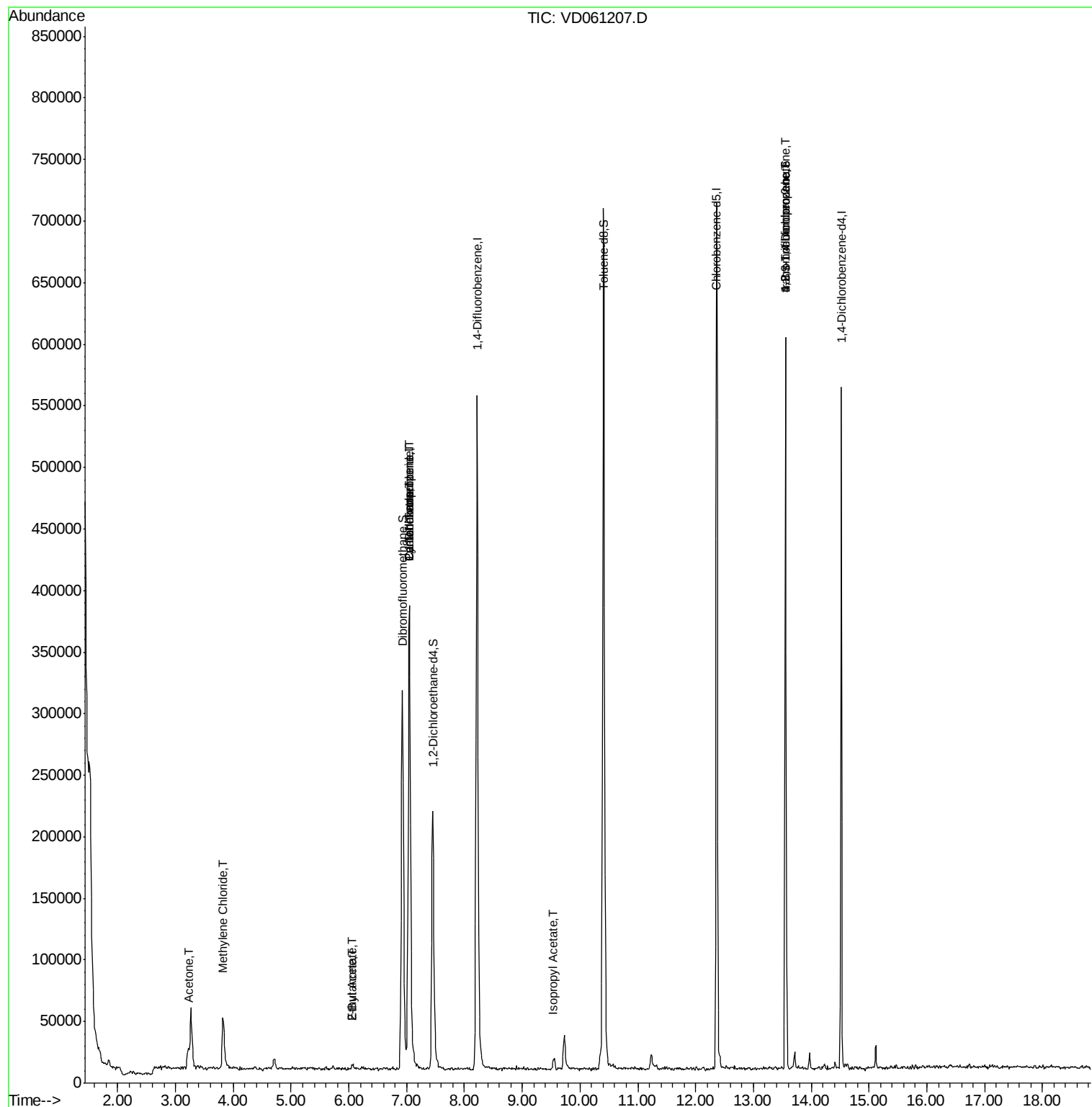
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.15  | 94   | 182      | Below Cal | #      | 8      |
| 16) Acetone                    | 3.23  | 43   | 37771    | 38.469    | ug/l   | 93     |
| 20) Methylene Chloride         | 3.82  | 84   | 34336    | 3.315     | ug/l   | 88     |
| 25) 2-Butanone                 | 6.05  | 43   | 8204     | 7.364     | ug/l # | 86     |
| 31) Cyclohexane                | 7.05  | 56   | 6991     | 1.151     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 29708    | 5.051     | ug/l # | 47     |
| 37) Ethyl Acetate              | 6.05  | 43   | 8204     | 2.972     | ug/l # | 66     |
| 38) Carbon Tetrachloride       | 7.05  | 117  | 38887    | 6.002     | ug/l # | 14     |
| 43) Isopropyl Acetate          | 9.54  | 43   | 7768     | 2.032     | ug/l # | 43     |
| 76) 1,2,3-Trichloropropane     | 13.55 | 75   | 47745    | 25.563    | ug/l # | 44     |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 67062    | 121.789   | ug/l # | 17     |

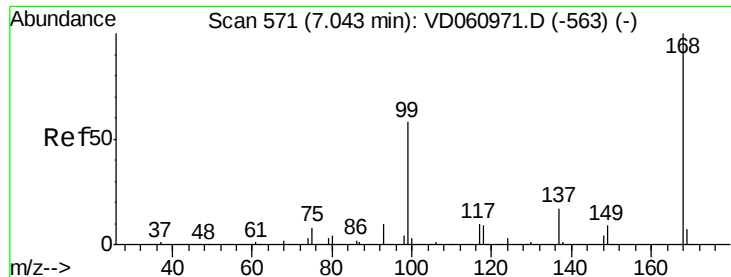
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD032019\  
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Sample : K1987-04RE  
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ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
20190146-COMPOSITE-ERE

Quant Time: Mar 22 02:00:09 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D030719S.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 08 02:35:39 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 571

Delta R.T. 0.00 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

Instrument :

MSVOA\_D

ClientSampleId :

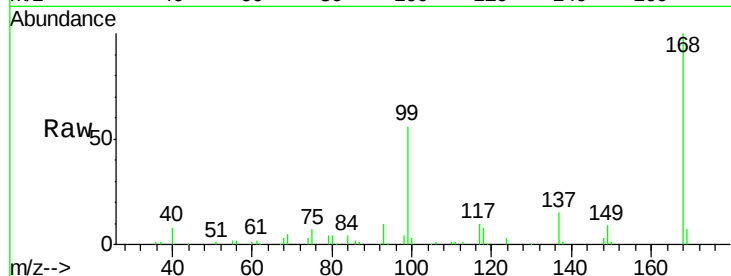
20190146-COMPOSITE-ERE

Tot Ion:168 Resp: 412493

Ion Ratio Lower Upper

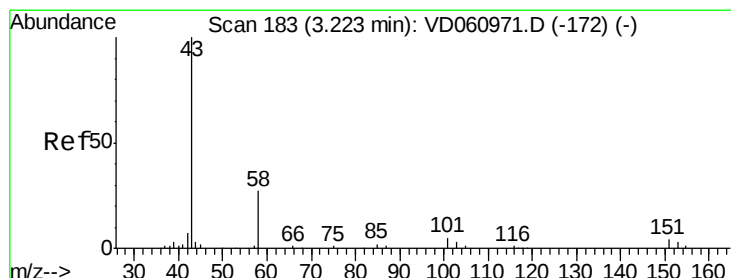
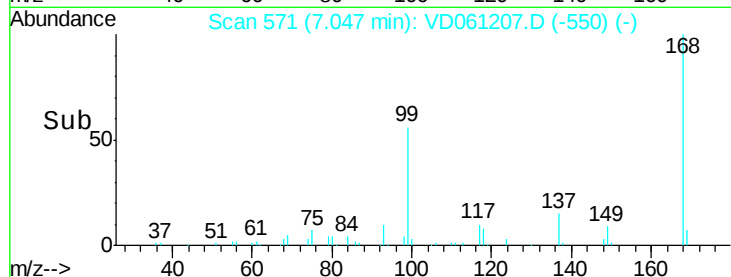
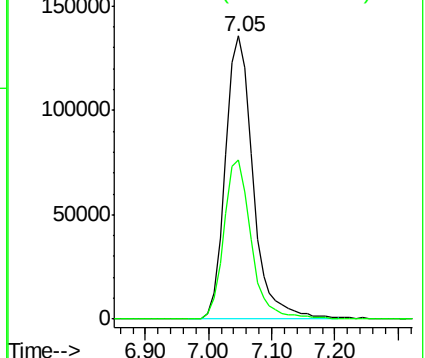
168 100

99 56.2 47.3 70.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#16

Acetone

Concen: 38.469 ug/l

RT: 3.23 min Scan# 183

Delta R.T. 0.00 min

Lab File: VD061207.D

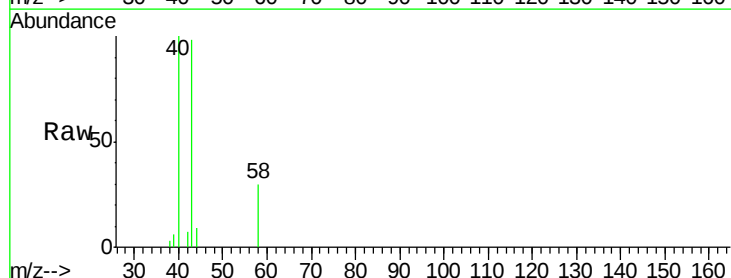
Acq: 20 Mar 2019 14:50

Tgt Ion: 43 Resp: 37771

Ion Ratio Lower Upper

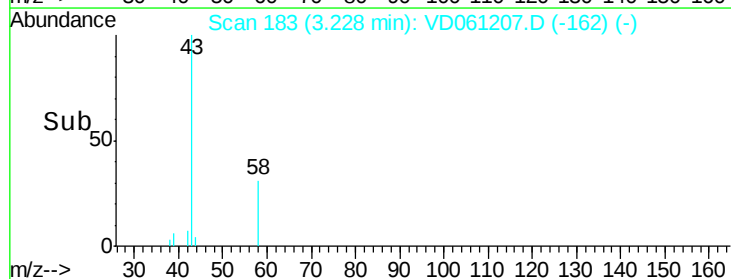
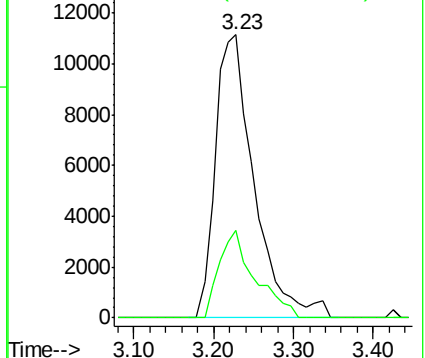
43 100

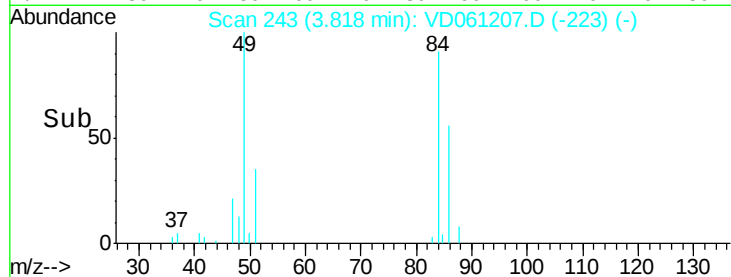
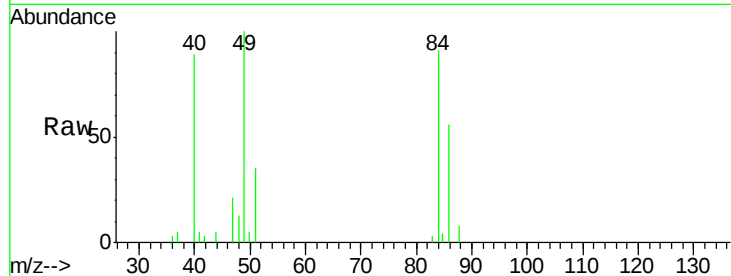
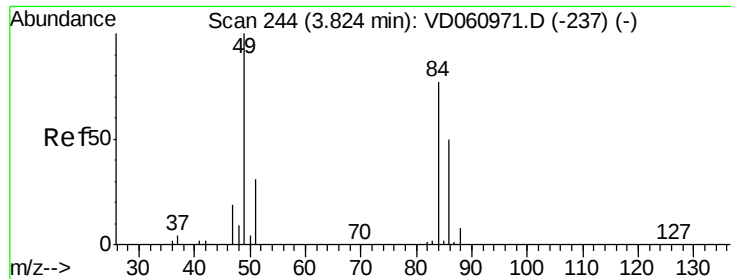
58 30.8 21.6 32.4



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

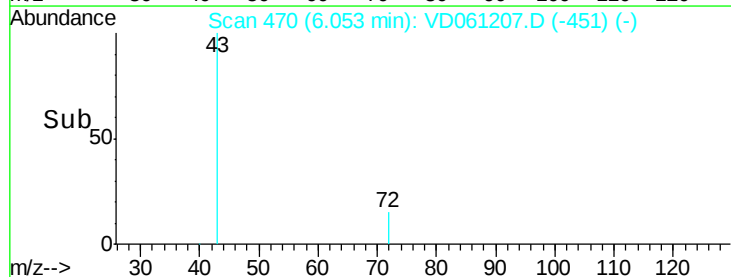
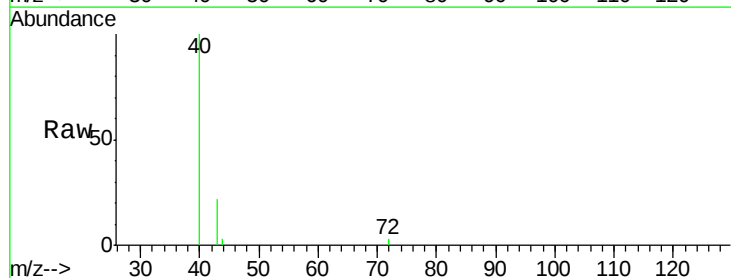
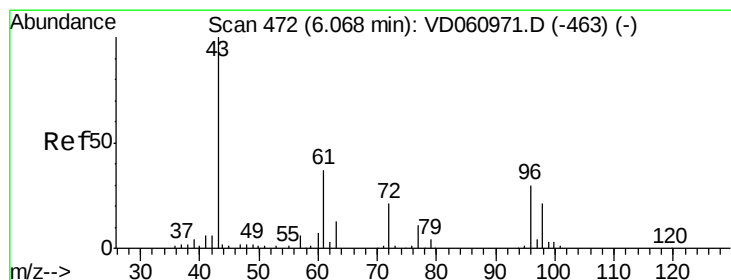
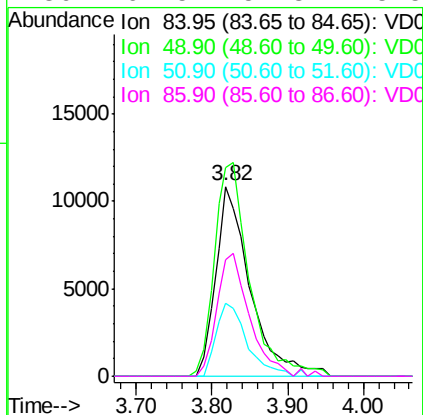




#20  
Methylene Chloride  
Concen: 3.315 ug/l  
RT: 3.82 min Scan# 243  
Delta R.T. -0.00 min  
Lab File: VD061207.D  
Acq: 20 Mar 2019 14:50

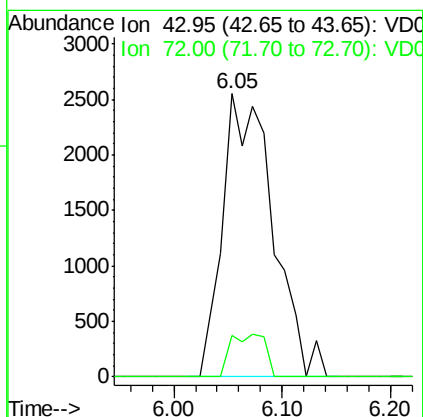
Instrument :  
MSVOA\_D  
ClientSampleId :  
20190146-COMPOSITE-ERE

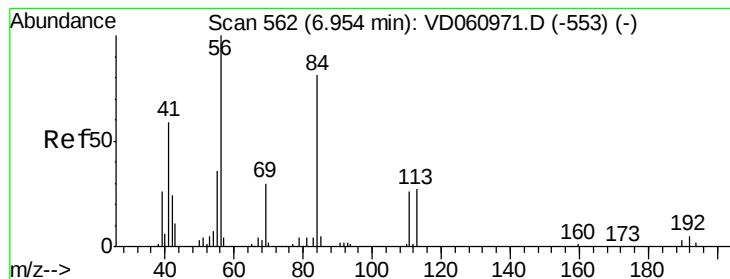
Tot Ion: 84 Resp: 34336  
Ion Ratio Lower Upper  
84 100  
49 109.9 104.2 156.2  
51 38.3 32.3 48.5  
86 61.5 52.3 78.5



#25  
2-Butanone  
Concen: 7.364 ug/l  
RT: 6.05 min Scan# 470  
Delta R.T. -0.02 min  
Lab File: VD061207.D  
Acq: 20 Mar 2019 14:50

Tgt Ion: 43 Resp: 8204  
Ion Ratio Lower Upper  
43 100  
72 14.6 16.7 25.1#





#31

Cvclohexane

Concen: 1.151 ug/l

RT: 7.05 min Scan# 571

Delta R.T. 0.09 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

Instrument :

MSVOA\_D

ClientSampleId :

20190146-COMPOSITE-ERE

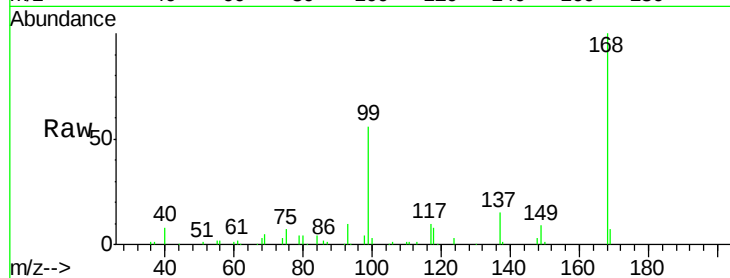
Tot Ion: 56 Resp: 6991

Ion Ratio Lower Upper

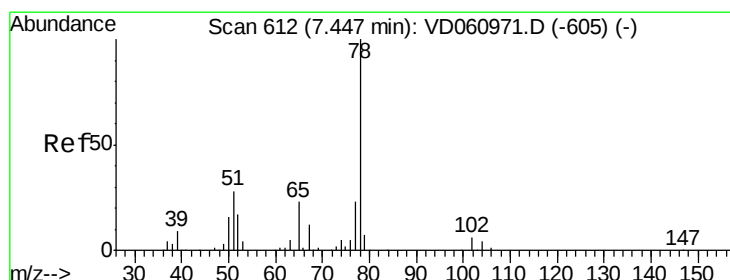
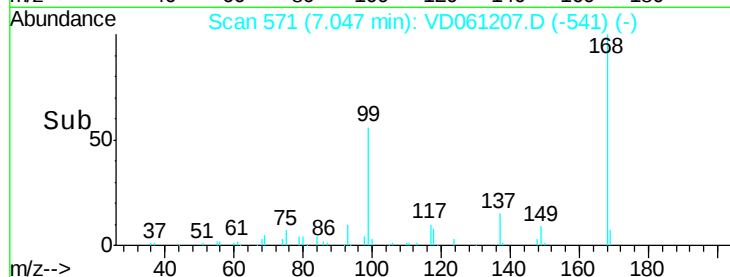
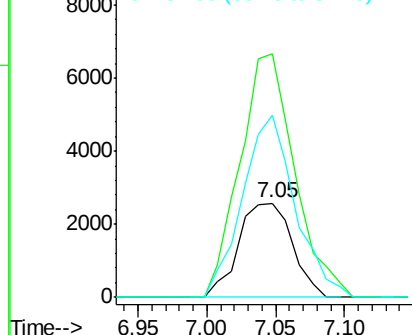
56 100

69 259.4 24.0 36.0#

84 193.6 65.8 98.6#



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: 7.45 min Scan# 612

Delta R.T. 0.00 min

Lab File: VD061207.D

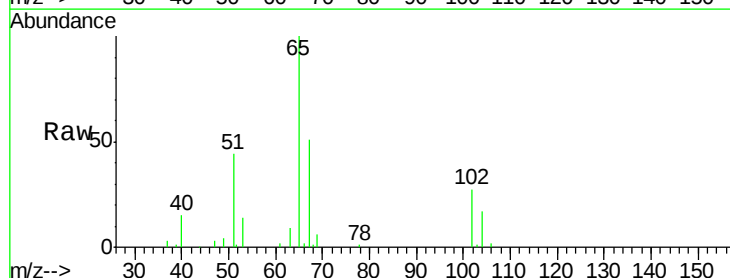
Acq: 20 Mar 2019 14:50

Tgt Ion: 65 Resp: 197882

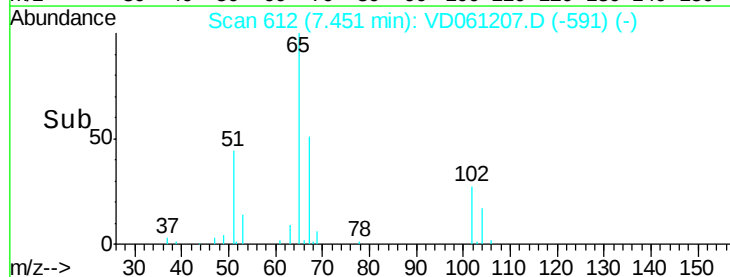
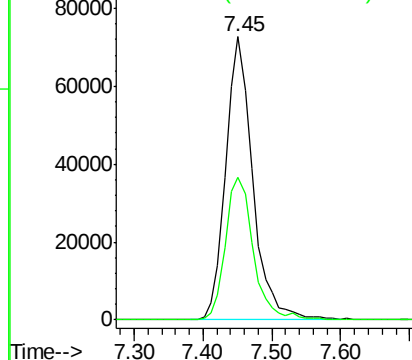
Ion Ratio Lower Upper

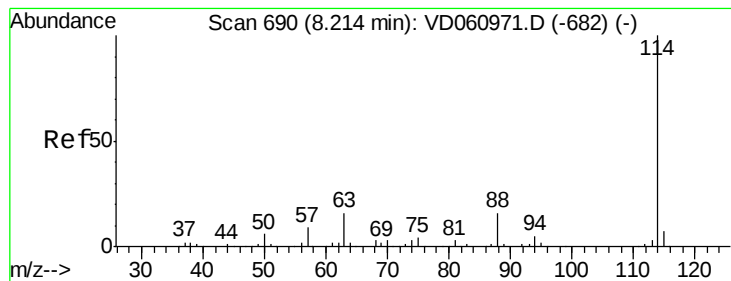
65 100

67 50.5 0.0 105.2



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. 0.00 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

Instrument :

MSVOA\_D

ClientSampleId :

20190146-COMPOSITE-ERE

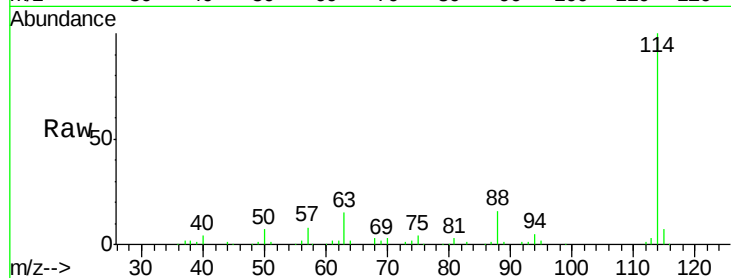
Tot Ion:114 Resp: 682396

Ion Ratio Lower Upper

114 100

63 15.4 0.0 31.4

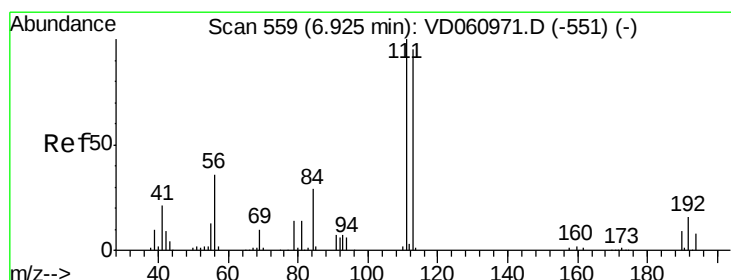
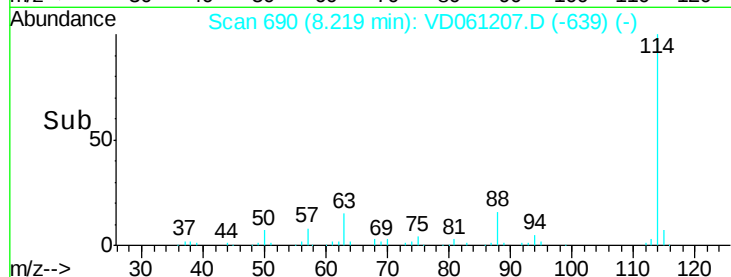
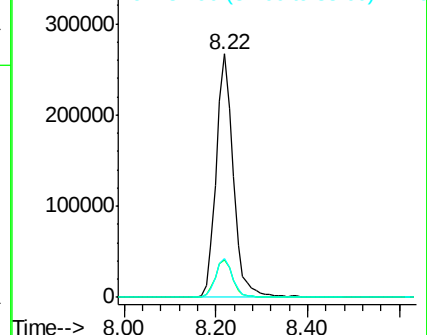
88 15.8 0.0 33.0



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: 50.000 ug/l

RT: 6.92 min Scan# 558

Delta R.T. -0.01 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

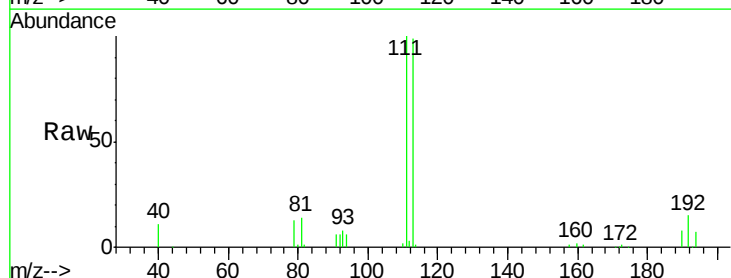
Tgt Ion:113 Resp: 312545

Ion Ratio Lower Upper

113 100

111 100.7 84.2 126.4

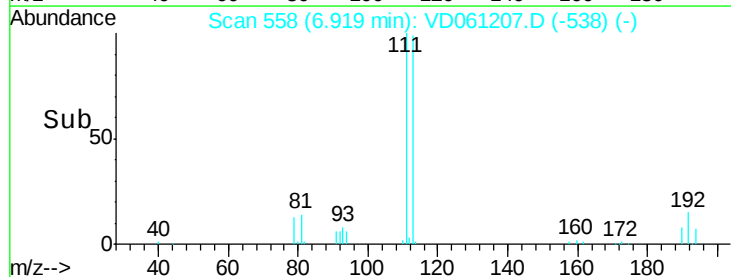
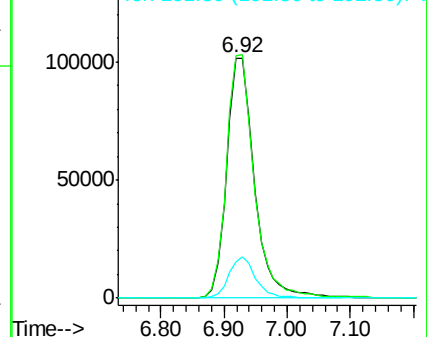
192 15.1 13.1 19.7

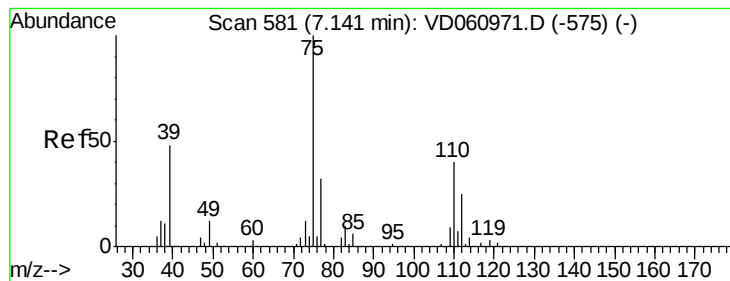


Abundance Ion 112.90 (112.60 to 113.60): V

Ion 110.90 (110.60 to 111.60): V

Ion 191.80 (191.50 to 192.50): V





#36

1,1-Dichloropropene

Concen: 5.051 ug/l

RT: 7.05 min Scan# 571

Delta R.T. -0.09 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

Instrument :

MSVOA\_D

ClientSampleId :

20190146-COMPOSITE-ERE

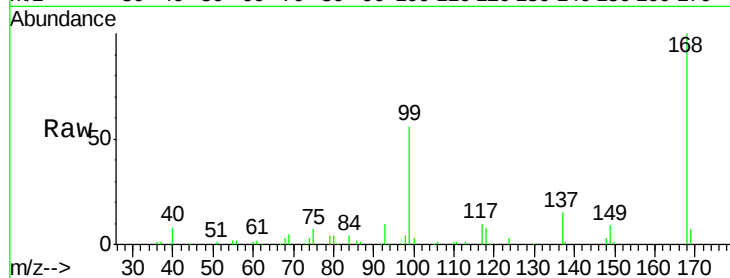
Tot Ion: 75 Resp: 29708

Ion Ratio Lower Upper

75 100

110 8.4 19.7 59.1#

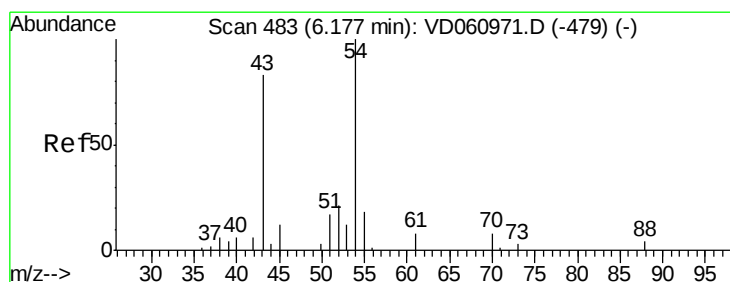
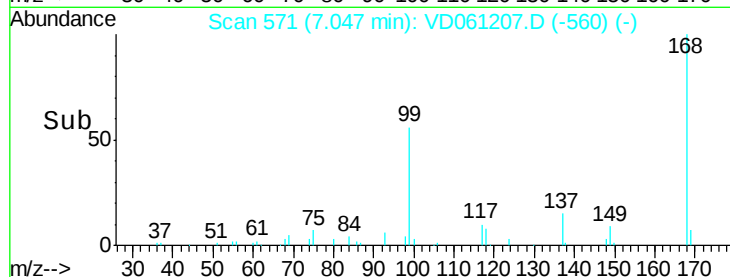
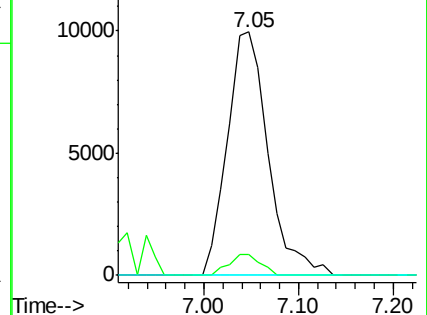
77 0.0 24.7 37.1#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 109.90 (109.60 to 110.60): VDC

Ion 76.95 (76.65 to 77.65): VDC



#37

Ethyl Acetate

Concen: 2.972 ug/l

RT: 6.05 min Scan# 470

Delta R.T. -0.12 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

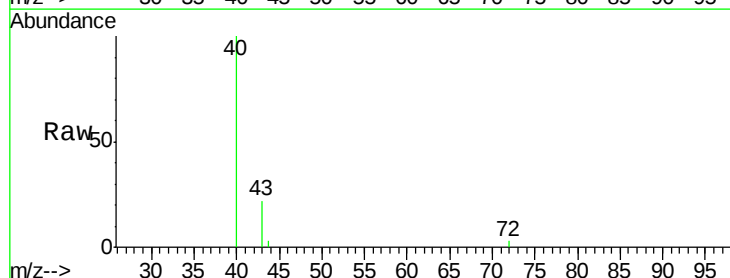
Tgt Ion: 43 Resp: 8204

Ion Ratio Lower Upper

43 100

61 0.0 13.7 20.5#

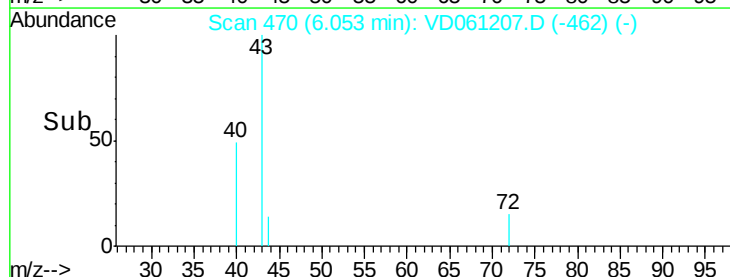
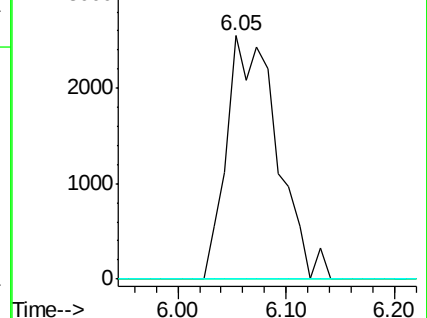
70 0.0 7.1 10.7#

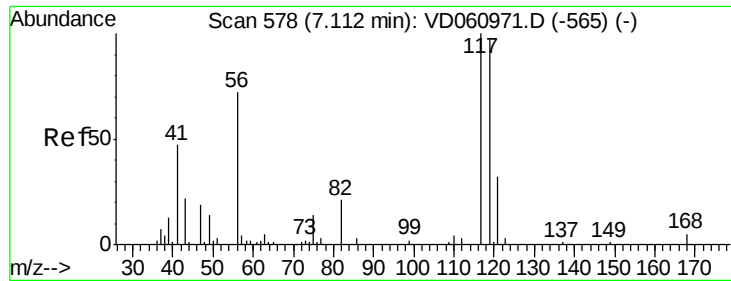


Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 60.95 (60.65 to 61.65): VDC

Ion 70.00 (69.70 to 70.70): VDC

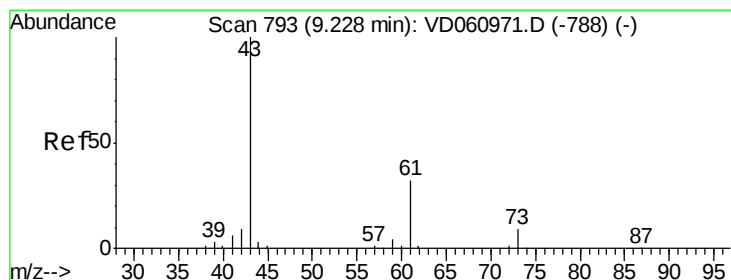
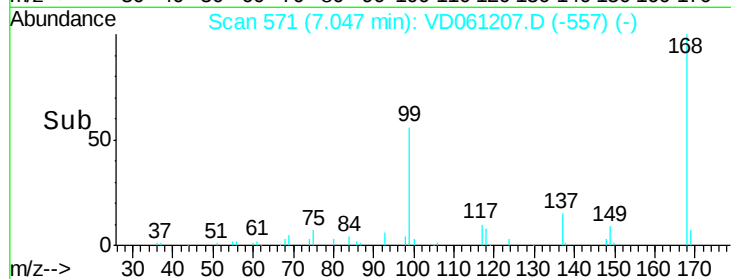
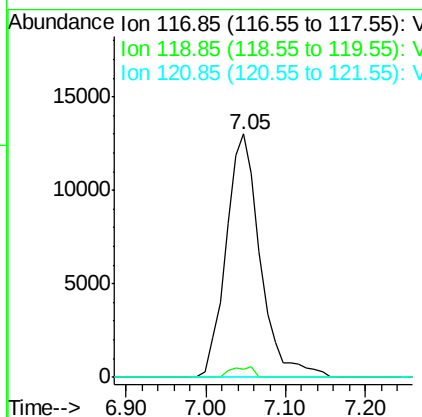
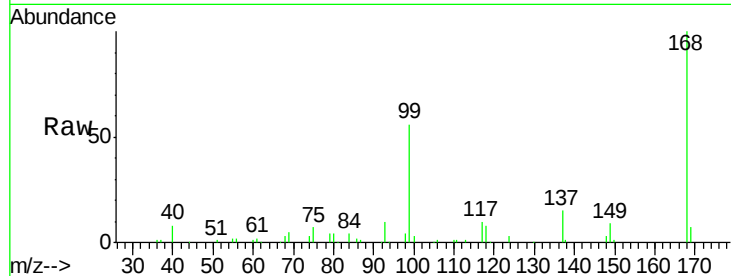




#38  
Carbon Tetrachloride  
Concen: 6.002 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. -0.06 min  
Lab File: VD061207.D  
Acq: 20 Mar 2019 14:50

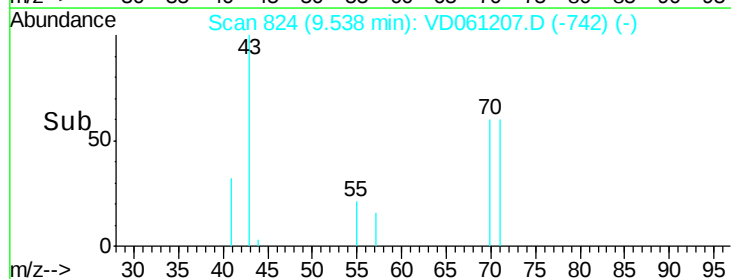
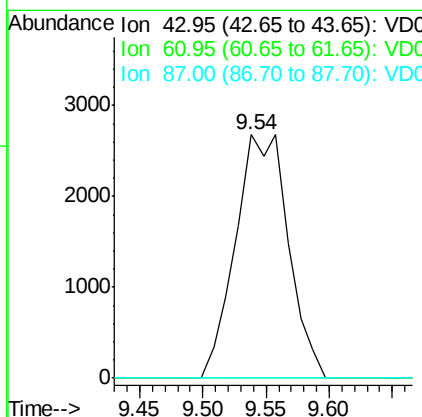
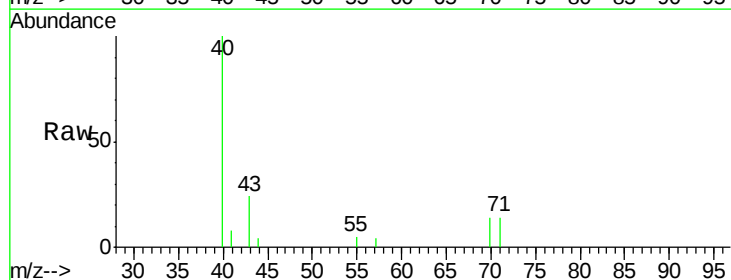
Instrument :  
MSVOA\_D  
ClientSampleId :  
20190146-COMPOSITE-ERE

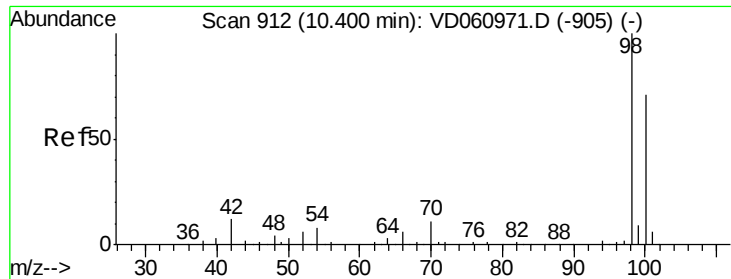
Tot Ion:117 Resp: 38887  
Ion Ratio Lower Upper  
117 100  
119 3.4 77.8 116.8#  
121 0.0 25.3 37.9#



#43  
Isopropyl Acetate  
Concen: 2.032 ug/l  
RT: 9.54 min Scan# 824  
Delta R.T. 0.31 min  
Lab File: VD061207.D  
Acq: 20 Mar 2019 14:50

Tgt Ion: 43 Resp: 7768  
Ion Ratio Lower Upper  
43 100  
61 0.0 25.6 38.4#  
87 0.0 0.2 0.4#





#50

Toluene-d8

Concen: N.D. ug/l

RT: 10.40 min Scan# 912

Delta R.T. 0.00 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

Instrument :

MSVOA\_D

ClientSampleId :

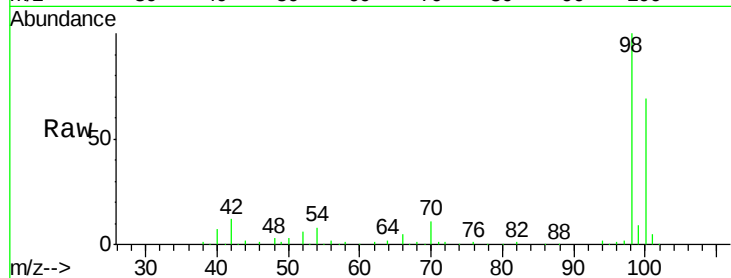
20190146-COMPOSITE-ERE

Tot Ion: 98 Resp: 650410

Ion Ratio Lower Upper

98 100

100 68.6 57.4 86.2



Abundance Ion 98.05 (97.75 to 98.75): VD061207.D (-891) (-)

Ion 100.05 (99.75 to 100.75): VD061207.D (-891) (-)

300000

250000

200000

150000

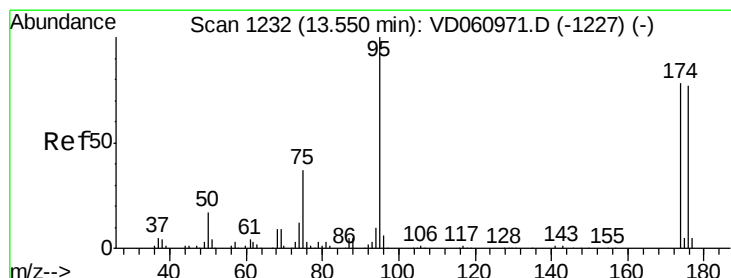
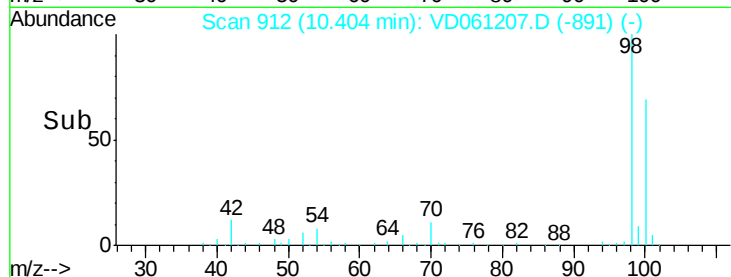
100000

50000

0

10.30 10.40 10.50

Time-->



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.00 min

Lab File: VD061207.D

Acq: 20 Mar 2019 14:50

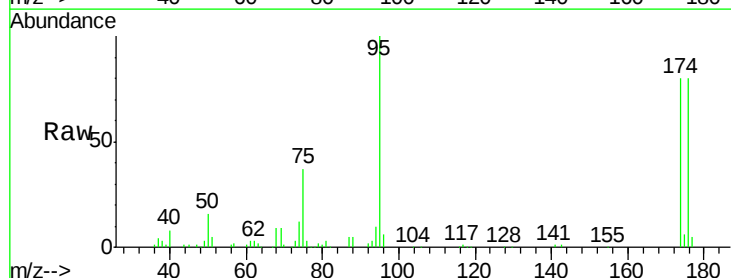
Tgt Ion: 95 Resp: 181948

Ion Ratio Lower Upper

95 100

174 80.2 0.0 155.6

176 79.9 0.0 153.8



Abundance Ion 95.00 (94.70 to 95.70): VD061207.D (-1211) (-)

Ion 173.90 (173.60 to 174.60): VD061207.D (-1211) (-)

Ion 175.90 (175.60 to 176.60): VD061207.D (-1211) (-)

150000

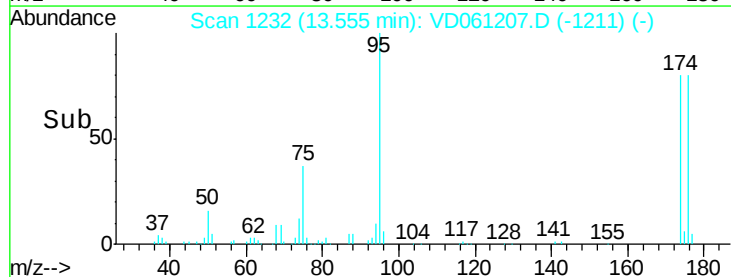
100000

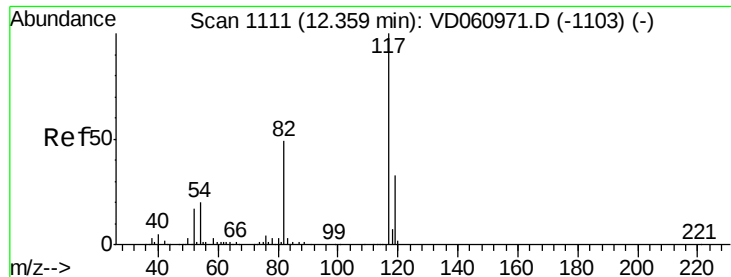
50000

0

13.50 13.55 13.60 13.65

Time-->

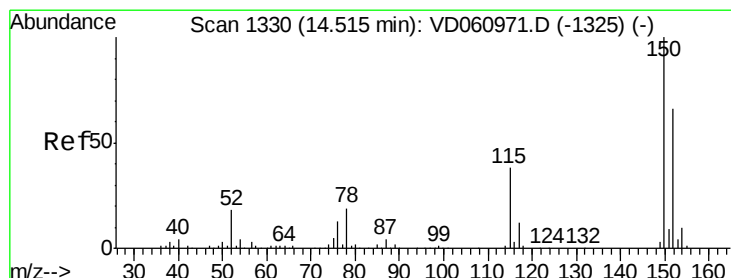
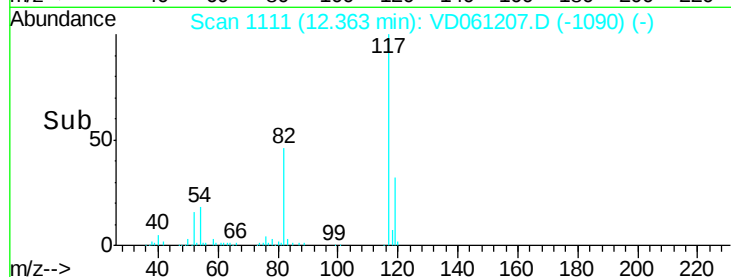
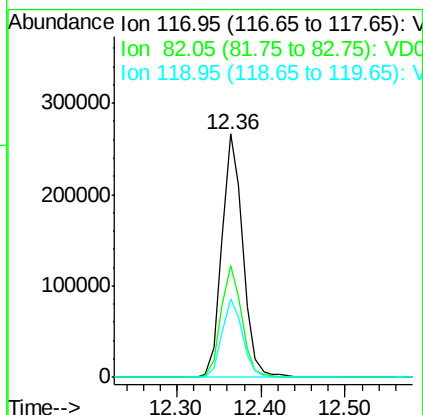
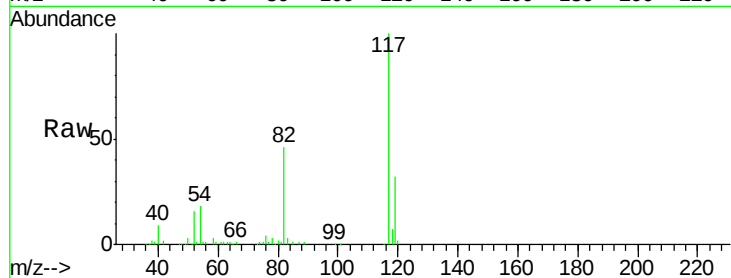




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.36 min Scan# 1111  
Delta R.T. 0.00 min  
Lab File: VD061207.D  
Acq: 20 Mar 2019 14:50

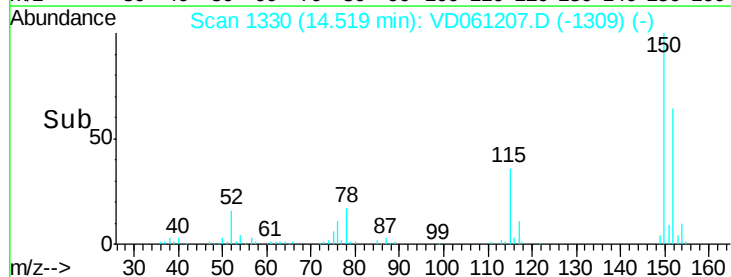
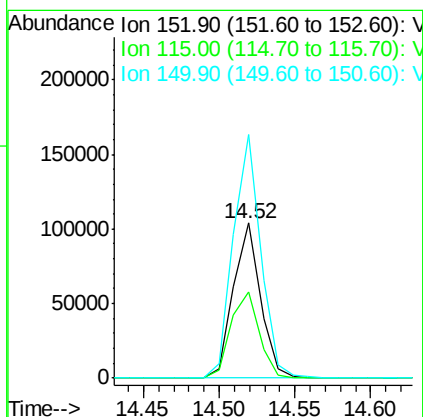
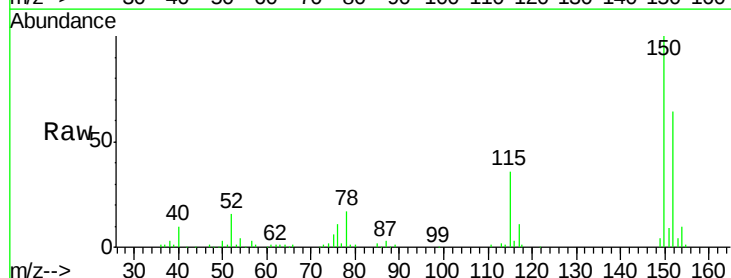
Instrument :  
MSVOA\_D  
ClientSampleId :  
20190146-COMPOSITE-ERE

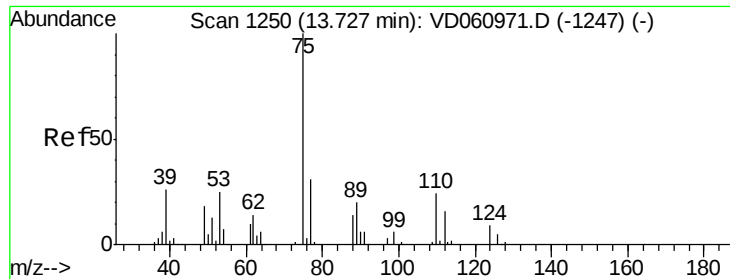
Tot Ion:117 Resp: 456708  
Ion Ratio Lower Upper  
117 100  
82 46.0 38.9 58.3  
119 32.0 26.6 39.8



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. 0.00 min  
Lab File: VD061207.D  
Acq: 20 Mar 2019 14:50

Tgt Ion:152 Resp: 129821  
Ion Ratio Lower Upper  
152 100  
115 56.0 28.6 85.9  
150 157.1 0.0 310.6

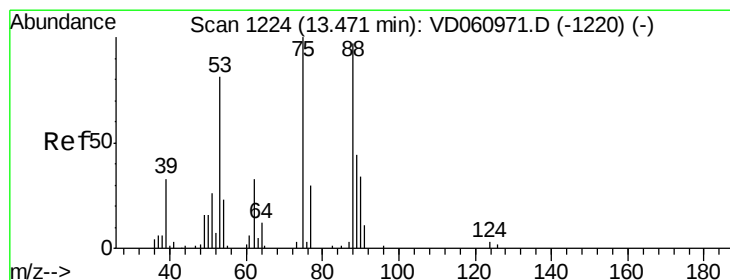
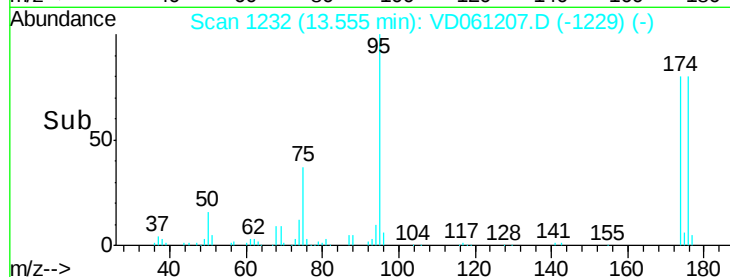
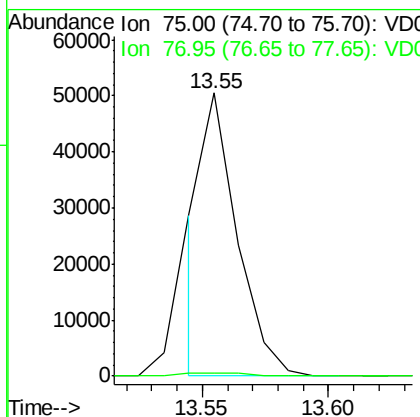
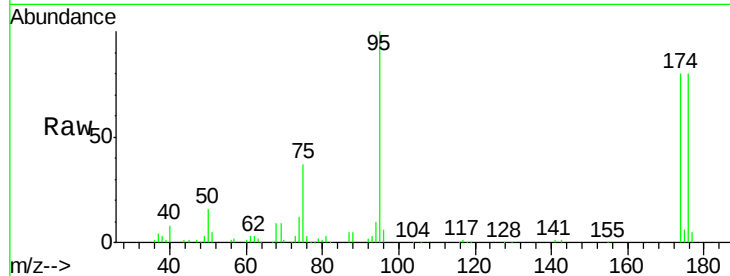




#76  
 1,2,3-Trichloropropane  
 Concen: 25.563 ug/l  
 RT: 13.55 min Scan# 1232  
 Delta R.T. -0.17 min  
 Lab File: VD061207.D  
 Acq: 20 Mar 2019 14:50

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 20190146-COMPOSITE-ERE

Tot Ion: 75 Resp: 47745  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 16.6 49.7#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 121.789 ug/l  
 RT: 13.55 min Scan# 1232  
 Delta R.T. 0.08 min  
 Lab File: VD061207.D  
 Acq: 20 Mar 2019 14:50

Tgt Ion: 75 Resp: 67062  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 64.4 96.6#  
 89 0.0 34.8 52.2#

