

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD030819\  
 Data File : VD060987.D  
 Acq On : 8 Mar 2019 16:49  
 Operator : VA/AP  
 Sample : K1787-01  
 Misc : 5.92g/5ml/MSVOA D/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SP-1

Quant Time: Mar 08 22:06:30 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  | 752919   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 1459667  | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 1248914  | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 557706   | 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   | 425472   | 67.89 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 135.78% |          |
| 35) Dibromofluoromethane    | 6.93  | 113  | 589921   | 54.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.92% |          |
| 50) Toluene-d8              | 10.41 | 98   | 1434867  | 52.75 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 105.50% |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 533627   | 50.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.12% |          |

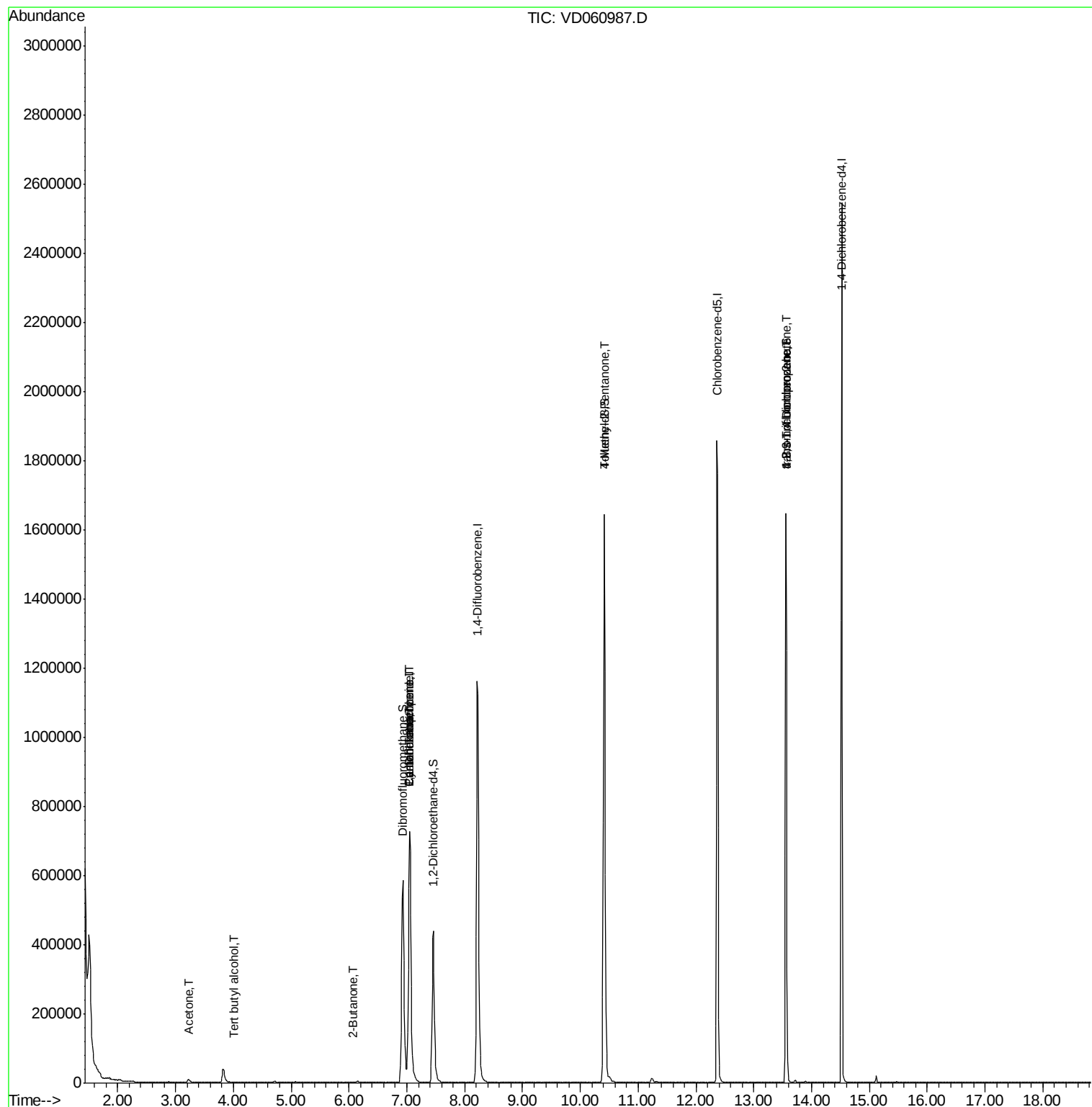
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.02  | 59   | 184      | 0.461     | ug/l # | 75     |
| 16) Acetone                    | 3.23  | 43   | 19758    | 11.025    | ug/l   | 96     |
| 20) Methylene Chloride         | 3.83  | 84   | 31411    | Below Cal |        | 94     |
| 25) 2-Butanone                 | 6.07  | 43   | 1084     | 0.533     | ug/l # | 55     |
| 31) Cyclohexane                | 7.05  | 56   | 14142    | 1.275     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 57708    | 4.587     | ug/l # | 47     |
| 38) Carbon Tetrachloride       | 7.05  | 117  | 73072    | 5.272     | ug/l # | 15     |
| 51) 4-Methyl-2-Pentanone       | 10.40 | 43   | 5807     | 1.159     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 13.55 | 75   | 153810   | 19.170    | ug/l # | 44     |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 198354   | 83.852    | ug/l # | 17     |

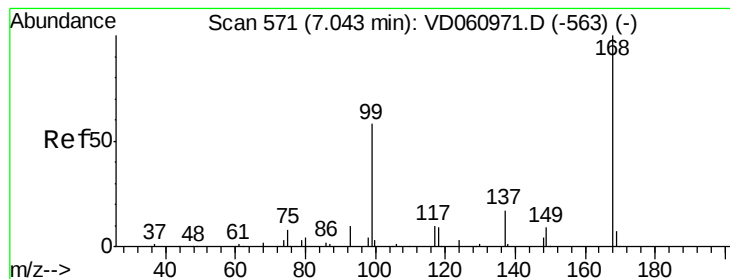
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: VD060987.D

Acq: 8 Mar 2019 16:49

Instrument :

MSVOA\_D

ClientSampleId :

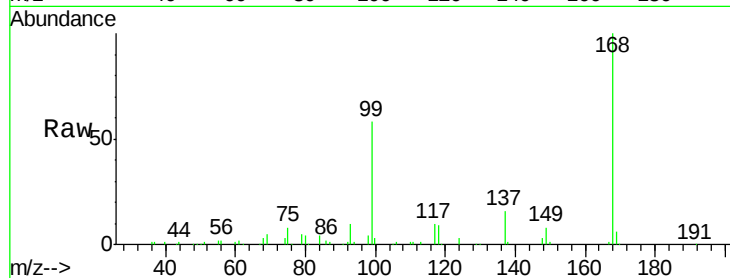
SP-1

Tot Ion:168 Resp: 752919

Ion Ratio Lower Upper

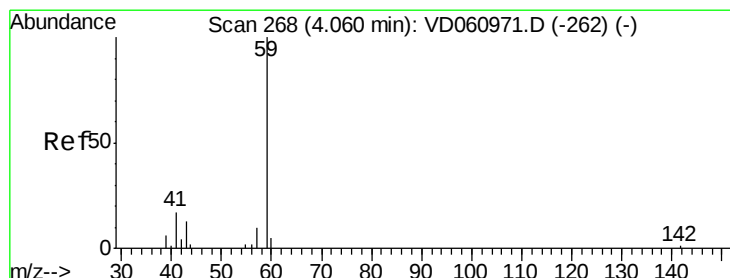
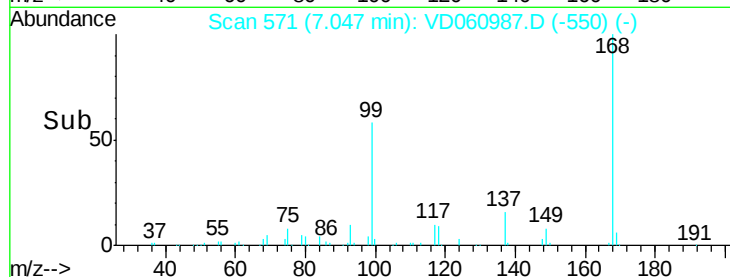
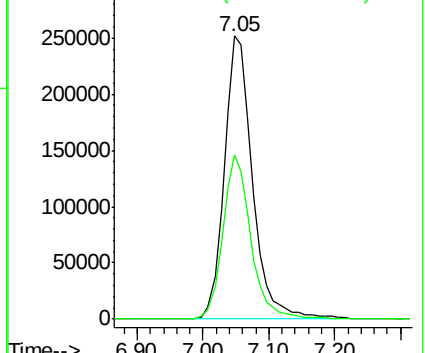
168 100

99 57.9 47.3 70.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#11

Tert butyl alcohol

Concen: 0.461 ug/l

RT: 4.02 min Scan# 263

Delta R.T. -0.04 min

Lab File: VD060987.D

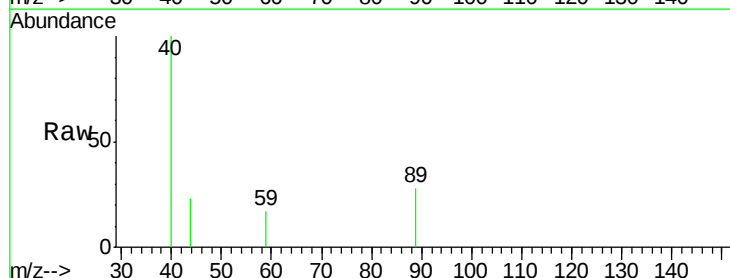
Acq: 8 Mar 2019 16:49

Tgt Ion: 59 Resp: 184

Ion Ratio Lower Upper

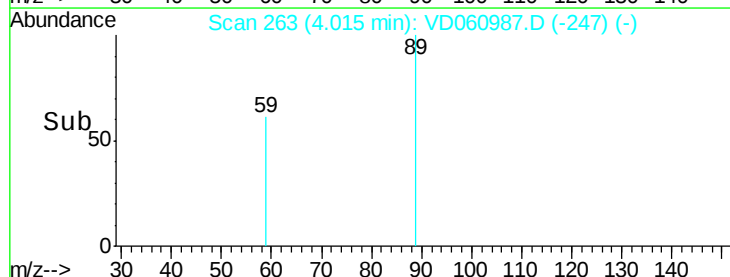
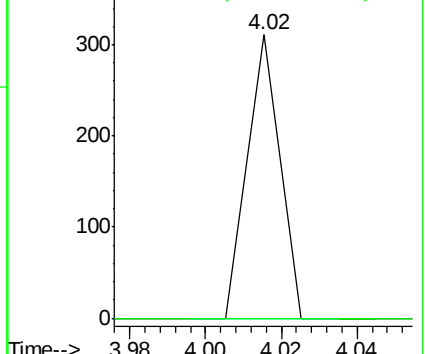
59 100

57 0.0 7.1 10.7#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#16

Acetone

Concen: 11.025 ug/l

RT: 3.23 min Scan# 183

Delta R.T. 0.00 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

Instrument :

MSVOA\_D

ClientSampled :

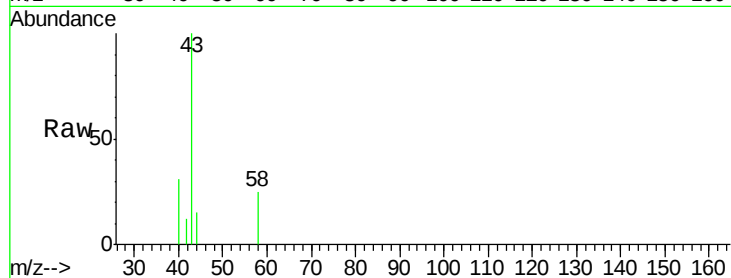
SP-1

Tot Ion: 43 Resp: 19758

Ion Ratio Lower Upper

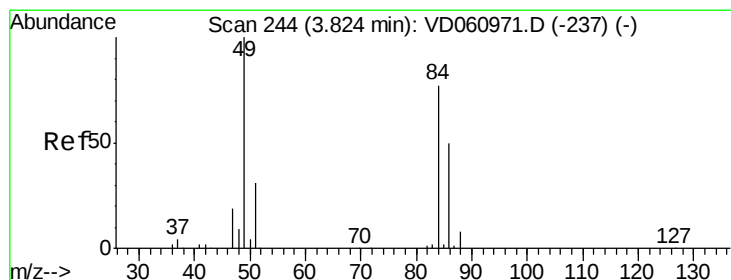
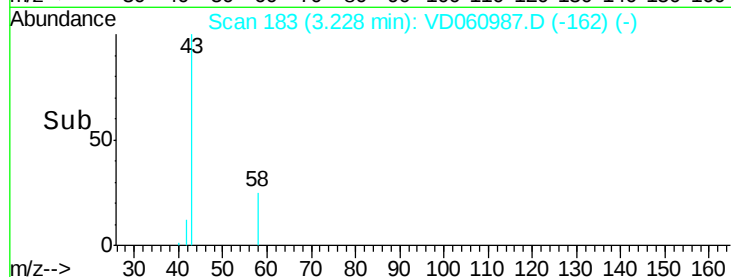
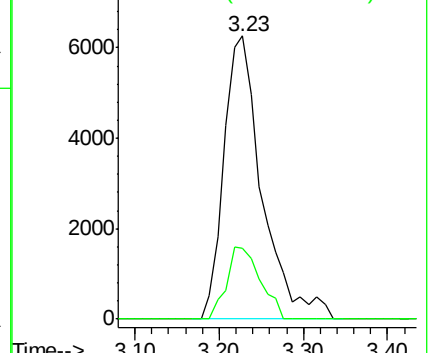
43 100

58 25.1 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: Below Cal

RT: 3.83 min Scan# 244

Delta R.T. 0.01 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

Tgt Ion: 84 Resp: 31411

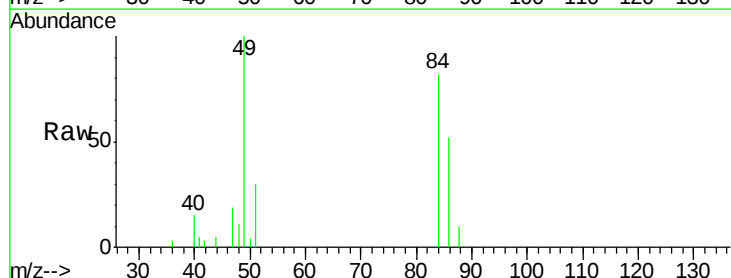
Ion Ratio Lower Upper

84 100

49 121.9 104.2 156.2

51 36.6 32.3 48.5

86 62.9 52.3 78.5

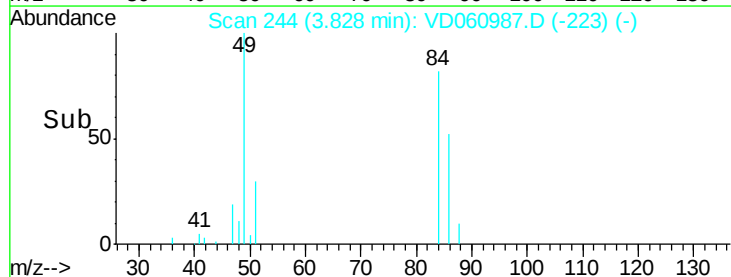
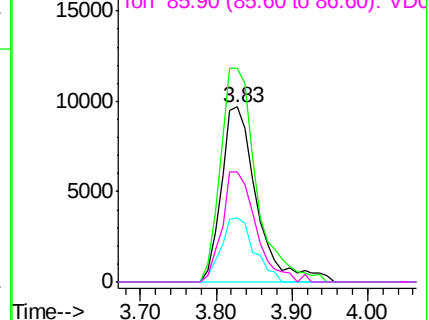


Abundance Ion 83.95 (83.65 to 84.65): VDC

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

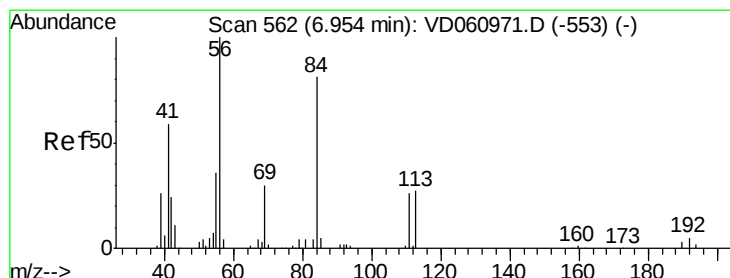
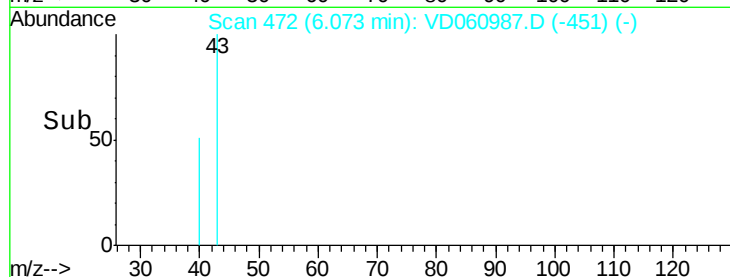
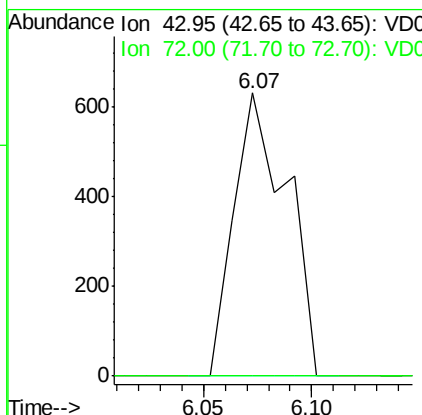
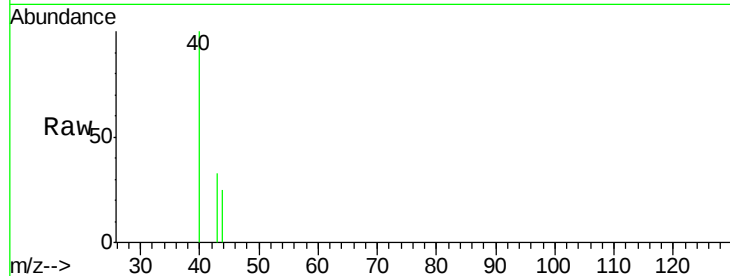




#25  
2-Butanone  
Concen: 0.533 ug/l  
RT: 6.07 min Scan# 472  
Delta R.T. 0.00 min  
Lab File: VD060987.D  
Acq: 8 Mar 2019 16:49

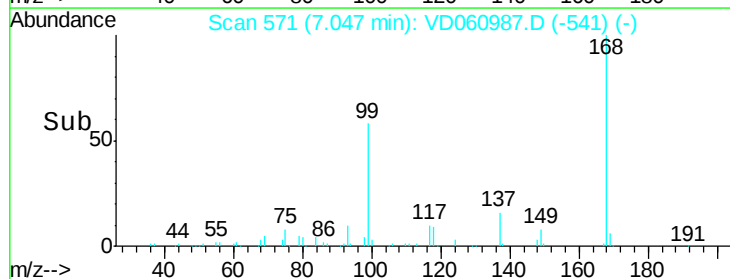
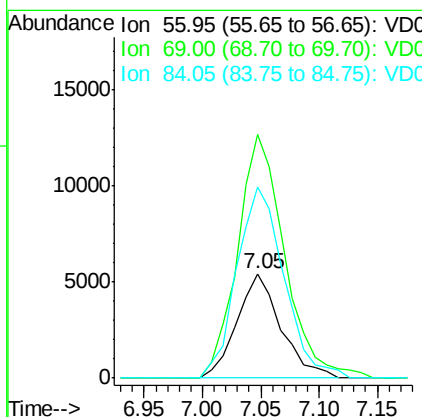
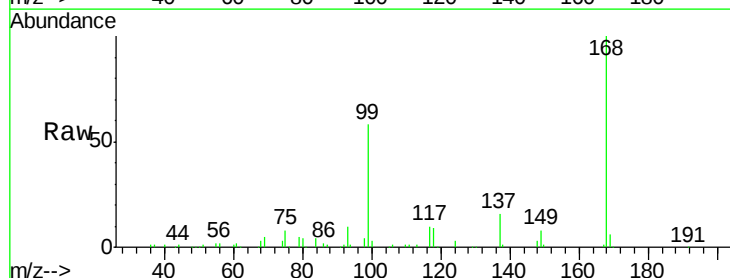
Instrument :  
MSVOA\_D  
ClientSampleId :  
SP-1

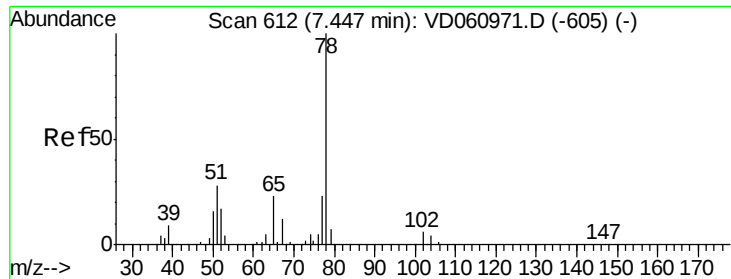
Tot Ion: 43 Resp: 1084  
Ion Ratio Lower Upper  
43 100  
72 0.0 16.7 25.1#



#31  
Cyclohexane  
Concen: 1.275 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. 0.09 min  
Lab File: VD060987.D  
Acq: 8 Mar 2019 16:49

Tgt Ion: 56 Resp: 14142  
Ion Ratio Lower Upper  
56 100  
69 232.5 24.0 36.0#  
84 182.0 65.8 98.6#





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 7.46 min Scan# 613

Delta R.T. 0.01 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

Instrument :

MSVOA\_D

ClientSampleId :

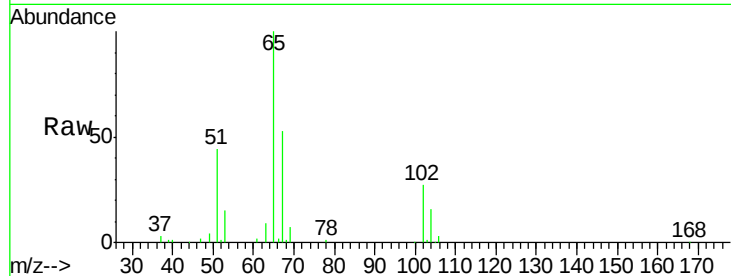
SP-1

Tot Ion: 65 Resp: 425472

Ion Ratio Lower Upper

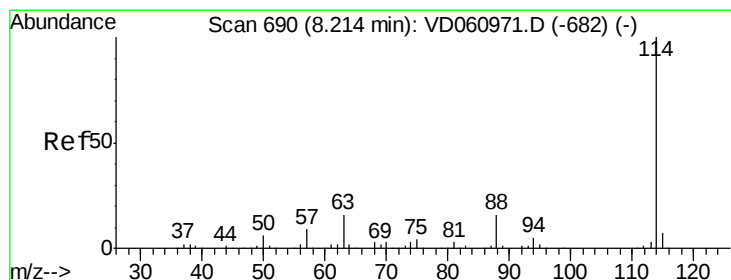
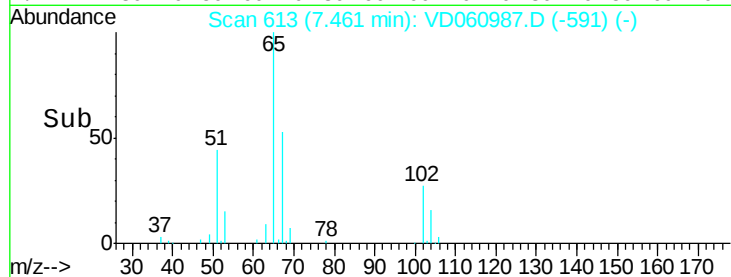
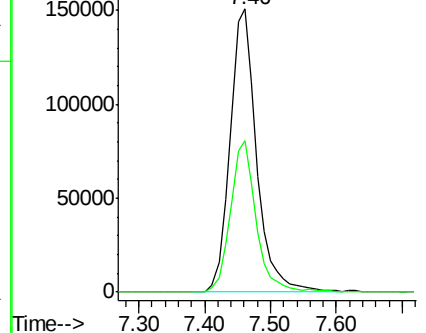
65 100

67 53.3 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: 8.23 min Scan# 691

Delta R.T. 0.01 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

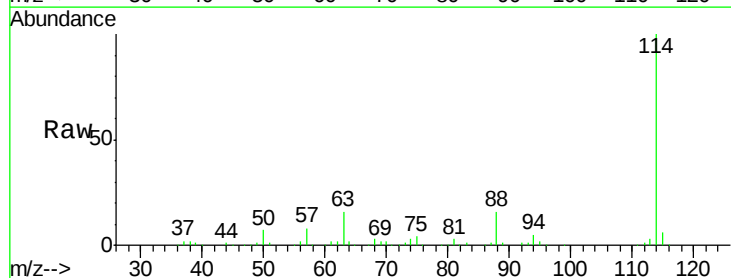
Tgt Ion: 114 Resp: 1459667

Ion Ratio Lower Upper

114 100

63 15.7 0.0 31.4

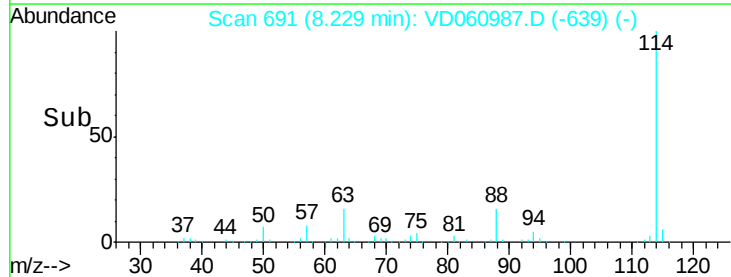
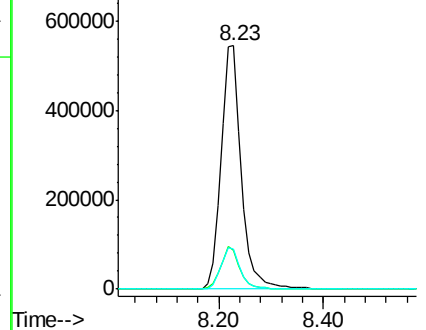
88 16.3 0.0 33.0

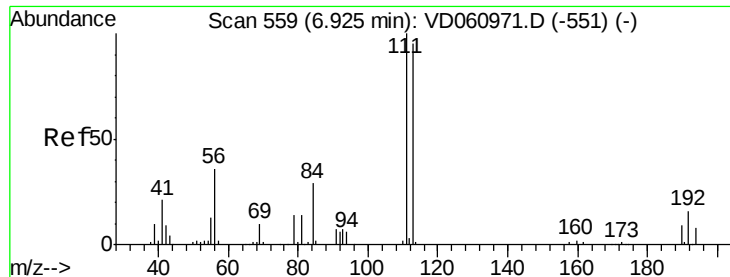


Abundance Ion 114.00 (113.70 to 114.70): V

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: 6.93 min Scan# 559

Delta R.T. 0.00 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

Instrument :

MSVOA\_D

ClientSampled :

SP-1

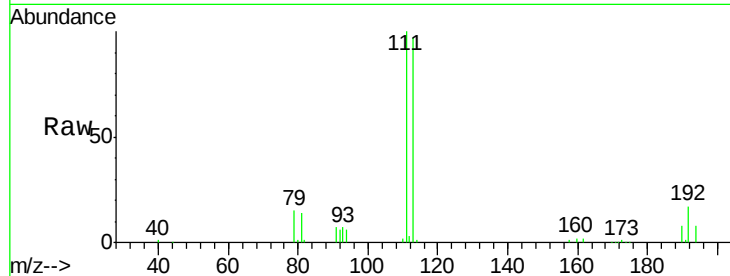
Tot Ion:113 Resp: 589921

Ion Ratio Lower Upper

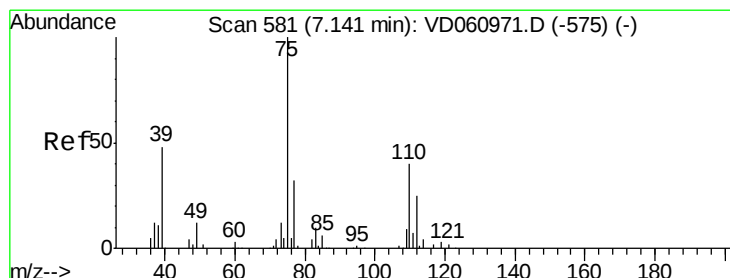
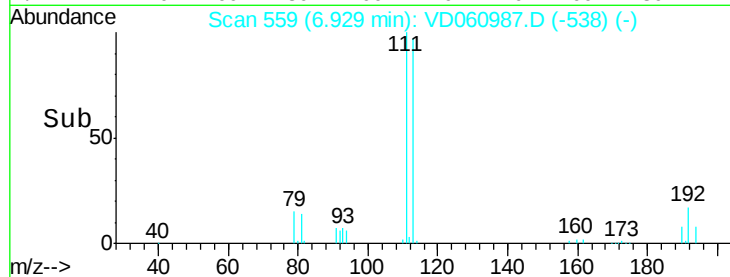
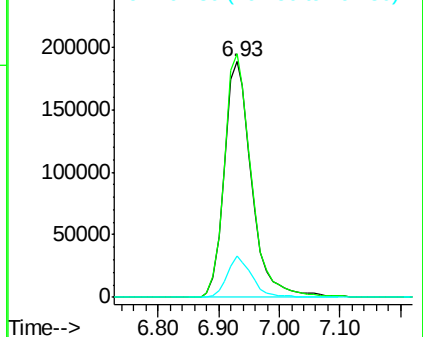
113 100

111 103.3 84.2 126.4

192 17.4 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: 4.587 ug/l

RT: 7.05 min Scan# 571

Delta R.T. -0.09 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

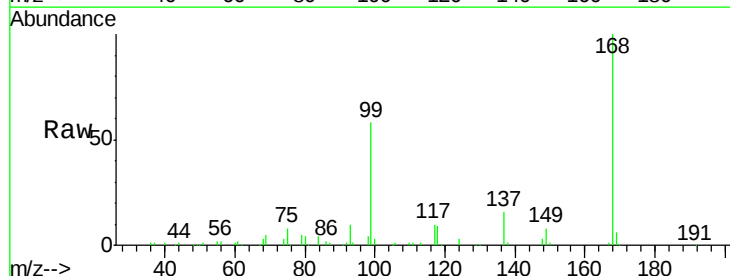
Tgt Ion: 75 Resp: 57708

Ion Ratio Lower Upper

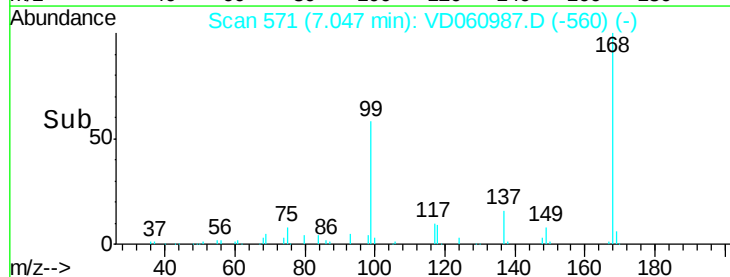
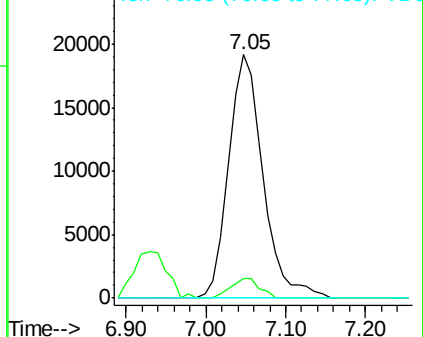
75 100

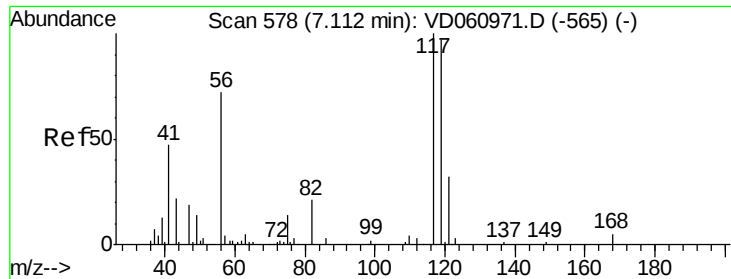
110 8.1 19.7 59.1#

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): V  
Ion 76.95 (76.65 to 77.65): VDC

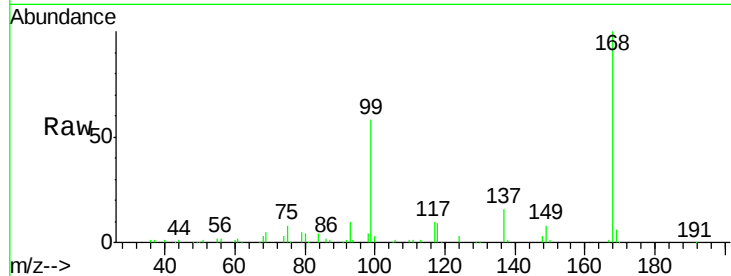




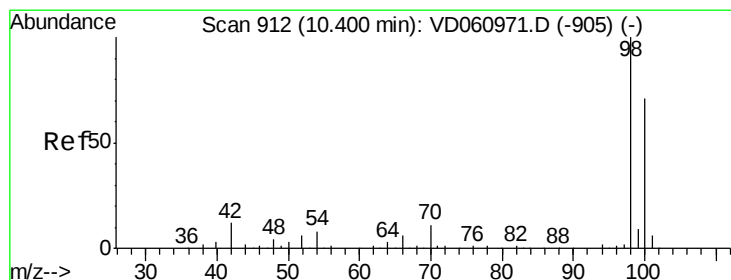
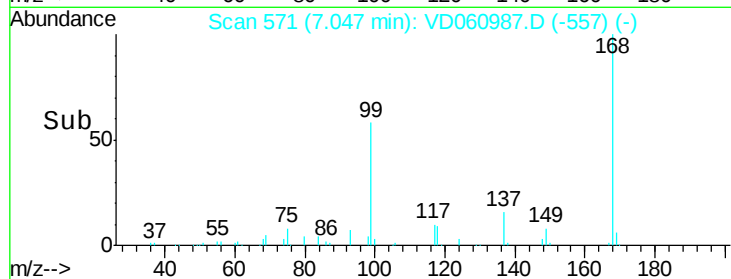
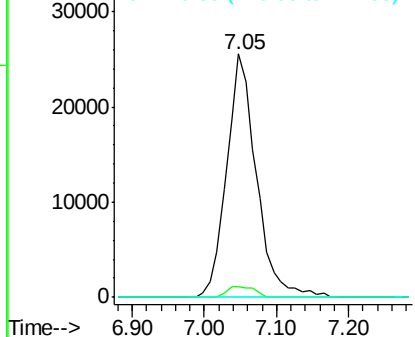
#38  
Carbon Tetrachloride  
Concen: 5.272 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. -0.06 min  
Lab File: VD060987.D  
Acq: 8 Mar 2019 16:49

Instrument :  
MSVOA\_D  
ClientSampled :  
SP-1

Tot Ion:117 Resp: 73072  
Ion Ratio Lower Upper  
117 100  
119 4.3 77.8 116.8#  
121 0.0 25.3 37.9#

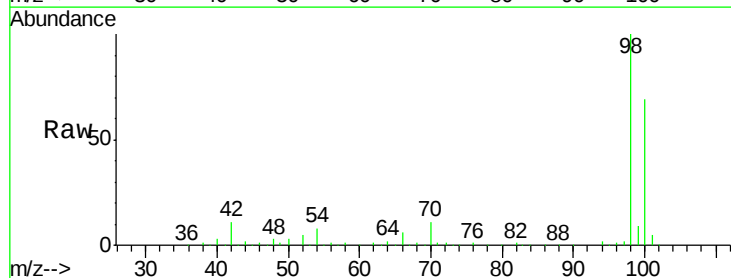


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

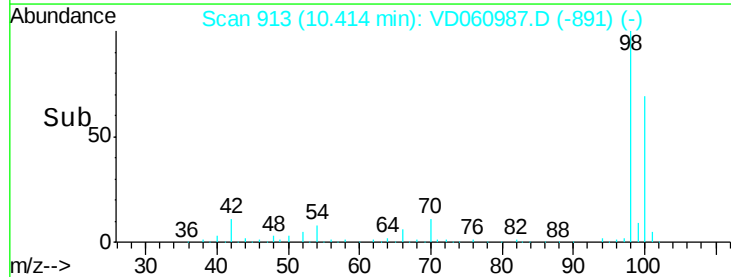
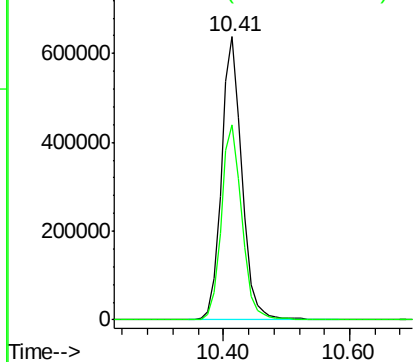


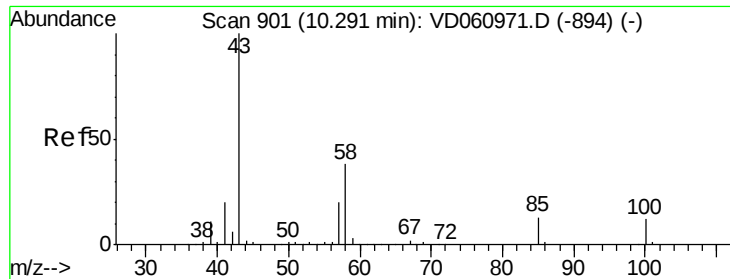
#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 10.41 min Scan# 913  
Delta R.T. 0.01 min  
Lab File: VD060987.D  
Acq: 8 Mar 2019 16:49

Tgt Ion: 98 Resp: 1434867  
Ion Ratio Lower Upper  
98 100  
100 69.1 57.4 86.2



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





#51

4-Methyl-2-Pentanone

Concen: 1.159 ug/l

RT: 10.40 min Scan# 912

Delta R.T. 0.11 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

Instrument :

MSVOA\_D

ClientSampled :

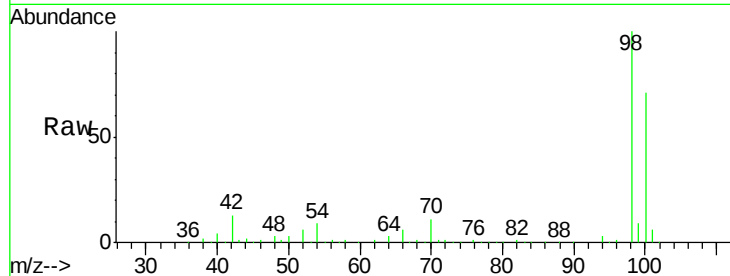
SP-1

Tot Ion: 43 Resp: 5807

Ion Ratio Lower Upper

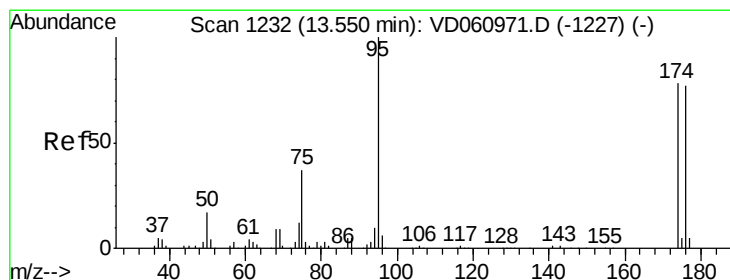
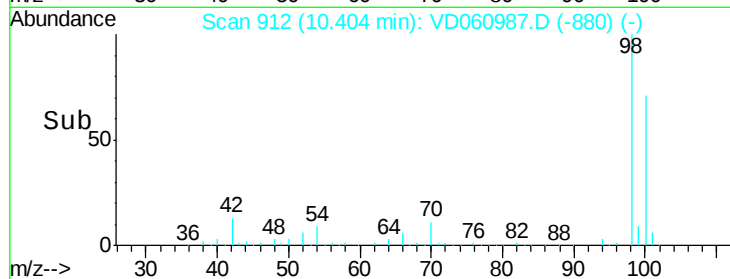
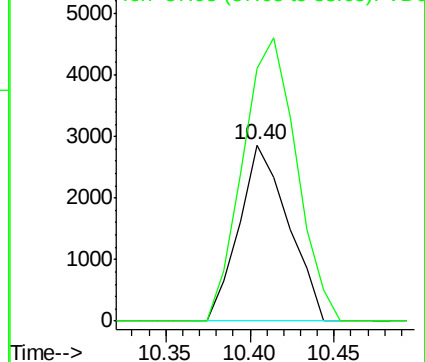
43 100

58 143.8 30.2 45.2#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.00 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

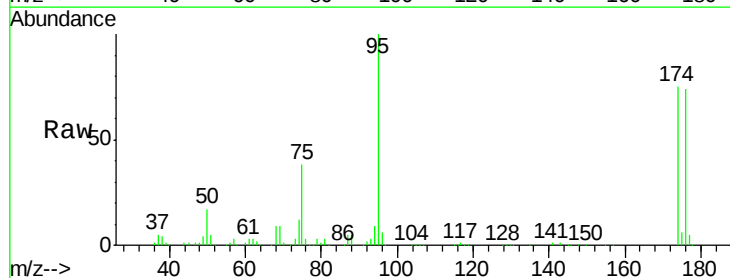
Tgt Ion: 95 Resp: 533627

Ion Ratio Lower Upper

95 100

174 75.0 0.0 155.6

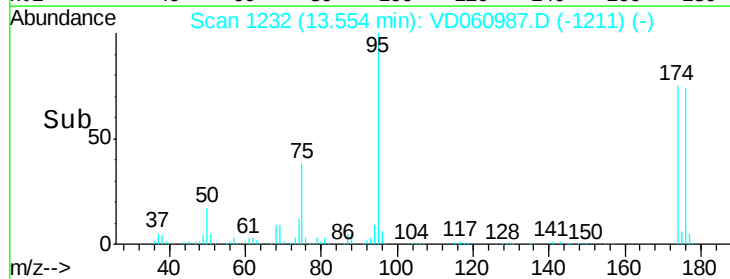
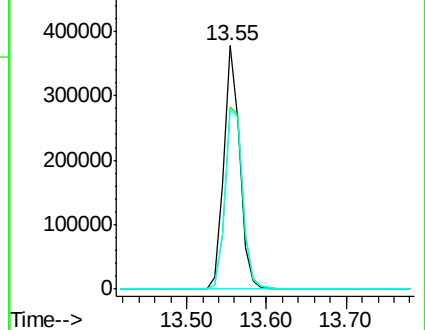
176 74.0 0.0 153.8

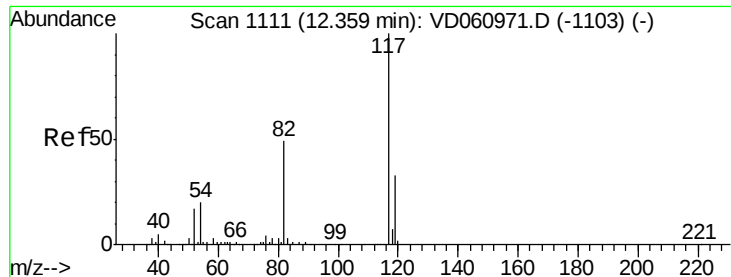


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V

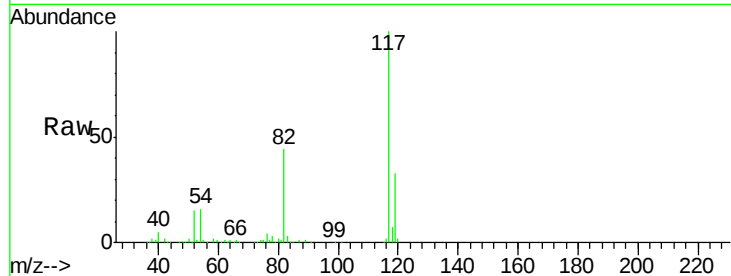




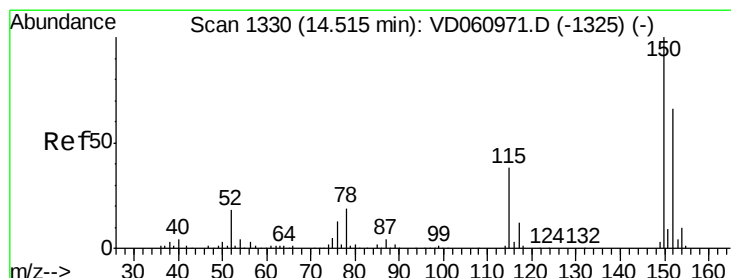
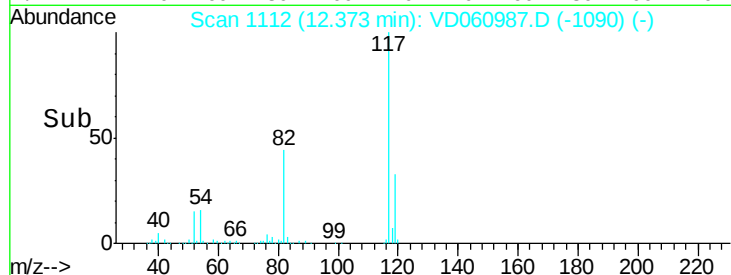
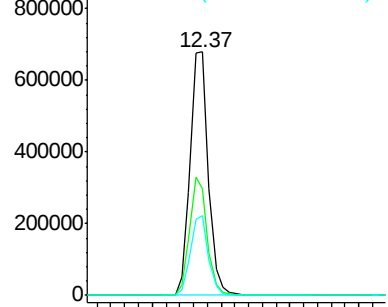
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.37 min Scan# 1112  
Delta R.T. 0.01 min  
Lab File: VD060987.D  
Acq: 8 Mar 2019 16:49

Instrument :  
MSVOA\_D  
ClientSampled :  
SP-1

Tot Ion:117 Resp: 1248914  
Ion Ratio Lower Upper  
117 100  
82 43.6 38.9 58.3  
119 32.9 26.6 39.8

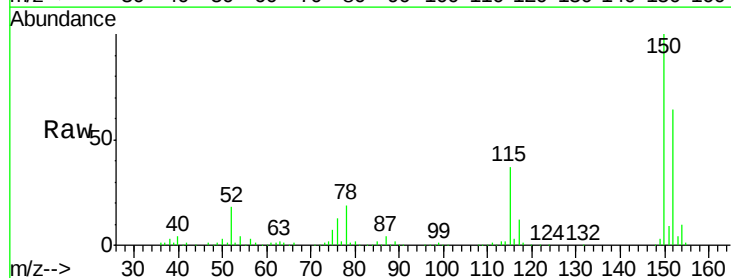


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

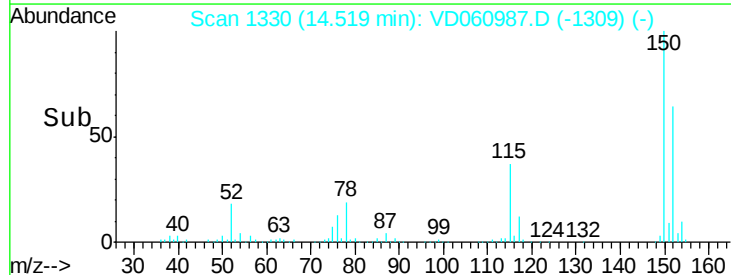
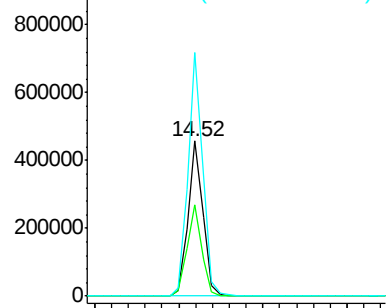


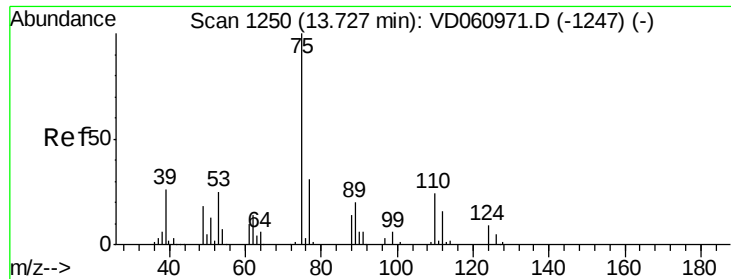
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. 0.00 min  
Lab File: VD060987.D  
Acq: 8 Mar 2019 16:49

Tgt Ion:152 Resp: 557706  
Ion Ratio Lower Upper  
152 100  
115 58.6 28.6 85.9  
150 156.9 0.0 310.6



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





#76

1,2,3-Trichloropropane

Concen: 19.170 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. -0.17 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

Instrument :

MSVOA\_D

ClientSampleId :

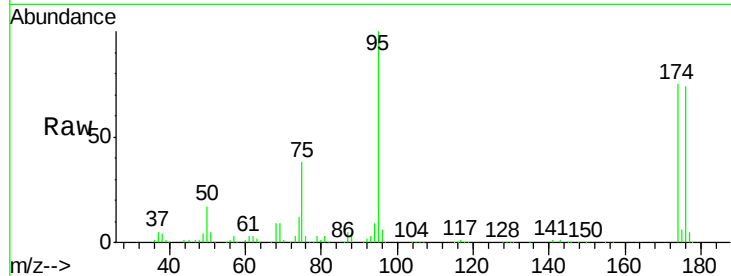
SP-1

Tot Ion: 75 Resp: 153810

Ion Ratio Lower Upper

75 100

77 1.3 16.6 49.7#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 76.95 (76.65 to 77.65): VDC

13.55

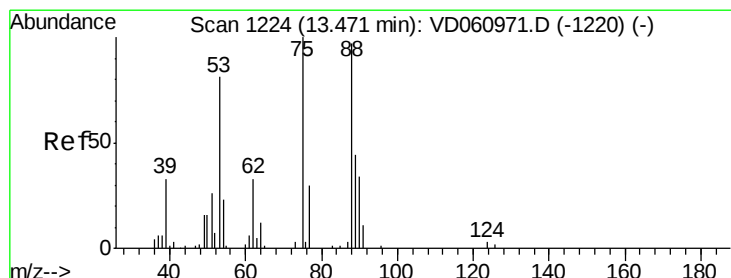
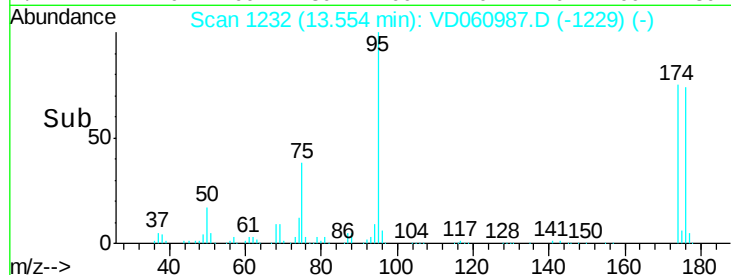
150000

100000

50000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 83.852 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.08 min

Lab File: VD060987.D

Acq: 8 Mar 2019 16:49

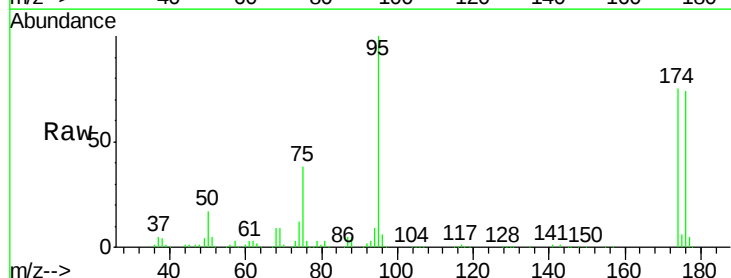
Tgt Ion: 75 Resp: 198354

Ion Ratio Lower Upper

75 100

53 0.0 64.4 96.6#

89 0.0 34.8 52.2#



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

13.55

150000

100000

50000

0

Time-->

