

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD080819\  
 Data File : VD063464.D  
 Acq On : 9 Aug 2019 4:46  
 Operator : JC/SY  
 Sample : K4237-04  
 Misc : 5.65g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SB-05(13-14)

Quant Time: Aug 09 07:05:26 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 30 03:04:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.05  | 168  | 1104600  | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 1508763  | 50.00 | ug/l  | 0.03     |
| 63) Chlorobenzene-d5       | 12.38 | 117  | 1161450  | 50.00 | ug/l  | 0.02     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 461885   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.47  | 65   | 517019   | 42.18 | ug/l   | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 84.36% |          |
| 35) Dibromofluoromethane    | 6.93  | 113  | 571110   | 44.34 | ug/l   | 0.03     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 88.68% |          |
| 50) Toluene-d8              | 10.42 | 98   | 1104909  | 38.33 | ug/l   | 0.02     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 76.66% |          |
| 62) 4-Bromofluorobenzene    | 13.56 | 95   | 411404   | 31.32 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 62.64% |          |

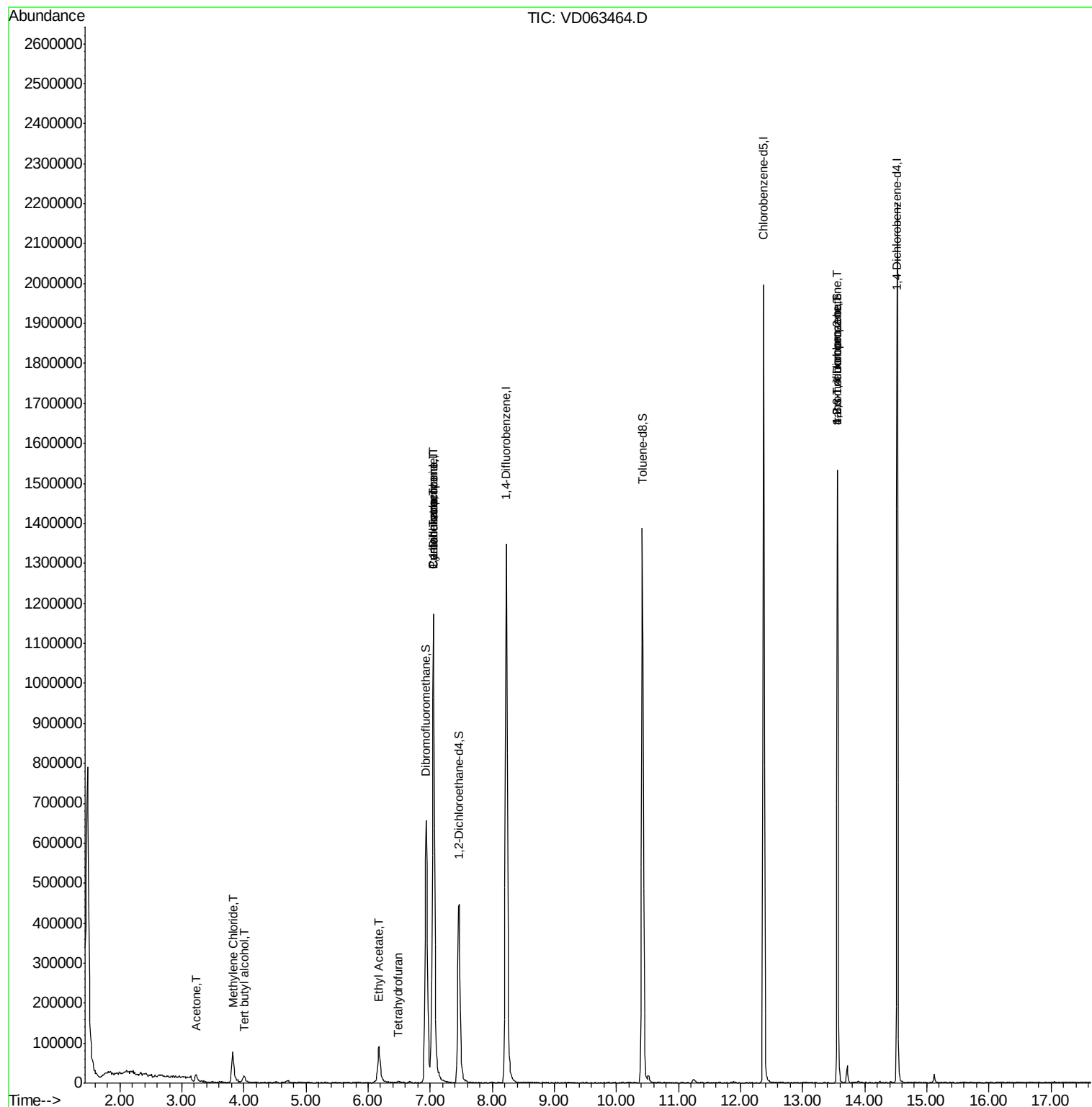
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 11) Tert butyl alcohol         | 4.01  | 59   | 17457    | 32.455  | ug/l # | 69     |
| 16) Acetone                    | 3.22  | 43   | 35804    | 14.993  | ug/l # | 80     |
| 20) Methylene Chloride         | 3.82  | 84   | 47930    | 4.965   | ug/l # | 84     |
| 29) Tetrahydrofuran            | 6.47  | 42   | 1504     | 1.325   | ug/l # | 75     |
| 31) Cyclohexane                | 7.05  | 56   | 21475    | 1.967   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 83474    | 6.062   | ug/l # | 52     |
| 37) Ethyl Acetate              | 6.17  | 43   | 8321     | 1.345   | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.05  | 117  | 100794   | 4.862   | ug/l # | 14     |
| 76) 1,2,3-Trichloropropane     | 13.56 | 75   | 133730   | 24.105  | ug/l # | 45     |
| 81) trans-1,4-Dichloro-2-buten | 13.56 | 75   | 187438   | 121.672 | ug/l # | 3      |

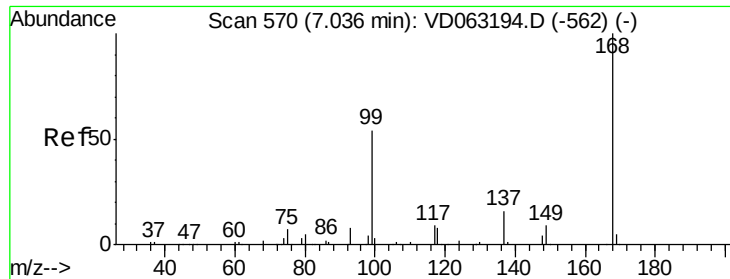
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-05(13-14)

Quant Time: Aug 09 07:05:26 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 30 03:04:50 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 571

Delta R.T. 0.02 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

Instrument :

MSVOA\_D

ClientSampleId :

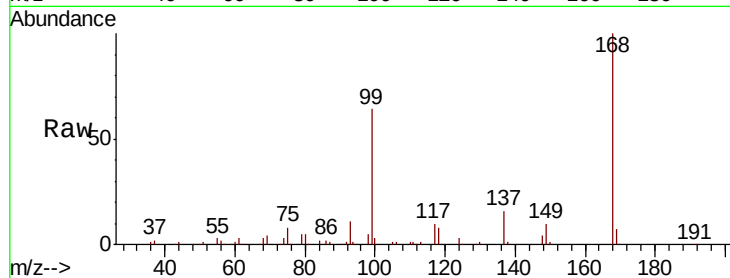
SB-05(13-14)

Tgt Ion:168 Resp: 1104600

Ion Ratio Lower Upper

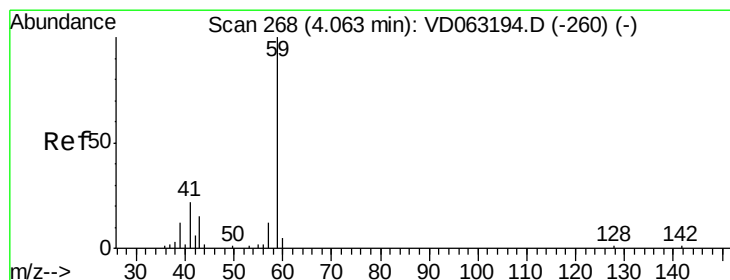
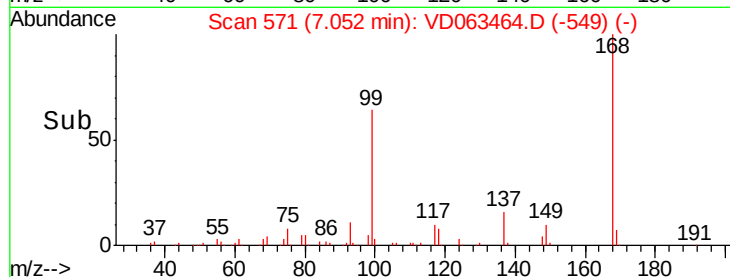
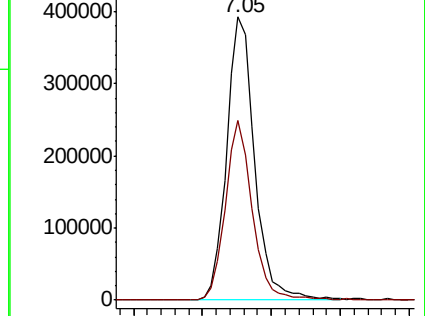
168 100

99 63.7 43.7 65.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#11

Tert butyl alcohol

Concen: 32.455 ug/l

RT: 4.01 min Scan# 262

Delta R.T. -0.05 min

Lab File: VD063464.D

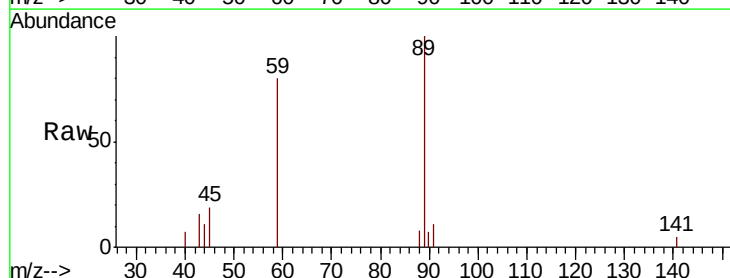
Acq: 9 Aug 2019 4:46

Tgt Ion: 59 Resp: 17457

Ion Ratio Lower Upper

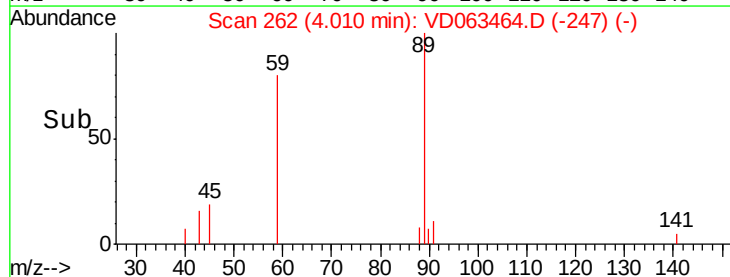
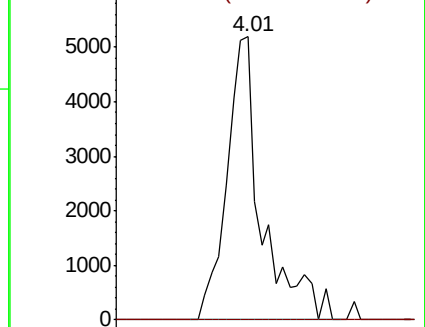
59 100

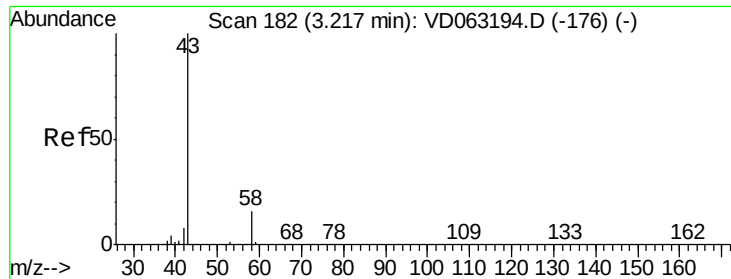
57 0.0 9.6 14.4#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC

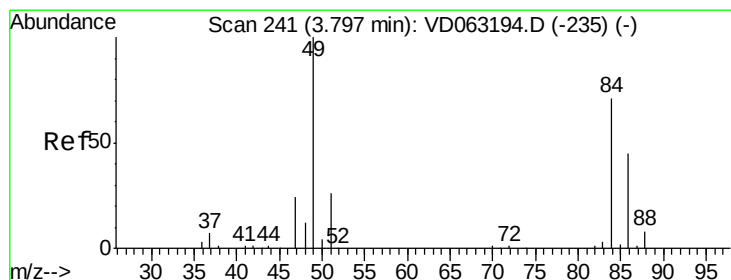
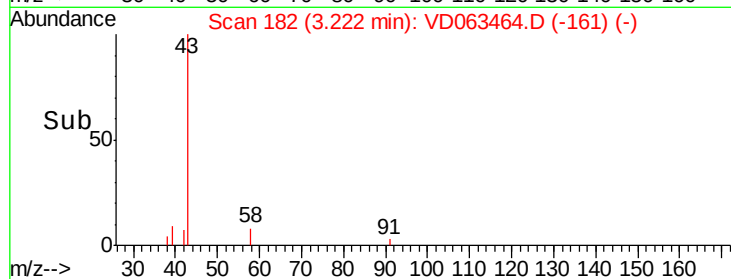
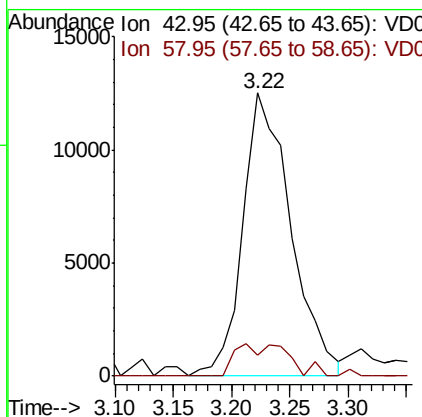
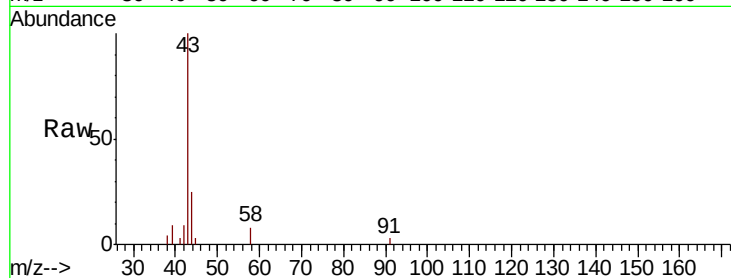




#16  
Acetone  
Concen: 14.993 ug/l  
RT: 3.22 min Scan# 182  
Delta R.T. 0.01 min  
Lab File: VD063464.D  
Acq: 9 Aug 2019 4:46

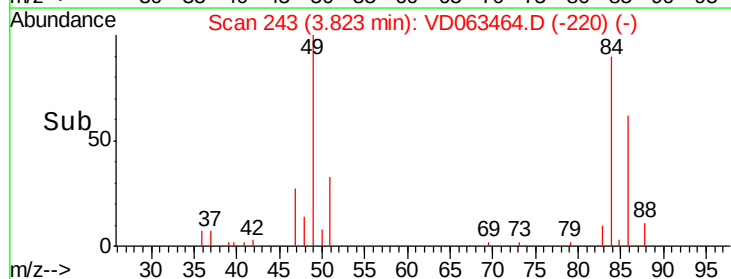
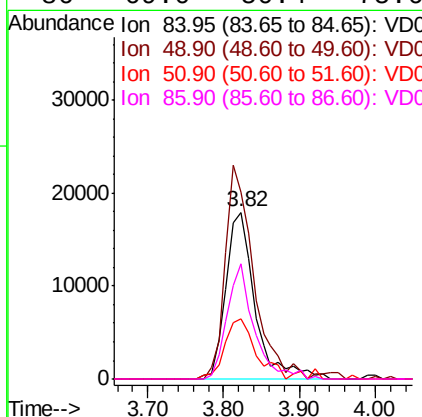
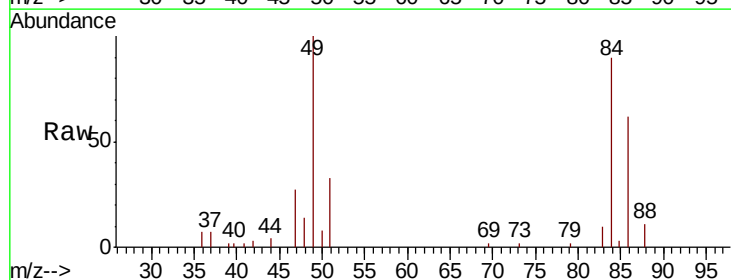
Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-05(13-14)

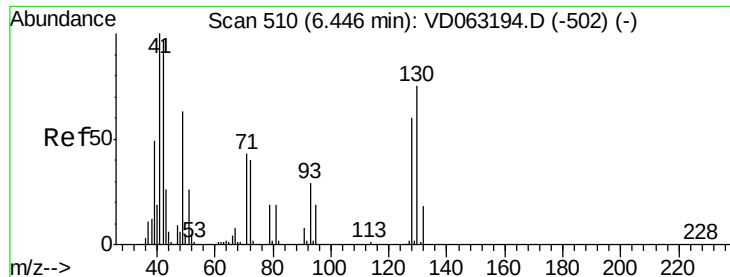
Tgt Ion: 43 Resp: 35804  
Ion Ratio Lower Upper  
43 100  
58 7.5 13.0 19.4#



#20  
Methylene Chloride  
Concen: 4.965 ug/l  
RT: 3.82 min Scan# 243  
Delta R.T. 0.03 min  
Lab File: VD063464.D  
Acq: 9 Aug 2019 4:46

Tgt Ion: 84 Resp: 47930  
Ion Ratio Lower Upper  
84 100  
49 111.6 112.5 168.7#  
51 36.3 29.6 44.4  
86 69.0 50.4 75.6





#29

Tetrahydrofuran

Concen: 1.325 ug/l

RT: 6.47 min Scan# 512

Delta R.T. 0.03 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

Instrument :

MSVOA\_D

ClientSampleId :

SB-05(13-14)

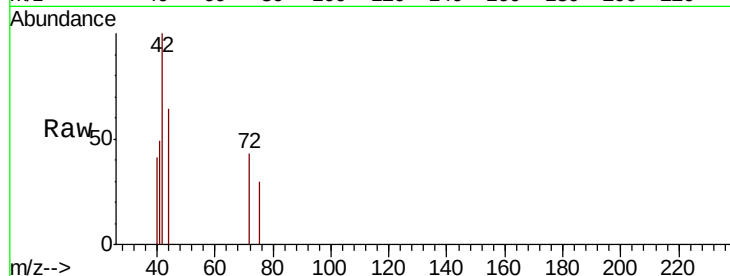
Tgt Ion: 42 Resp: 1504

Ion Ratio Lower Upper

42 100

72 33.7 33.4 50.2

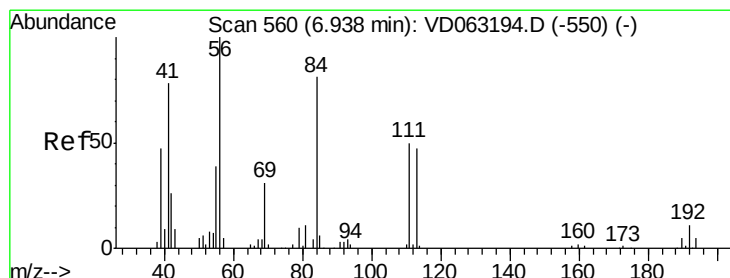
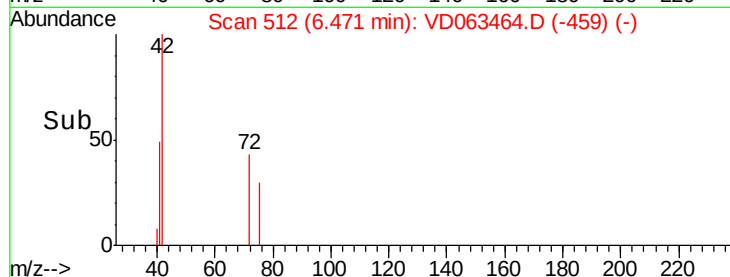
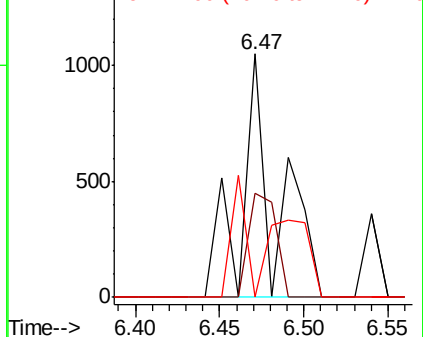
71 20.7 35.7 53.5#



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: 1.967 ug/l

RT: 7.05 min Scan# 571

Delta R.T. 0.11 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

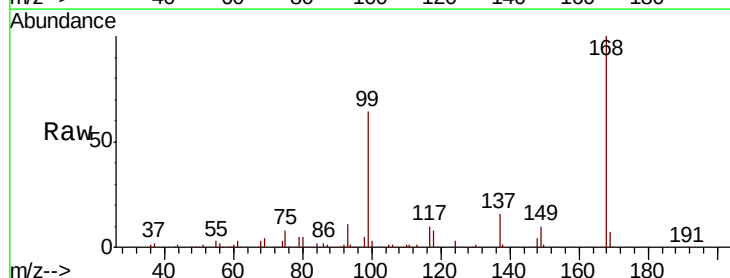
Tgt Ion: 56 Resp: 21475

Ion Ratio Lower Upper

56 100

69 227.1 24.5 36.7#

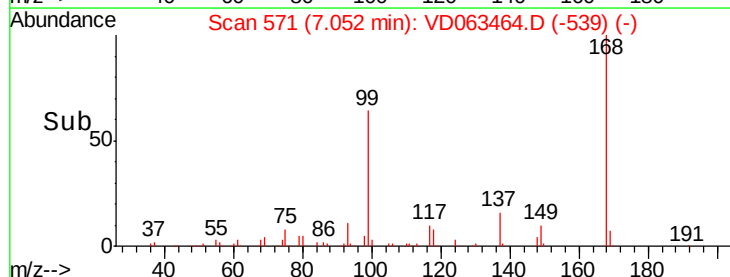
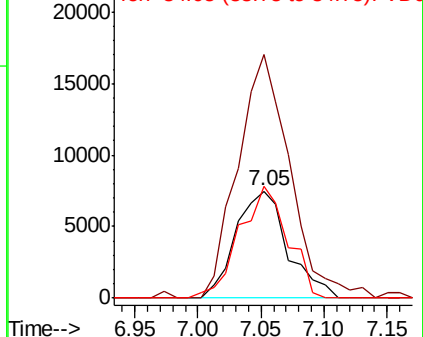
84 104.8 64.9 97.3#

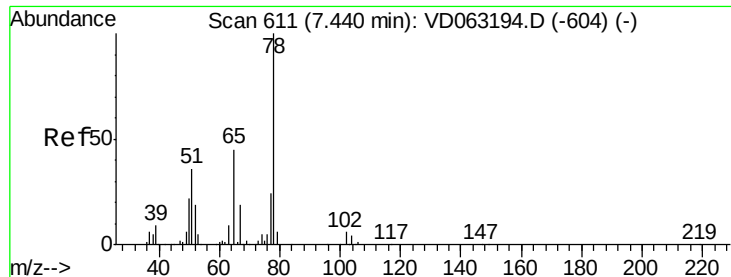


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.05 (83.75 to 84.75): VDC





#33

1,2-Dichloroethane-d4

Concen: 42.183 ug/l

RT: 7.47 min Scan# 613

Delta R.T. 0.03 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

Instrument :

MSVOA\_D

ClientSampleId :

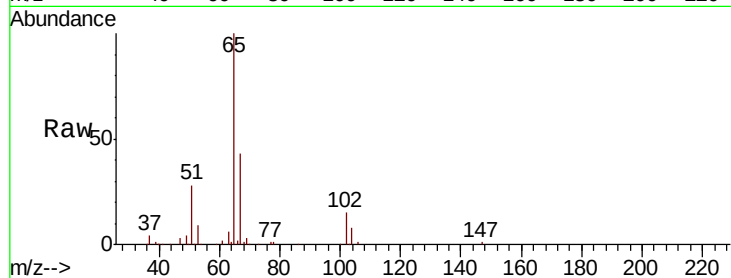
SB-05(13-14)

Tgt Ion: 65 Resp: 517019

Ion Ratio Lower Upper

65 100

67 43.4 0.0 85.8



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

7.47

200000

150000

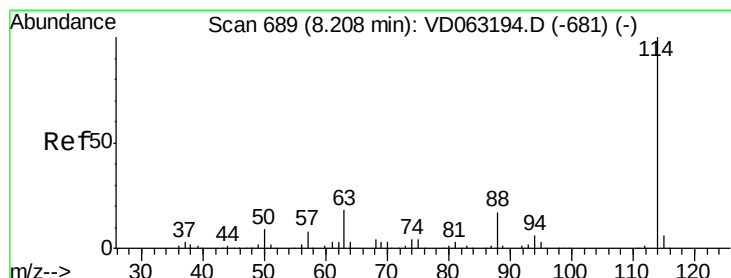
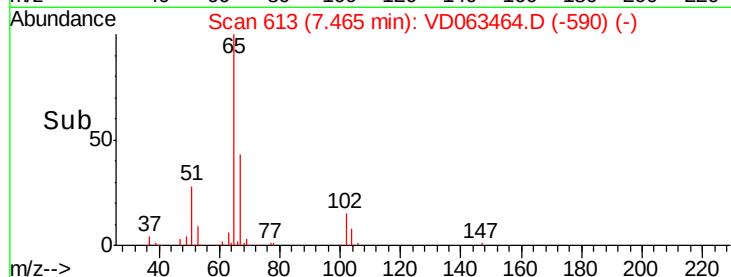
100000

50000

0

Time-->

7.30 7.40 7.50 7.60



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.23 min Scan# 691

Delta R.T. 0.03 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

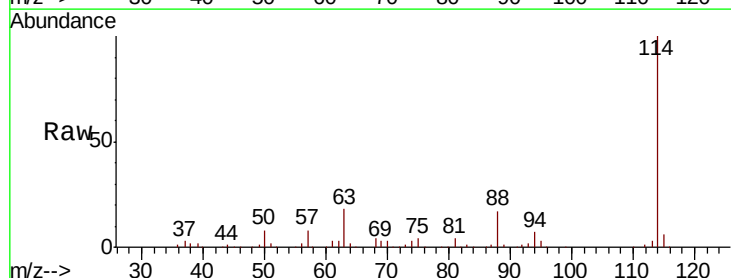
Tgt Ion: 114 Resp: 1508763

Ion Ratio Lower Upper

114 100

63 18.5 0.0 35.2

88 16.9 0.0 34.6



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

8.23

800000

600000

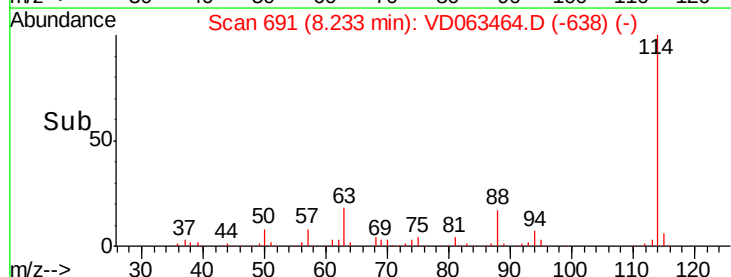
400000

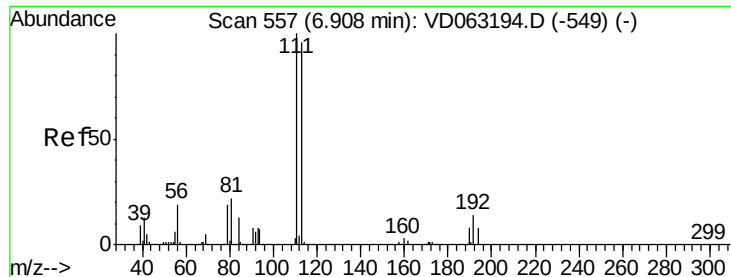
200000

0

Time-->

8.10 8.20 8.30 8.40





#35

Dibromofluoromethane

Concen: 44.335 ug/l

RT: 6.93 min Scan# 559

Delta R.T. 0.03 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

Instrument :

MSVOA\_D

ClientSampled :

SB-05(13-14)

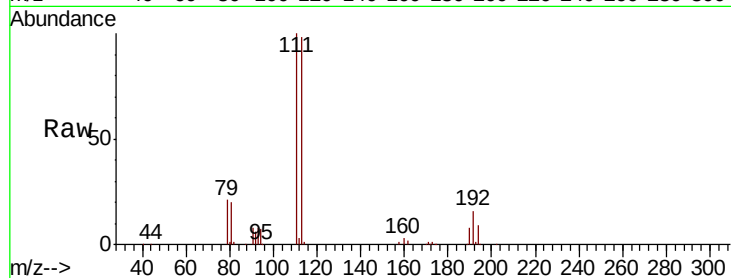
Tgt Ion:113 Resp: 571110

Ion Ratio Lower Upper

113 100

111 101.6 83.2 124.8

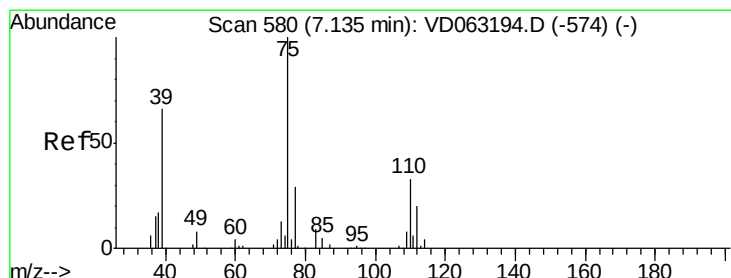
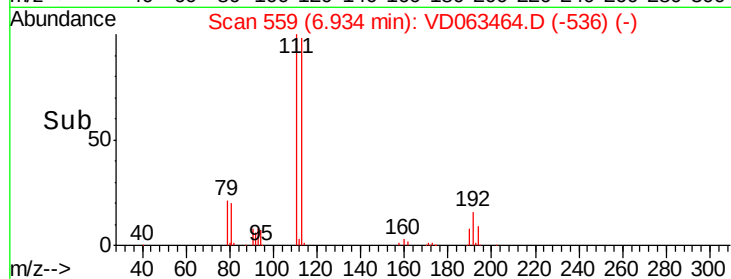
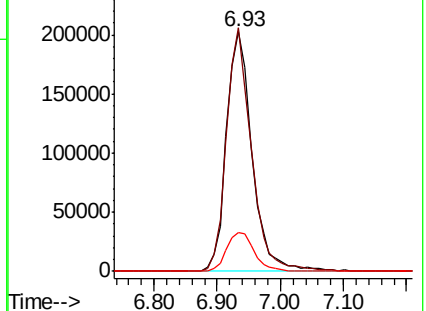
192 16.3 11.8 17.8



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: 6.062 ug/l

RT: 7.05 min Scan# 571

Delta R.T. -0.08 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

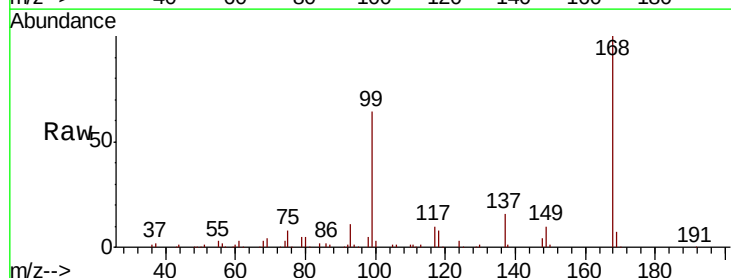
Tgt Ion: 75 Resp: 83474

Ion Ratio Lower Upper

75 100

110 7.8 16.1 48.2#

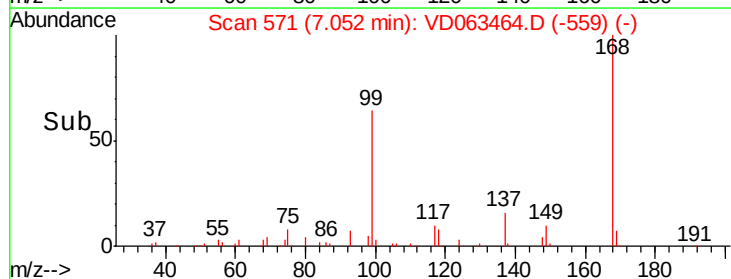
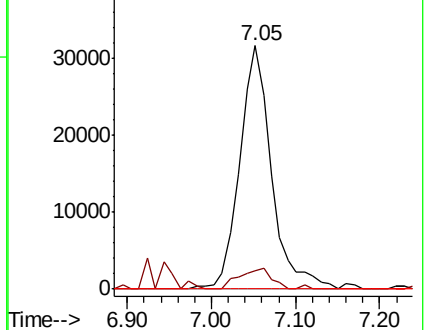
77 0.0 22.7 34.1#

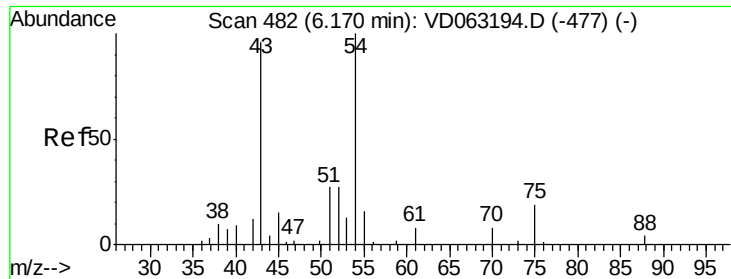


Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V

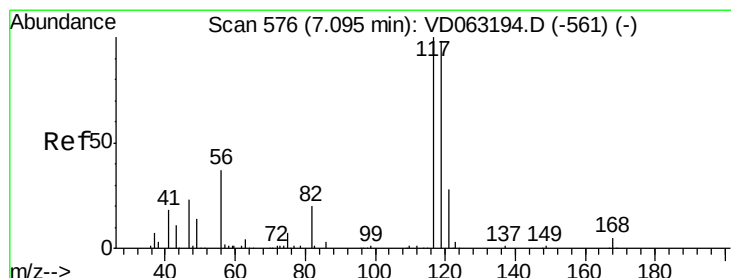
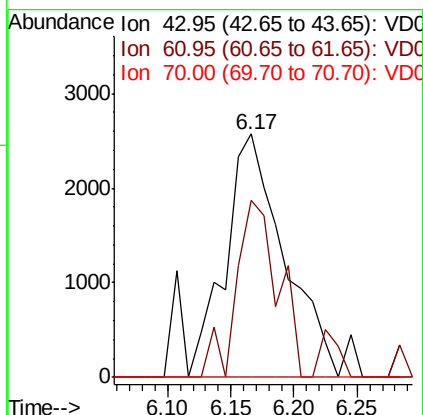
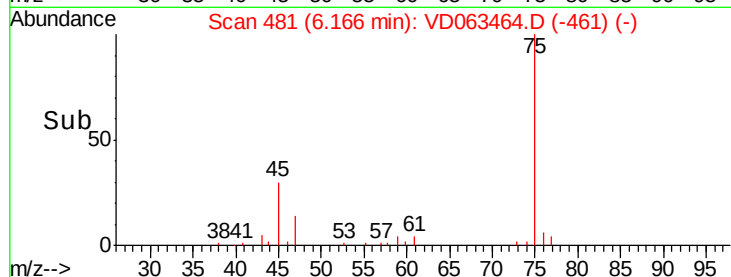
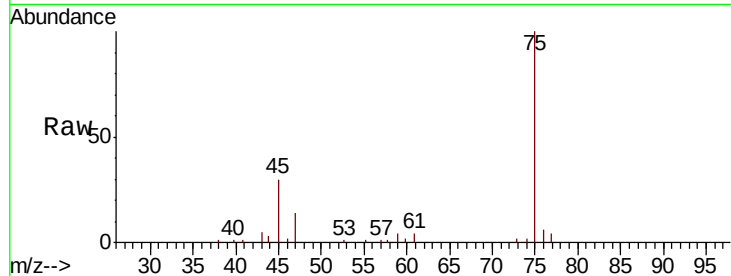




#37  
Ethyl Acetate  
Concen: 1.345 ug/l  
RT: 6.17 min Scan# 481  
Delta R.T. -0.00 min  
Lab File: VD063464.D  
Acq: 9 Aug 2019 4:46

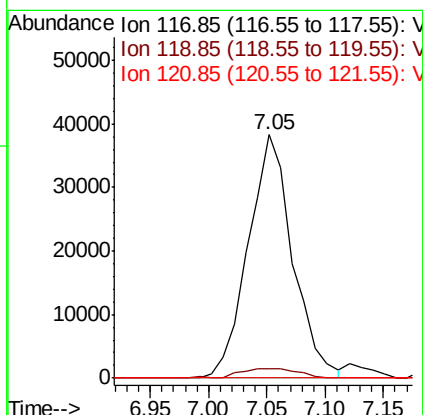
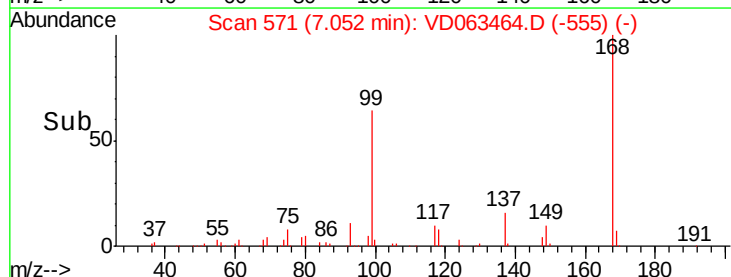
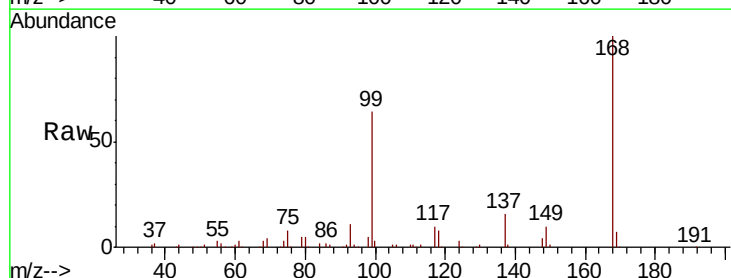
Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-05(13-14)

Tgt Ion: 43 Resp: 8321  
Ion Ratio Lower Upper  
43 100  
61 72.9 11.3 16.9#  
70 0.0 5.1 7.7#

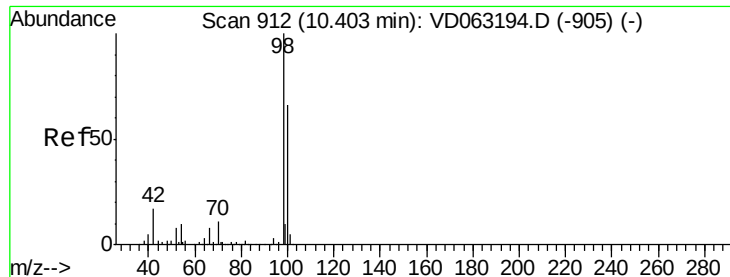


#38  
Carbon Tetrachloride  
Concen: 4.862 ug/l  
RT: 7.05 min Scan# 571  
Delta R.T. -0.04 min  
Lab File: VD063464.D  
Acq: 9 Aug 2019 4:46

Tgt Ion: 117 Resp: 100794  
Ion Ratio Lower Upper  
117 100  
119 3.7 78.2 117.2#  
121 0.0 22.1 33.1#







#50

Toluene-d8

Concen: 38.326 ug/l

RT: 10.42 min Scan# 913

Delta R.T. 0.02 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

Instrument :

MSVOA\_D

ClientSampleId :

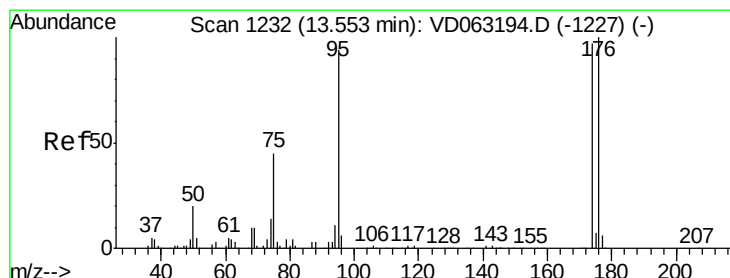
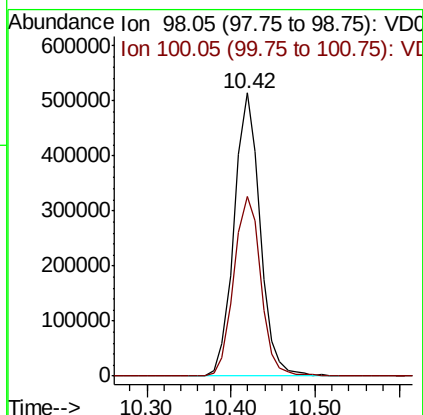
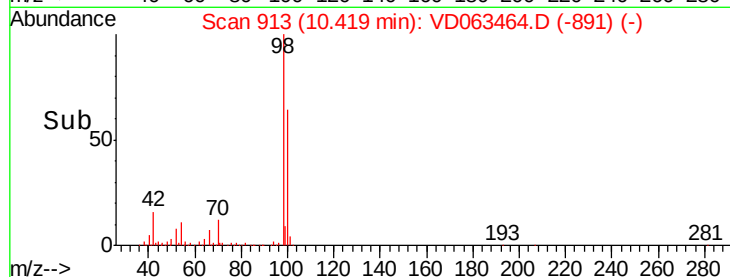
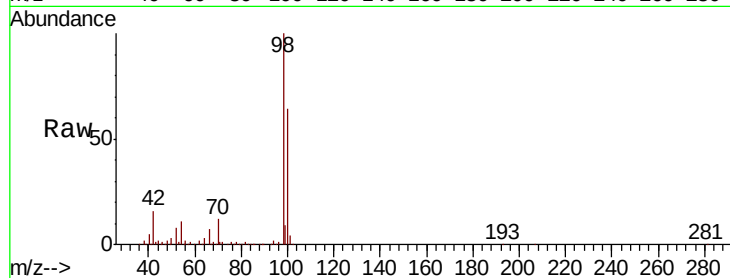
SB-05(13-14)

Tgt Ion: 98 Resp: 1104909

Ion Ratio Lower Upper

98 100

100 63.7 53.2 79.8



#62

4-Bromofluorobenzene

Concen: 31.316 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.01 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

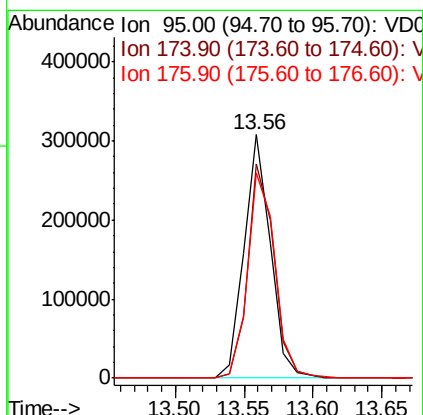
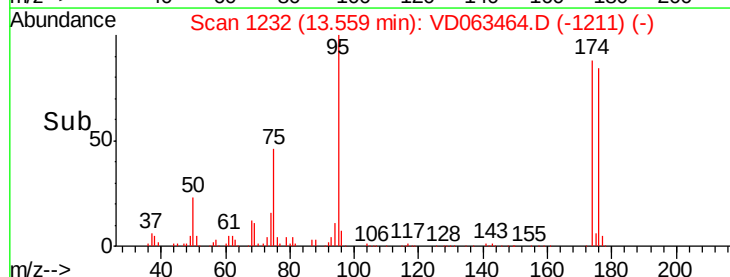
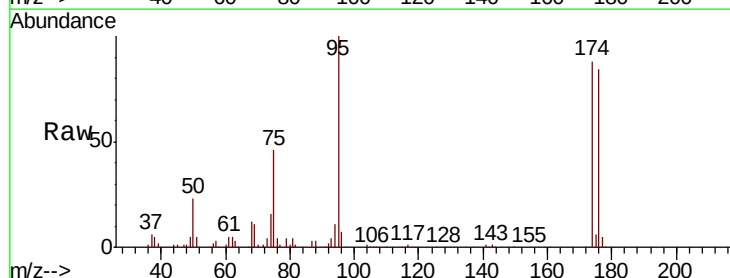
Tgt Ion: 95 Resp: 411404

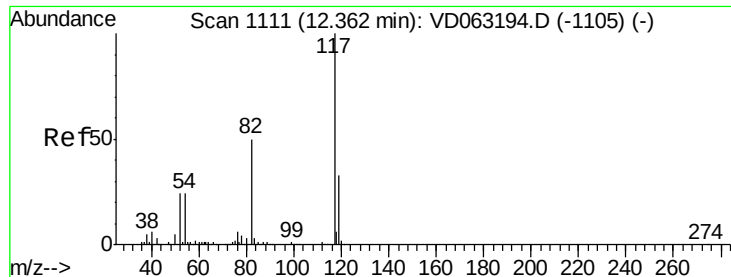
Ion Ratio Lower Upper

95 100

174 88.0 0.0 205.4

176 84.3 0.0 211.8

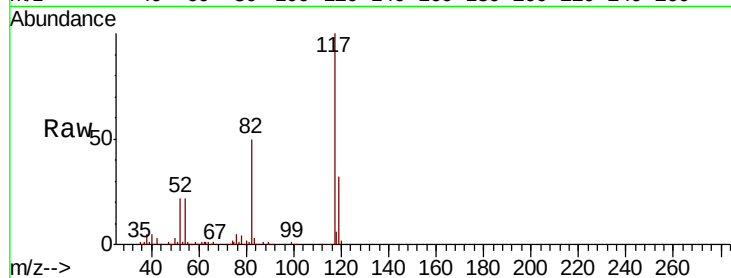




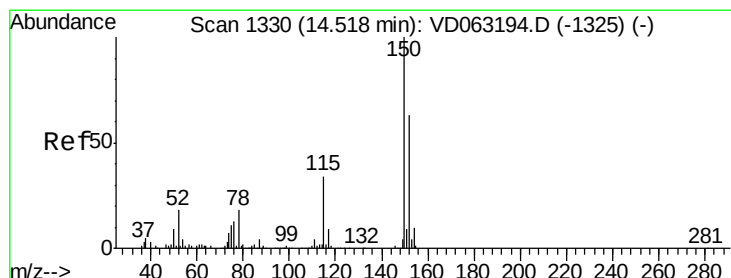
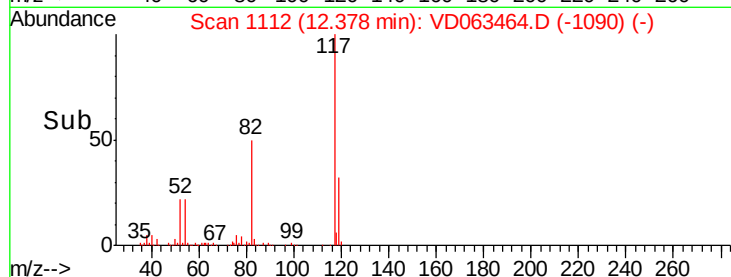
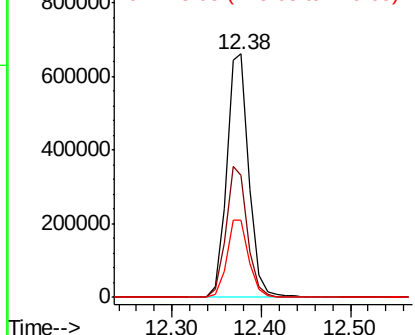
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.38 min Scan# 1112  
Delta R.T. 0.02 min  
Lab File: VD063464.D  
Acq: 9 Aug 2019 4:46

Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-05(13-14)

Tgt Ion:117 Resp: 1161450  
Ion Ratio Lower Upper  
117 100  
82 50.1 40.1 60.1  
119 32.0 26.5 39.7

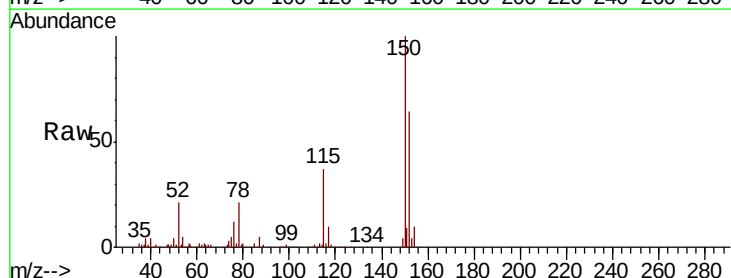


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

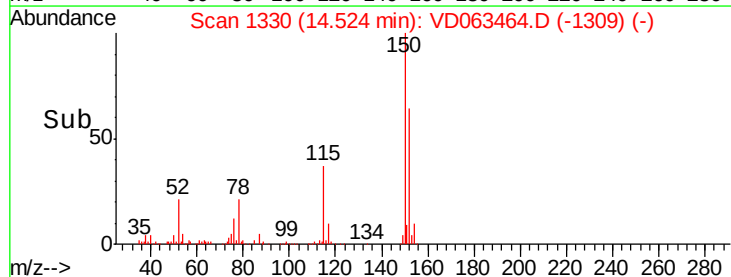
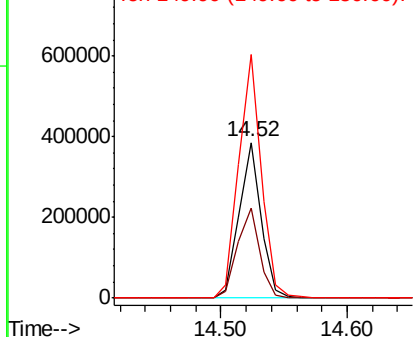


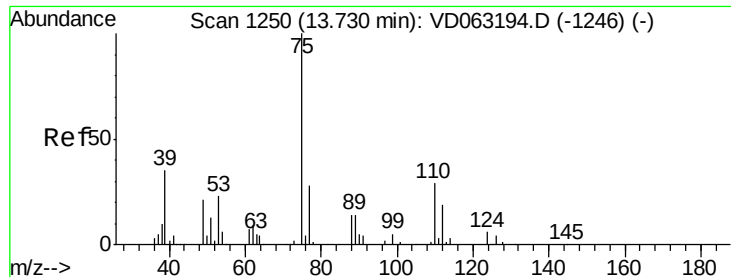
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.52 min Scan# 1330  
Delta R.T. 0.01 min  
Lab File: VD063464.D  
Acq: 9 Aug 2019 4:46

Tgt Ion:152 Resp: 461885  
Ion Ratio Lower Upper  
152 100  
115 57.7 27.5 82.4  
150 156.4 0.0 320.6



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: 24.105 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. -0.17 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

Instrument :

MSVOA\_D

ClientSampleId :

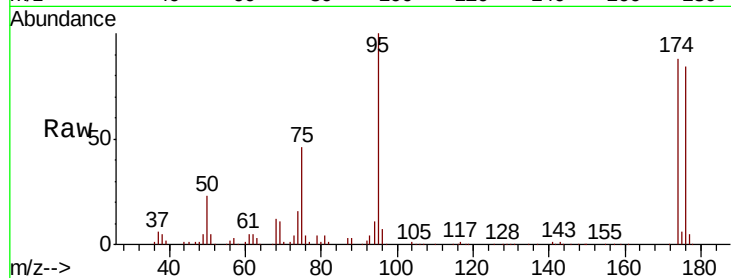
SB-05(13-14)

Tgt Ion: 75 Resp: 133730

Ion Ratio Lower Upper

75 100

77 1.3 16.0 48.0#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 76.95 (76.65 to 77.65): VDC

13.56

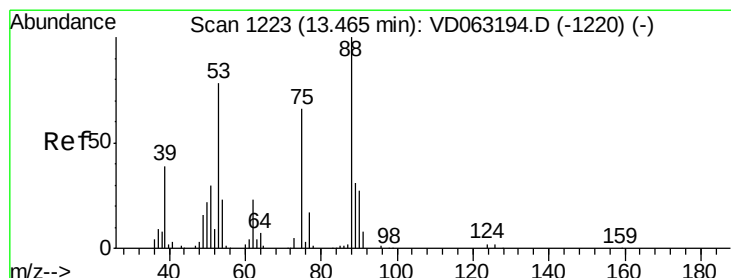
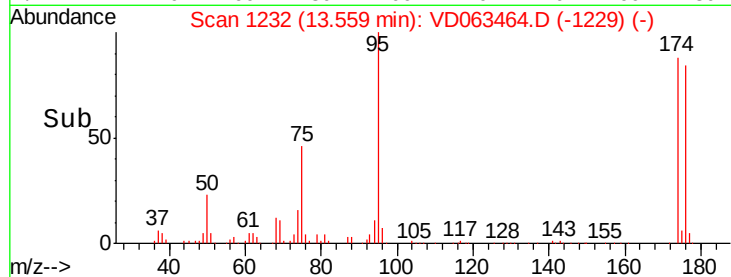
150000

100000

50000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 121.672 ug/l

RT: 13.56 min Scan# 1232

Delta R.T. 0.09 min

Lab File: VD063464.D

Acq: 9 Aug 2019 4:46

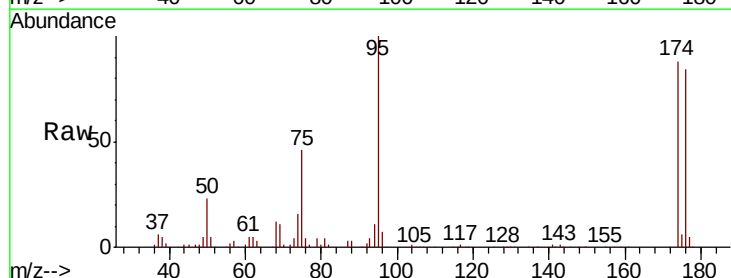
Tgt Ion: 75 Resp: 187438

Ion Ratio Lower Upper

75 100

53 0.0 94.9 142.3#

89 0.0 37.4 56.0#



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

13.56

150000

100000

50000

0

Time-->

