

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD032519\  
 Data File : VD061308.D  
 Acq On : 25 Mar 2019 18:07  
 Operator : VA/AP  
 Sample : K2043-14  
 Misc : 6.37g/5ml/MSVOA D/SOIL  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 WP022SB433-190319-(23-25)

Quant Time: Mar 26 04:29:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D032519S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 03:31:57 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.06  | 168  | 635762   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 1126705  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 820436   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 402241   | 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   | 216346   | 39.44 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 78.88% |          |
| 35) Dibromofluoromethane    | 6.94  | 113  | 354232   | 41.09 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 82.18% |          |
| 50) Toluene-d8              | 10.41 | 98   | 918498   | 43.94 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.88% |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 309990   | 38.01 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 76.02% |          |

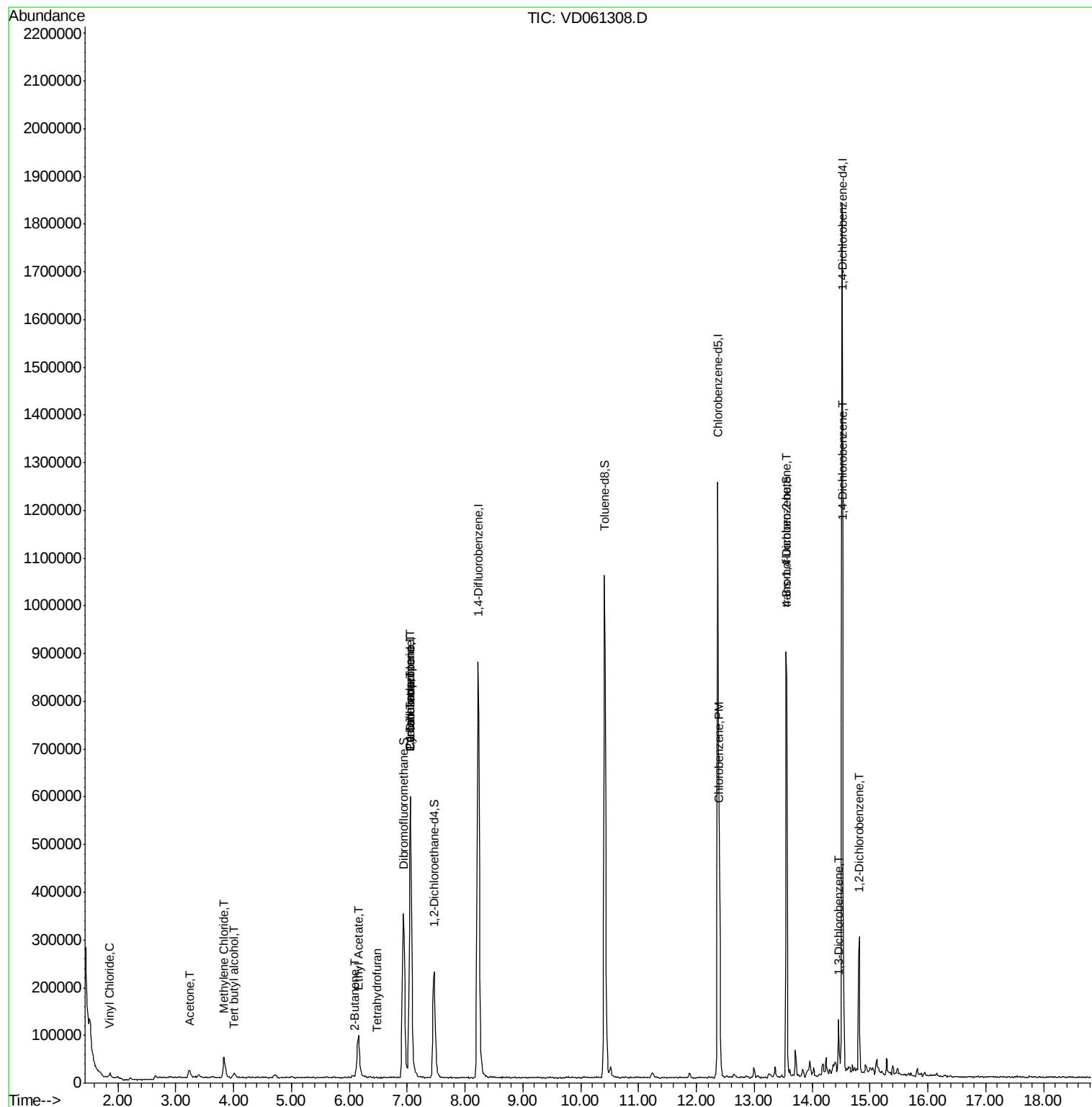
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 4) Vinyl Chloride              | 1.87  | 62   | 7512     | 1.584  | ug/l   | 99     |
| 11) Tert butyl alcohol         | 4.02  | 59   | 9343     | 31.998 | ug/l # | 77     |
| 16) Acetone                    | 3.24  | 43   | 33472    | 25.512 | ug/l   | 98     |
| 20) Methylene Chloride         | 3.84  | 84   | 33272    | 4.468  | ug/l   | 87     |
| 25) 2-Butanone                 | 6.09  | 43   | 3691     | 2.432  | ug/l # | 52     |
| 29) Tetrahydrofuran            | 6.47  | 42   | 965      | 1.278  | ug/l # | 49     |
| 31) Cyclohexane                | 7.06  | 56   | 11230    | 1.294  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.06  | 75   | 46956    | 5.094  | ug/l # | 46     |
| 37) Ethyl Acetate              | 6.15  | 43   | 4629     | 1.202  | ug/l # | 1      |
| 38) Carbon Tetrachloride       | 7.06  | 117  | 60205    | 5.714  | ug/l # | 14     |
| 65) Chlorobenzene              | 12.40 | 112  | 241699   | 15.994 | ug/l   | 100    |
| 81) trans-1,4-Dichloro-2-buten | 13.55 | 75   | 112864   | 71.492 | ug/l # | 17     |
| 87) 1,3-Dichlorobenzene        | 14.46 | 146  | 36823    | 2.843  | ug/l   | 90     |
| 88) 1,4-Dichlorobenzene        | 14.54 | 146  | 81439    | 6.490  | ug/l   | 99     |
| 91) 1,2-Dichlorobenzene        | 14.81 | 146  | 100122   | 9.687  | ug/l   | 98     |

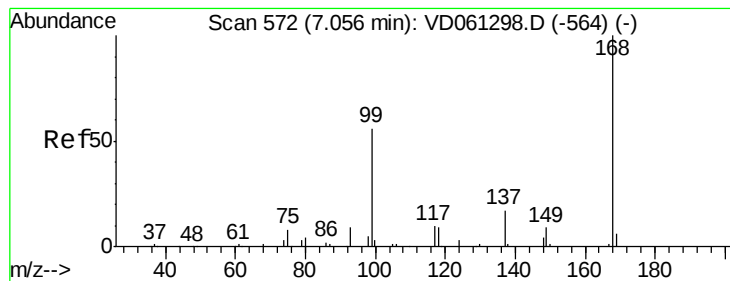
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD032519\  
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ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
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WP022SB433-190319-(23-25)

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Quant Title : SW846 8260  
QLast Update : Tue Mar 26 03:31:57 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.06 min Scan# 572

Delta R.T. -0.00 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

Instrument :

MSVOA\_D

ClientSampleId :

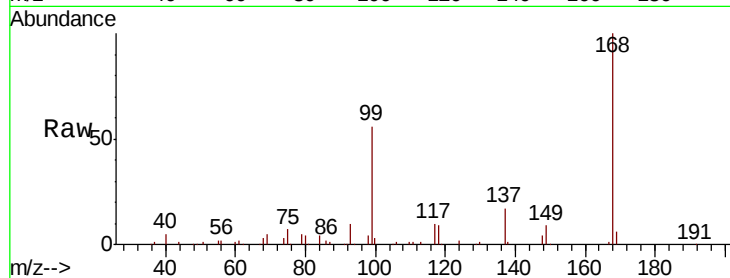
WP022SB433-190319-(23-25)

Tot Ion:168 Resp: 635762

Ion Ratio Lower Upper

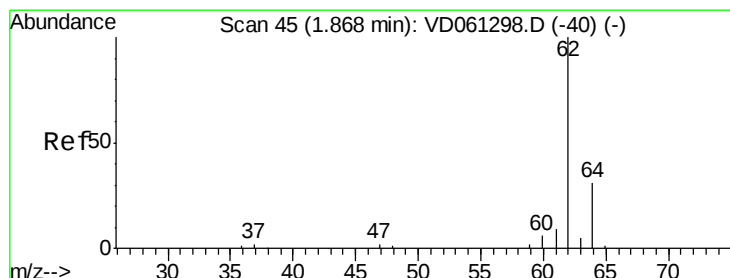
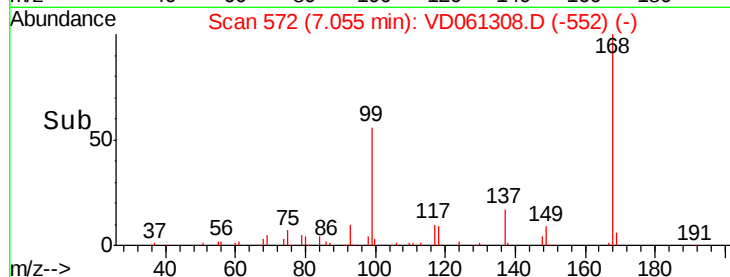
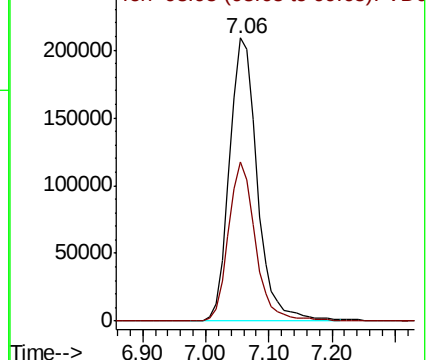
168 100

99 56.2 45.8 68.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#4

Vinyl Chloride

Concen: 1.584 ug/l

RT: 1.87 min Scan# 45

Delta R.T. -0.00 min

Lab File: VD061308.D

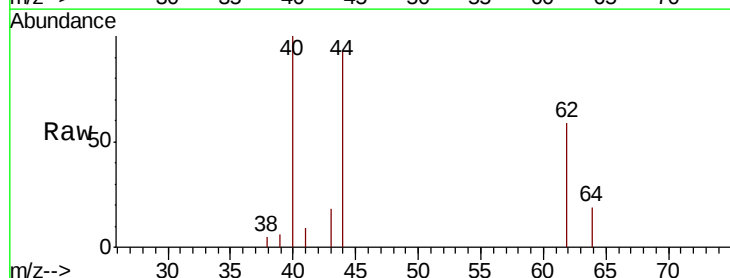
Acq: 25 Mar 2019 18:07

Tgt Ion: 62 Resp: 7512

Ion Ratio Lower Upper

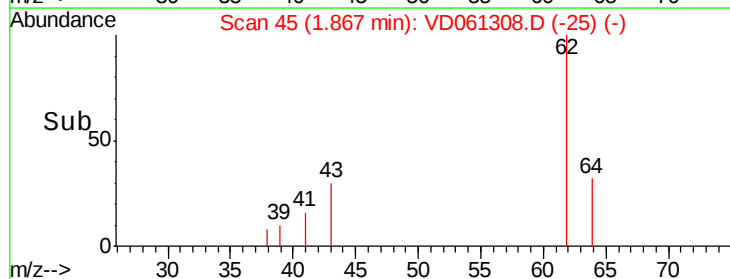
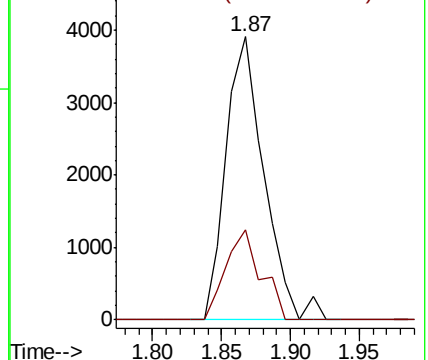
62 100

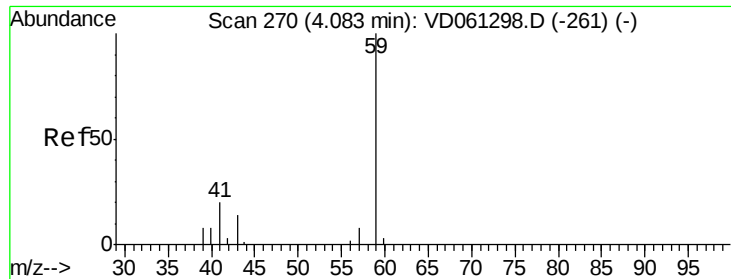
64 31.7 25.1 37.7



Abundance Ion 61.95 (61.65 to 62.65): VDC

Ion 63.95 (63.65 to 64.65): VDC



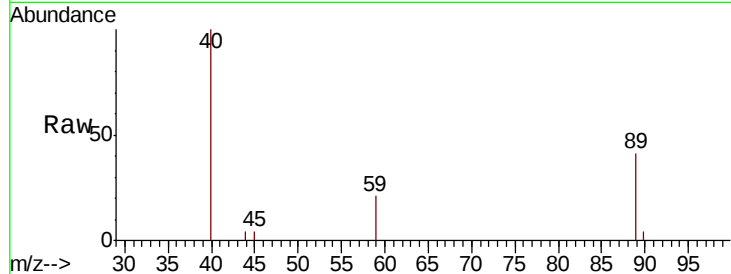


#11

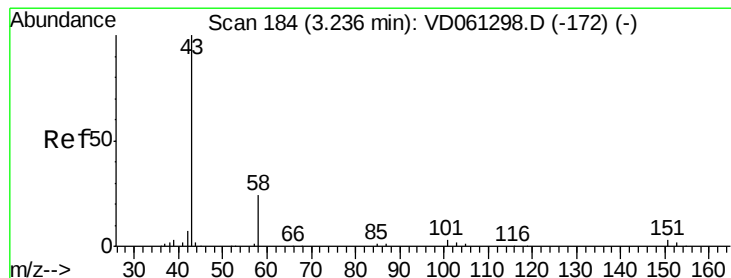
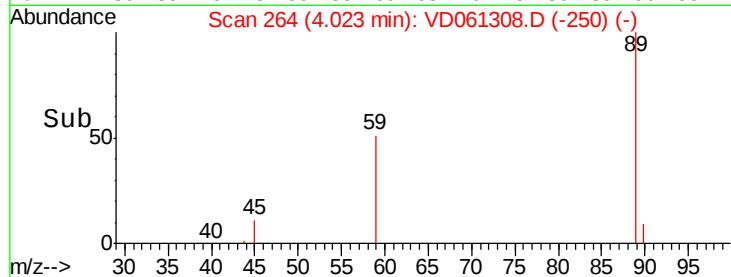
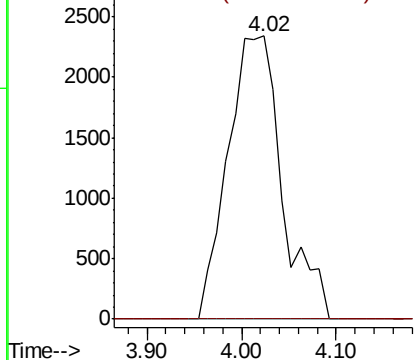
Tert butyl alcohol  
 Concen: 31.998 ug/l  
 RT: 4.02 min Scan# 264  
 Delta R.T. -0.06 min  
 Lab File: VD061308.D  
 Acq: 25 Mar 2019 18:07

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 WP022SB433-190319-(23-25)

Tot Ion: 59 Resp: 9343  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 6.6 9.8#



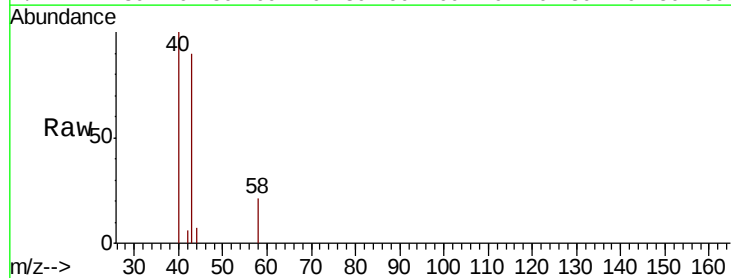
Abundance Ion 58.95 (58.65 to 59.65): VDC  
 Ion 56.95 (56.65 to 57.65): VDC



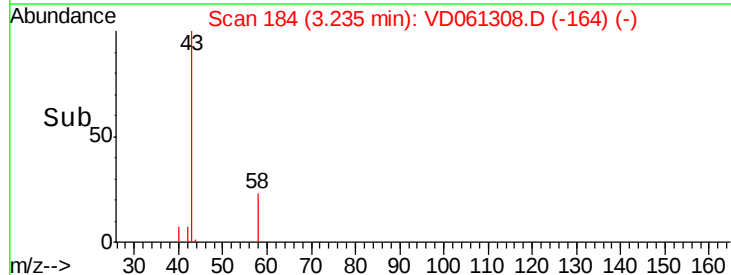
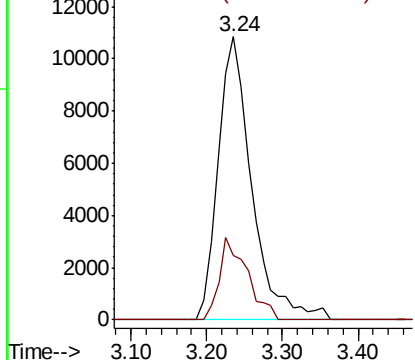
#16

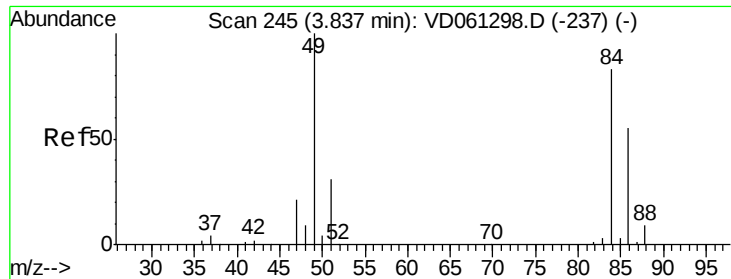
Acetone  
 Concen: 25.512 ug/l  
 RT: 3.24 min Scan# 184  
 Delta R.T. -0.00 min  
 Lab File: VD061308.D  
 Acq: 25 Mar 2019 18:07

Tgt Ion: 43 Resp: 33472  
 Ion Ratio Lower Upper  
 43 100  
 58 23.0 19.4 29.0



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

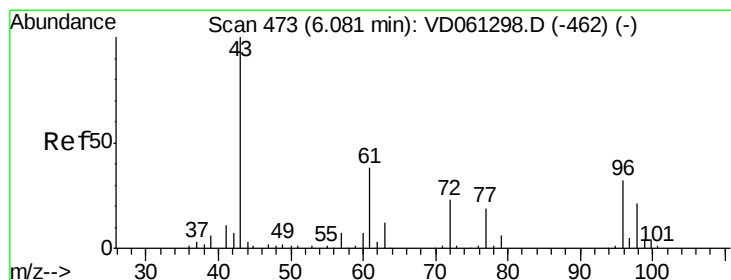
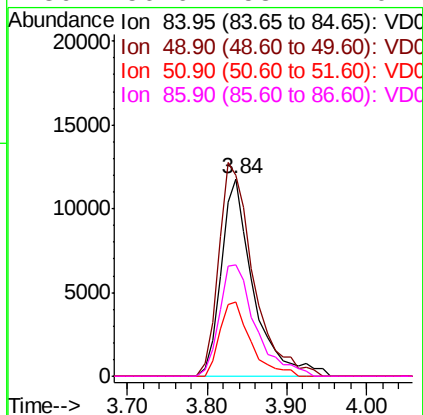
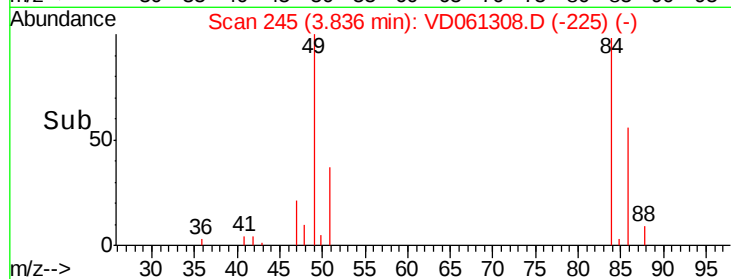
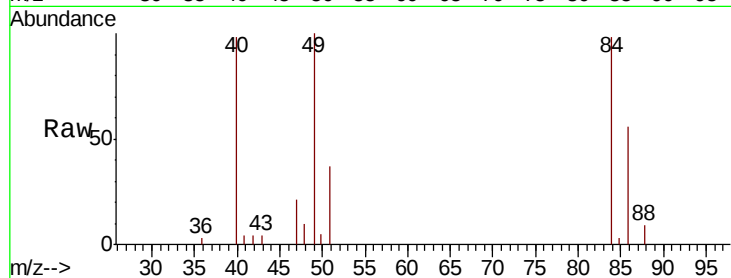




#20  
Methvlene Chloride  
Concen: 4.468 ug/l  
RT: 3.84 min Scan# 245  
Delta R.T. -0.00 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

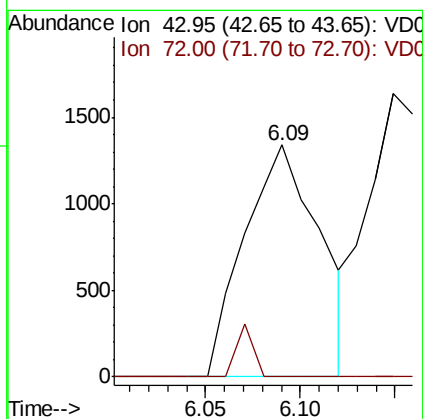
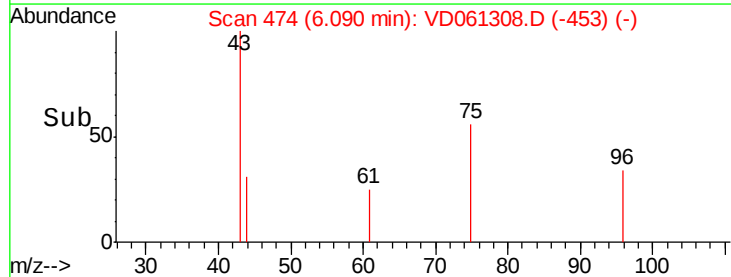
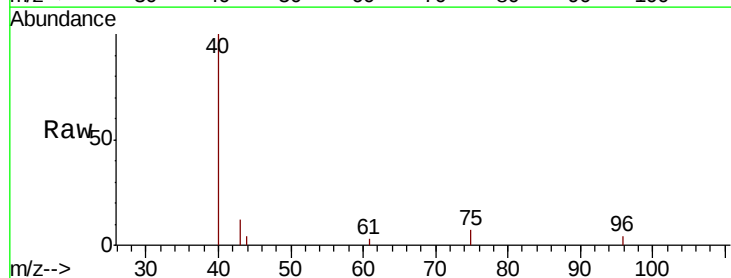
Instrument :  
MSVOA\_D  
ClientSampleId :  
WP022SB433-190319-(23-25)

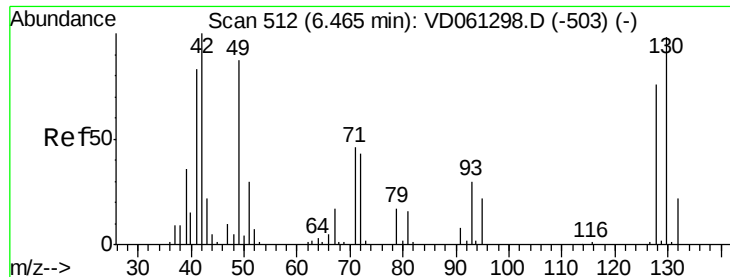
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 33272 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 101.7 | 96.8  | 145.2 |
| 51       | 37.3  | 29.9  | 44.9  |
| 86       | 56.6  | 53.1  | 79.7  |



#25  
2-Butanone  
Concen: 2.432 ug/l  
RT: 6.09 min Scan# 474  
Delta R.T. 0.01 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 3691  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 0.0   | 18.5  | 27.7# |





#29

Tetrahydrofuran

Concen: 1.278 ug/l

RT: 6.47 min Scan# 513

Delta R.T. 0.01 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

Instrument :

MSVOA\_D

ClientSampleId :

WP022SB433-190319-(23-25)

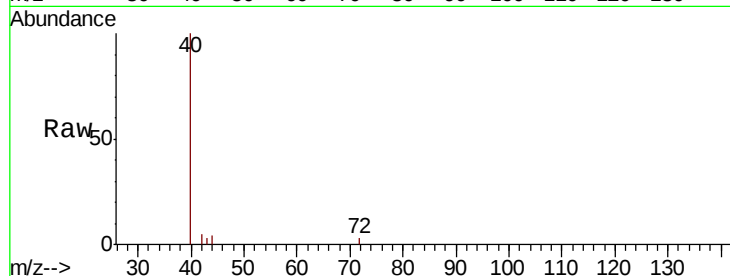
Tot Ion: 42 Resp: 965

Ion Ratio Lower Upper

42 100

72 24.2 36.6 54.8#

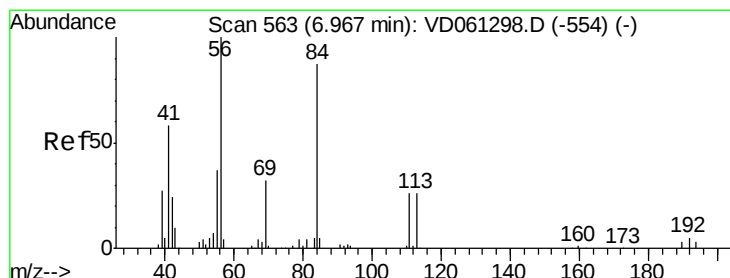
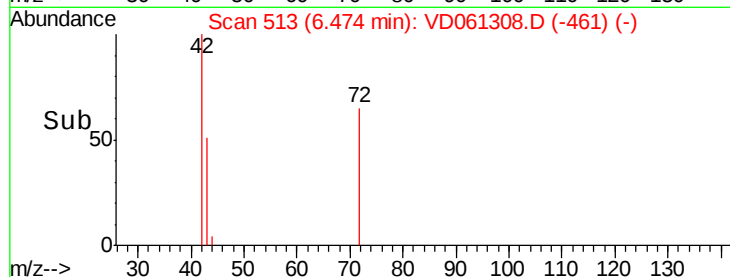
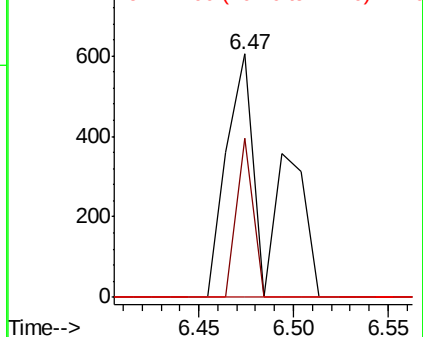
71 0.0 36.3 54.5#



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: 1.294 ug/l

RT: 7.06 min Scan# 572

Delta R.T. 0.09 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

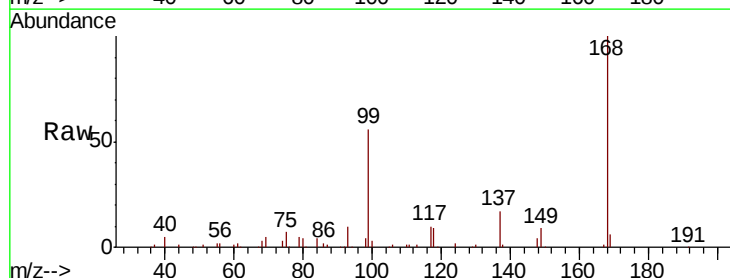
Tgt Ion: 56 Resp: 11230

Ion Ratio Lower Upper

56 100

69 266.6 25.5 38.3#

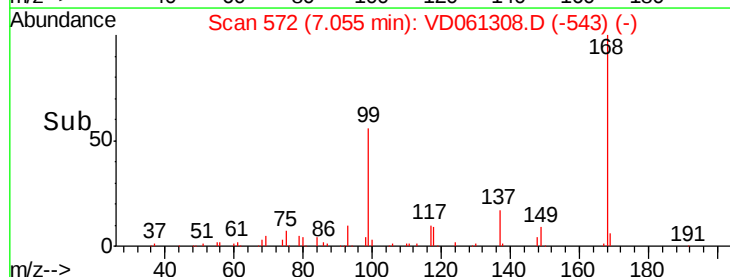
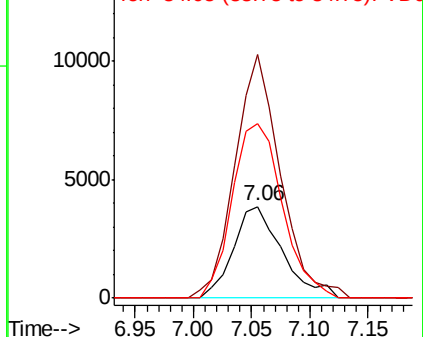
84 190.5 71.4 107.2#

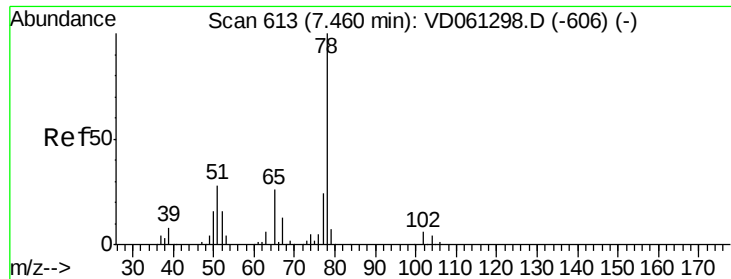


Abundance Ion 55.95 (55.65 to 56.65): VDC

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: 7.47 min Scan# 614

Delta R.T. 0.01 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

Instrument :

MSVOA\_D

ClientSampleId :

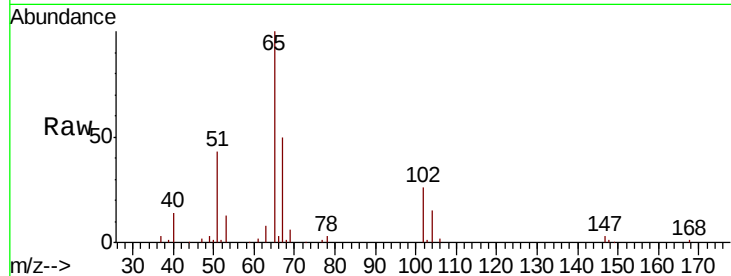
WP022SB433-190319-(23-25)

Tot Ion: 65 Resp: 216346

Ion Ratio Lower Upper

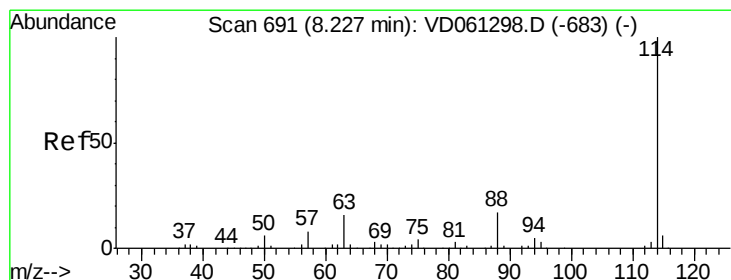
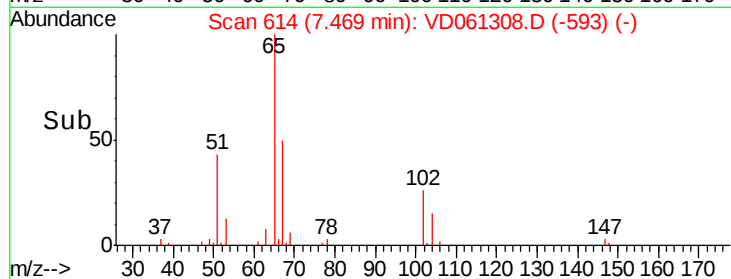
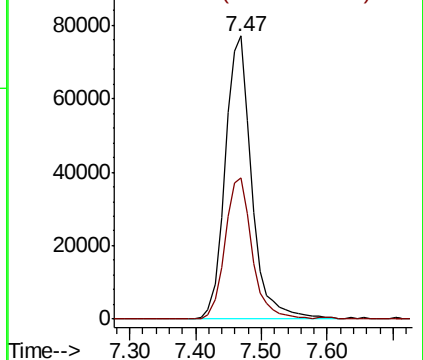
65 100

67 49.8 0.0 100.8



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. -0.00 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

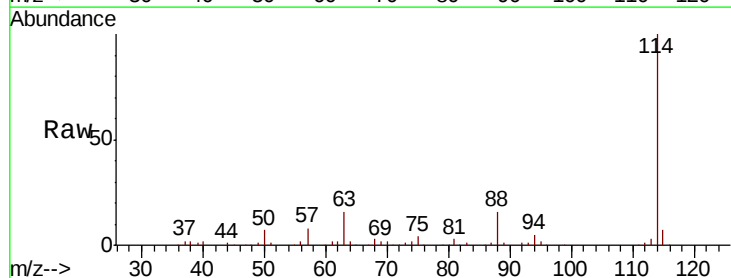
Tgt Ion: 114 Resp: 1126705

Ion Ratio Lower Upper

114 100

63 16.0 0.0 31.4

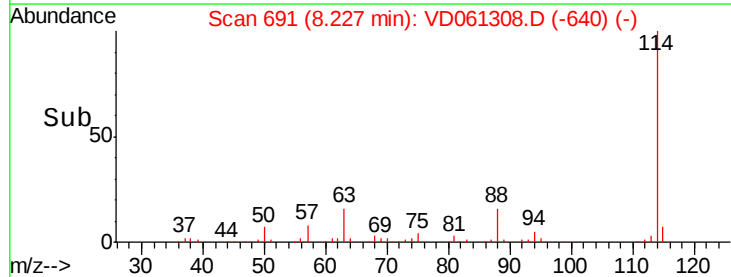
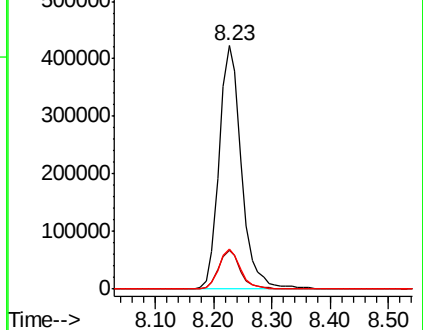
88 16.5 0.0 33.2

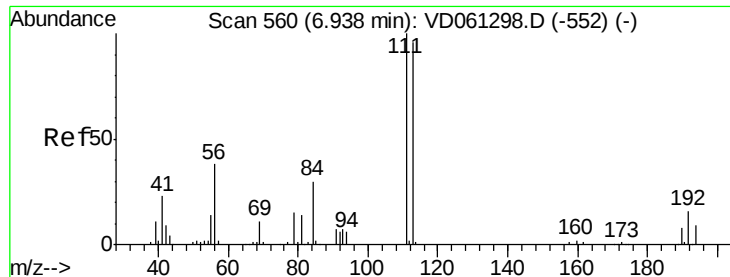


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

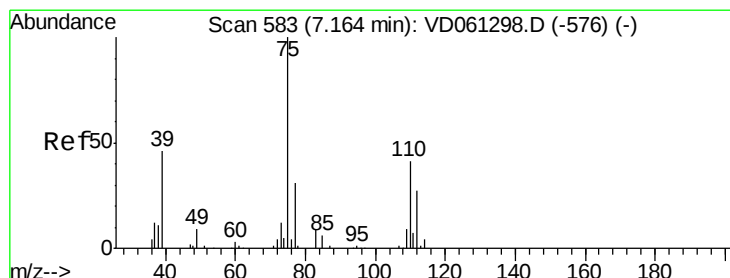
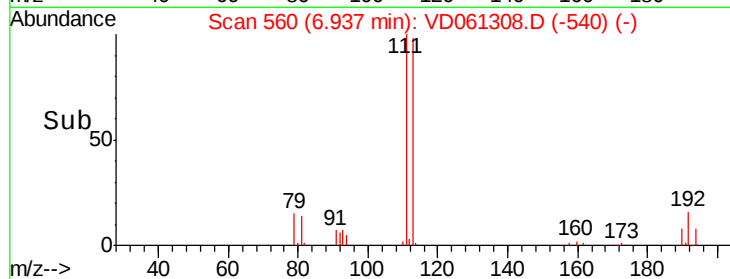
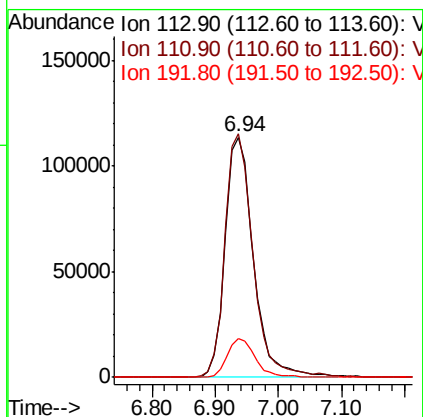
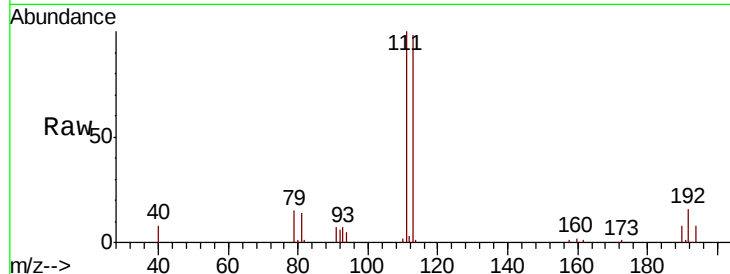




#35  
Dibromofluoromethane  
Concen: 50.000 ug/l  
RT: 6.94 min Scan# 560  
Delta R.T. -0.00 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

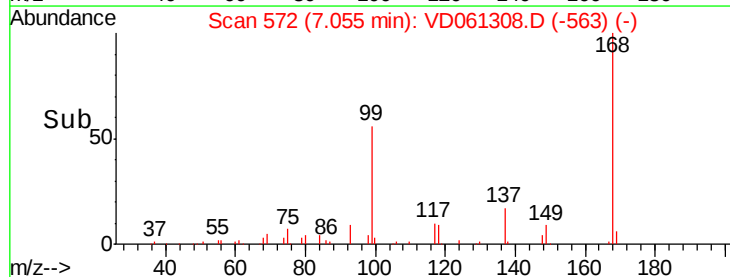
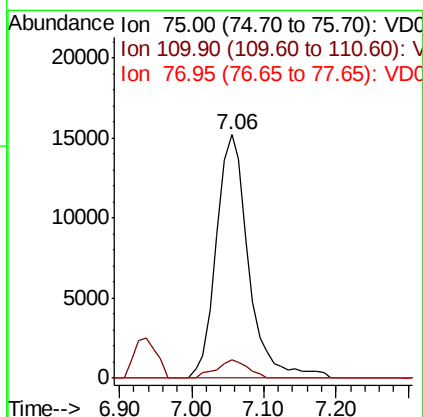
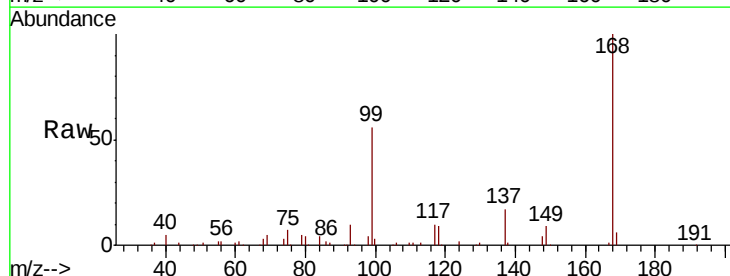
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WP022SB433-190319-(23-25)

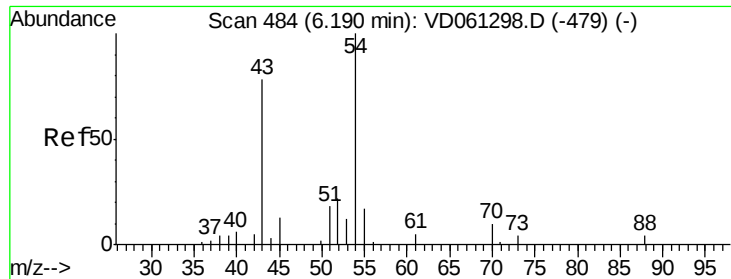
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.5 | 83.7  | 125.5 |
| 192     | 16.1  | 13.4  | 20.0  |



#36  
1,1-Dichloropropene  
Concen: 5.094 ug/l  
RT: 7.06 min Scan# 572  
Delta R.T. -0.11 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.3   | 20.1  | 60.2# |
| 77      | 0.0   | 24.3  | 36.5# |

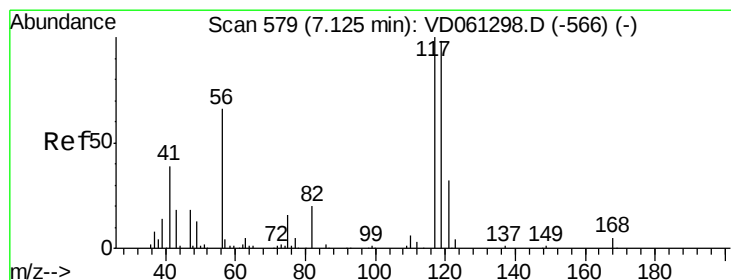
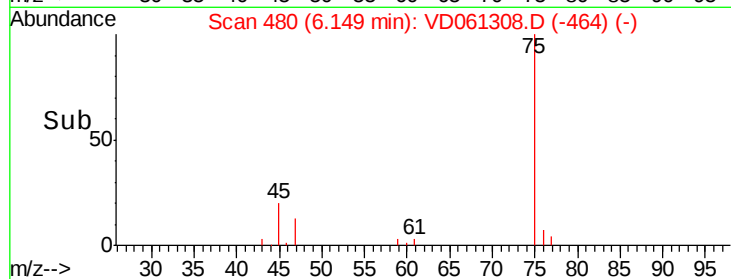
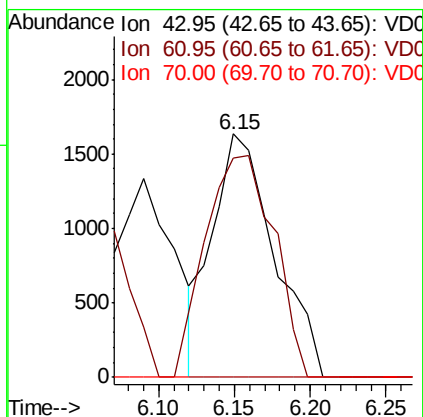
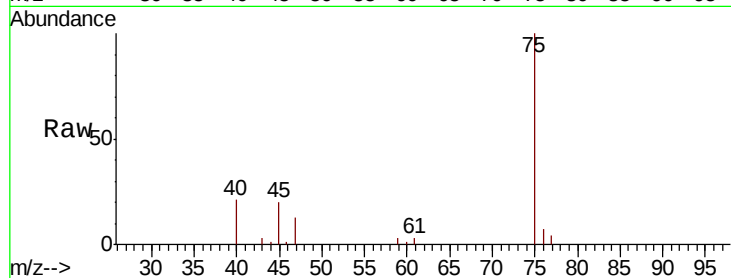




#37  
Ethyl Acetate  
Concen: 1.202 ug/l  
RT: 6.15 min Scan# 480  
Delta R.T. -0.04 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

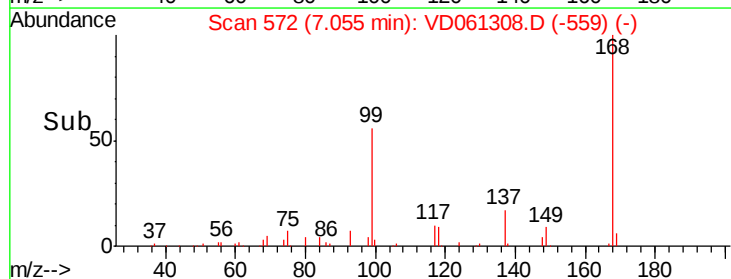
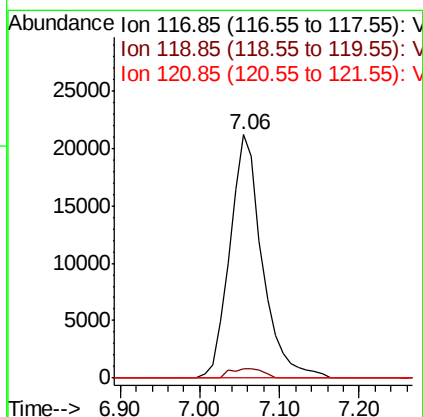
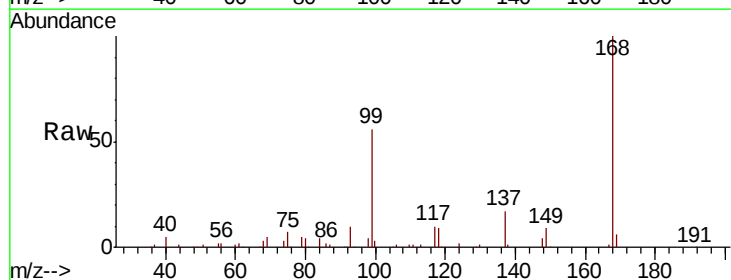
Instrument :  
MSVOA\_D  
ClientSampleId :  
WP022SB433-190319-(23-25)

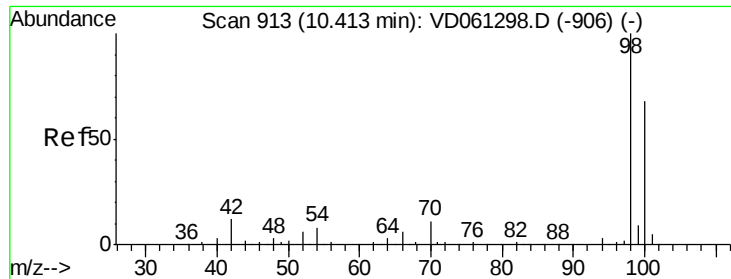
Tot Ion: 43 Resp: 4629  
Ion Ratio Lower Upper  
43 100  
61 90.0 12.6 19.0#  
70 0.0 8.2 12.4#



#38  
Carbon Tetrachloride  
Concen: 5.714 ug/l  
RT: 7.06 min Scan# 572  
Delta R.T. -0.07 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

Tgt Ion: 117 Resp: 60205  
Ion Ratio Lower Upper  
117 100  
119 3.7 78.4 117.6#  
121 0.0 25.1 37.7#





#50

Toluene-d8

Concen: N.D. ug/l

RT: 10.41 min Scan# 913

Delta R.T. -0.00 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

Instrument :

MSVOA\_D

ClientSampleId :

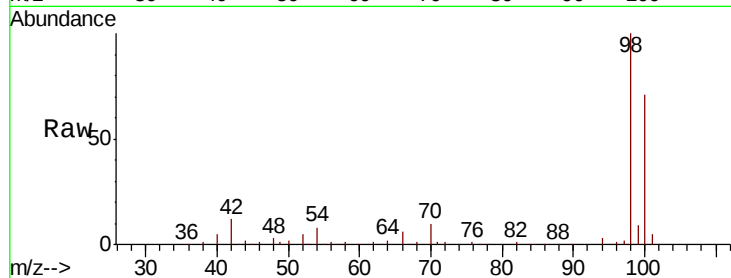
WP022SB433-190319-(23-25)

Tot Ion: 98 Resp: 918498

Ion Ratio Lower Upper

98 100

100 71.0 55.4 83.0



Abundance Ion 98.05 (97.75 to 98.75): VD061298.D (-906) (-)

Ion 100.05 (99.75 to 100.75): VD061298.D (-906) (-)

10.41

400000

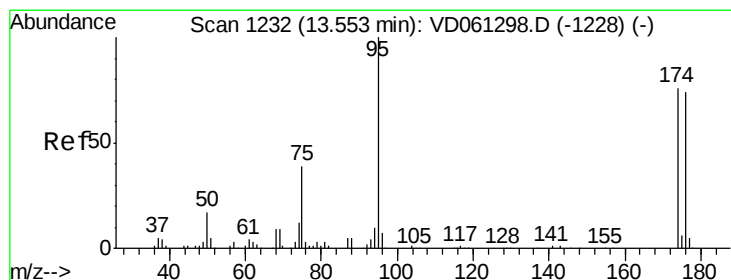
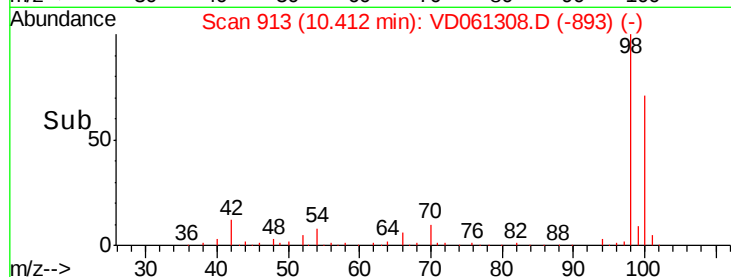
300000

200000

100000

0

Time-->



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 13.55 min Scan# 1232

Delta R.T. -0.00 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

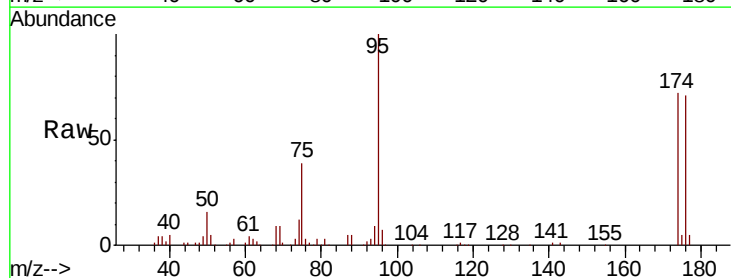
Tgt Ion: 95 Resp: 309990

Ion Ratio Lower Upper

95 100

174 72.2 0.0 151.8

176 71.5 0.0 148.0



Abundance Ion 95.00 (94.70 to 95.70): VD061298.D (-1228) (-)

Ion 173.90 (173.60 to 174.60): VD061298.D (-1228) (-)

Ion 175.90 (175.60 to 176.60): VD061298.D (-1228) (-)

13.55

250000

200000

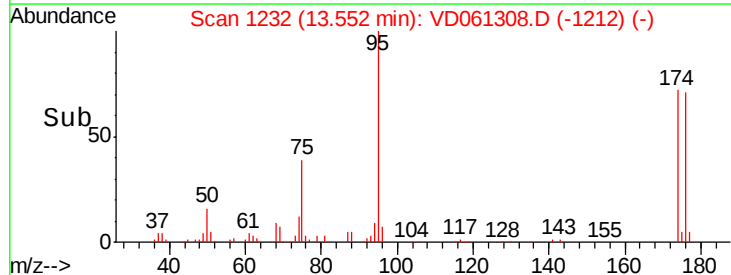
150000

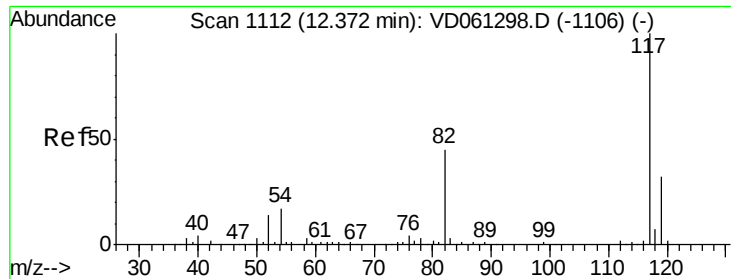
100000

50000

0

Time-->

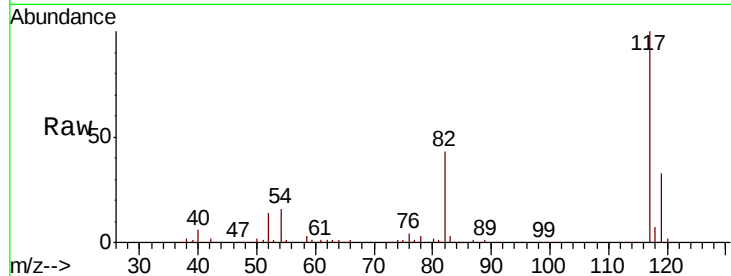




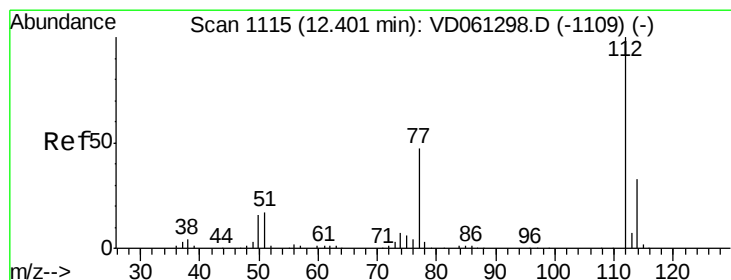
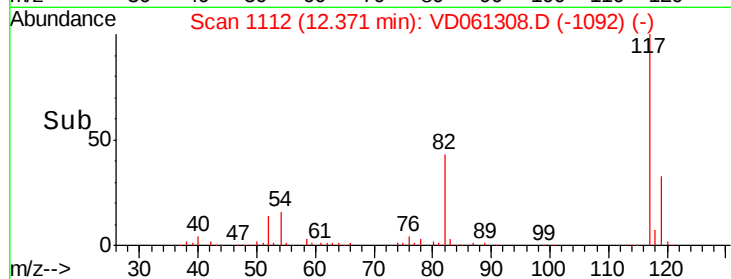
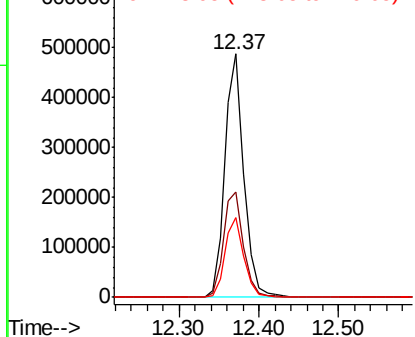
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.37 min Scan# 1112  
Delta R.T. -0.00 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

Instrument :  
MSVOA\_D  
ClientSampleId :  
WP022SB433-190319-(23-25)

Tot Ion:117 Resp: 820436  
Ion Ratio Lower Upper  
117 100  
82 43.5 35.7 53.5  
119 32.5 25.9 38.9

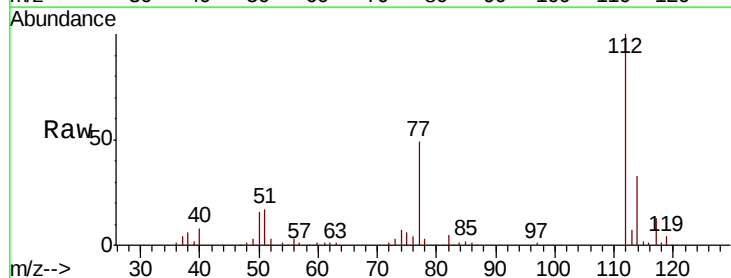


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): VD  
Ion 118.95 (118.65 to 119.65): V

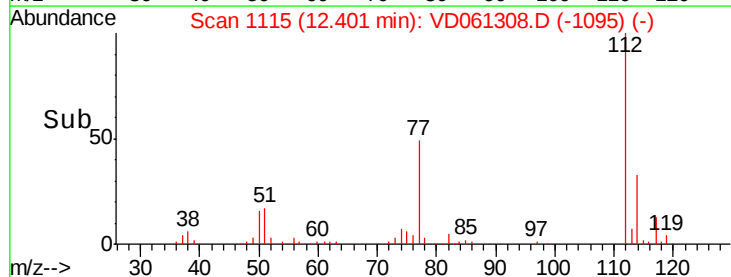
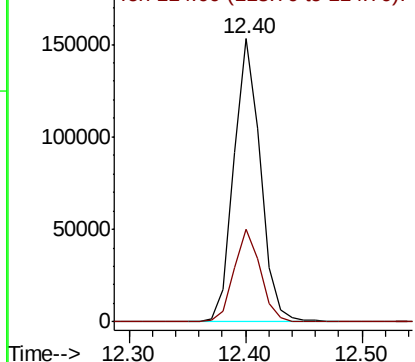


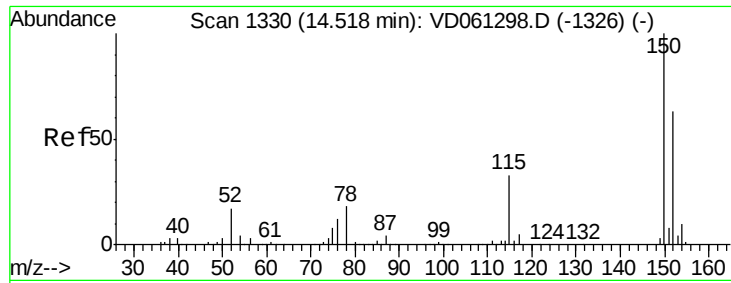
#65  
Chlorobenzene  
Concen: 15.994 ug/l  
RT: 12.40 min Scan# 1115  
Delta R.T. -0.00 min  
Lab File: VD061308.D  
Acq: 25 Mar 2019 18:07

Tgt Ion:112 Resp: 241699  
Ion Ratio Lower Upper  
112 100  
114 32.9 26.5 39.7



Abundance Ion 111.90 (111.60 to 112.60): V  
Ion 114.00 (113.70 to 114.70): V

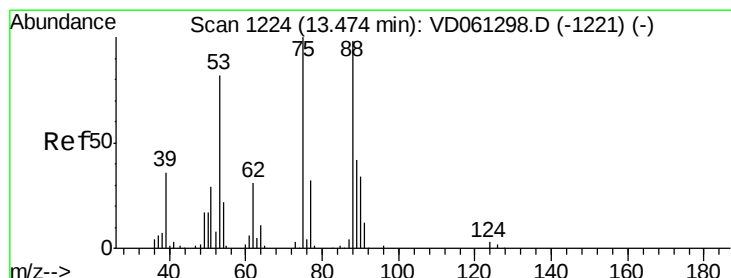
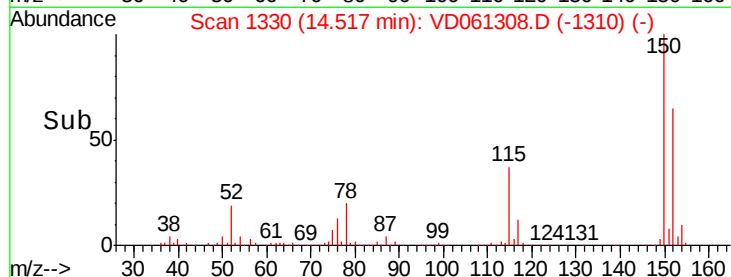
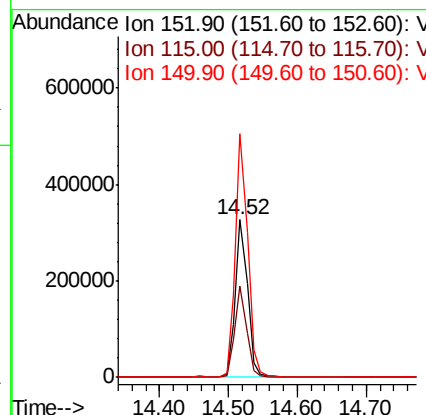
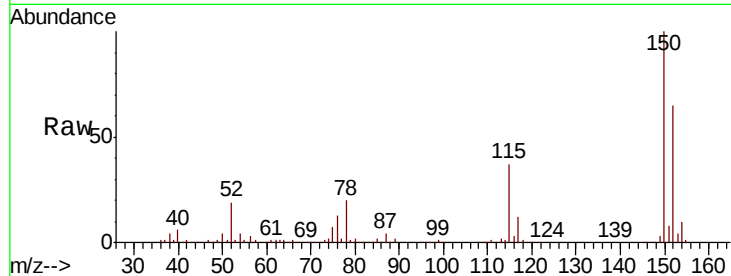




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 14.52 min Scan# 1330  
 Delta R.T. -0.00 min  
 Lab File: VD061308.D  
 Acq: 25 Mar 2019 18:07

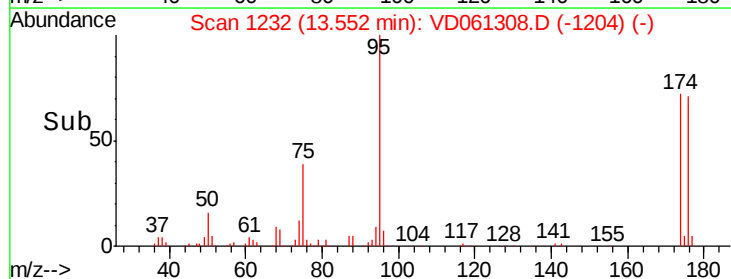
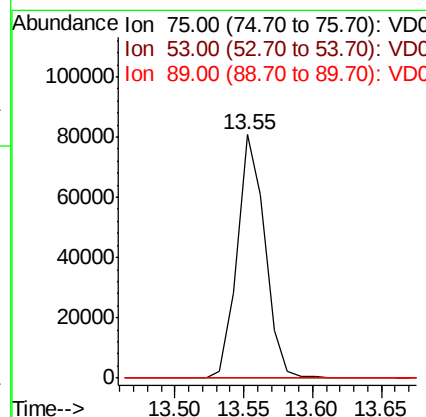
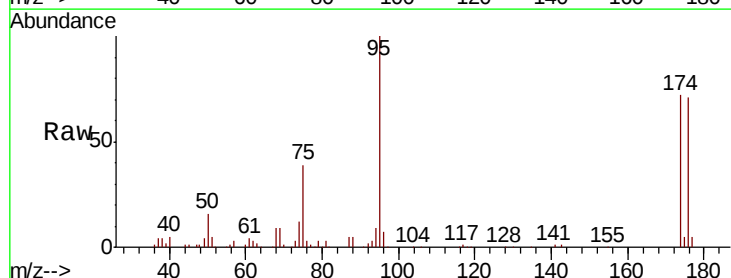
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 WP022SB433-190319-(23-25)

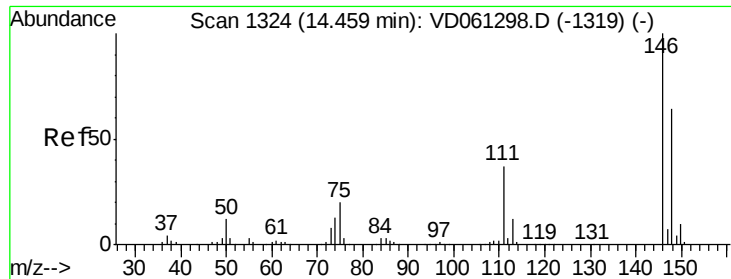
Tot Ion:152 Resp: 402241  
 Ion Ratio Lower Upper  
 152 100  
 115 58.0 29.2 87.6  
 150 154.7 0.0 319.6



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 71.492 ug/l  
 RT: 13.55 min Scan# 1232  
 Delta R.T. 0.08 min  
 Lab File: VD061308.D  
 Acq: 25 Mar 2019 18:07

Tgt Ion: 75 Resp: 112864  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 65.3 97.9#  
 89 0.0 33.8 50.6#

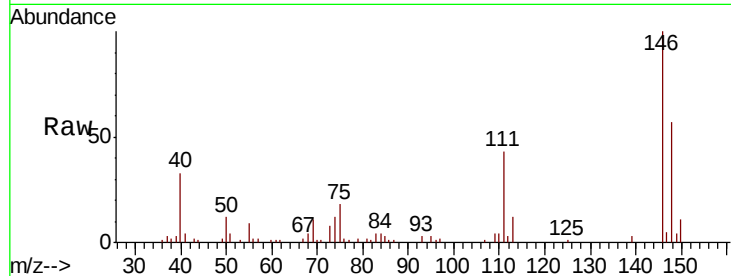




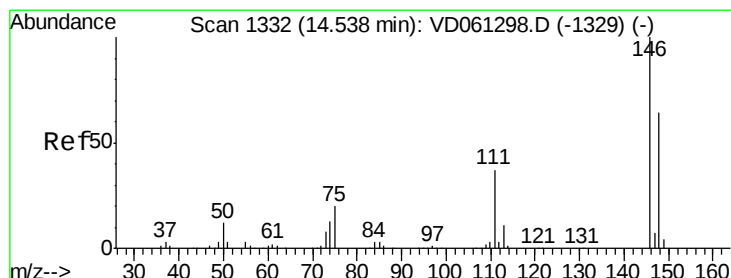
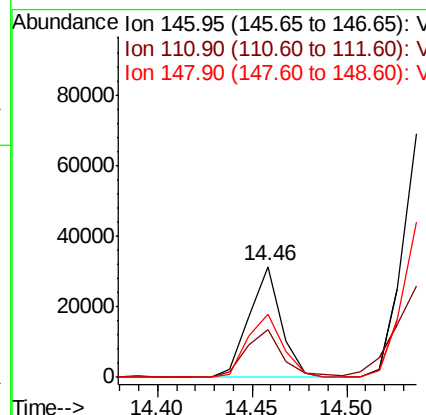
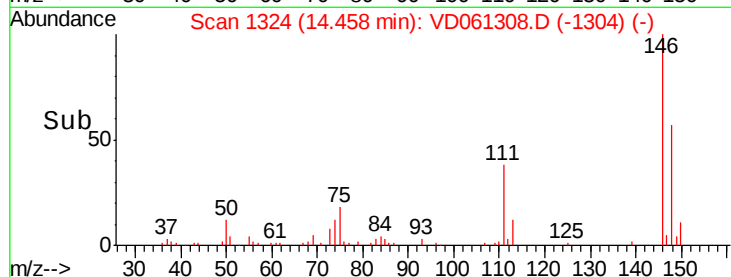
#87  
 1,3-Dichlorobenzene  
 Concen: 2.843 ug/l  
 RT: 14.46 min Scan# 1324  
 Delta R.T. -0.00 min  
 Lab File: VD061308.D  
 Acq: 25 Mar 2019 18:07

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 WP022SB433-190319-(23-25)

Tot Ion:146 Resp: 36823  
 Ion Ratio Lower Upper  
 146 100  
 111 43.3 18.4 55.0  
 148 56.8 32.0 96.2

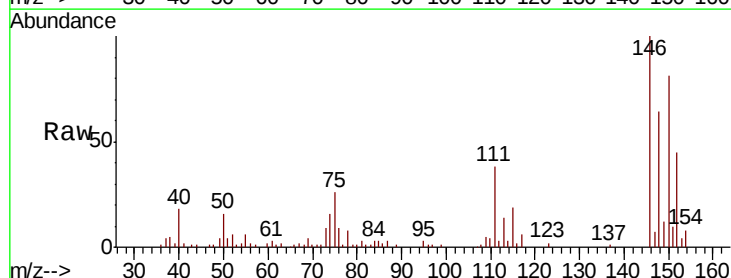


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 110.90 (110.60 to 111.60): V  
 Ion 147.90 (147.60 to 148.60): V

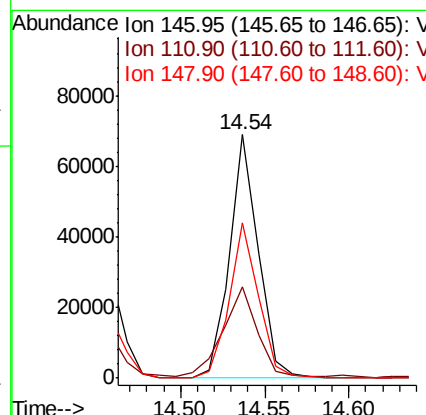
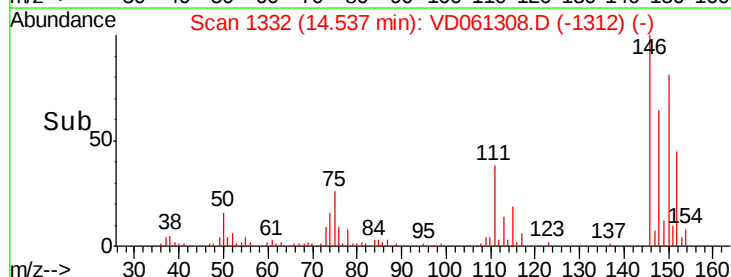


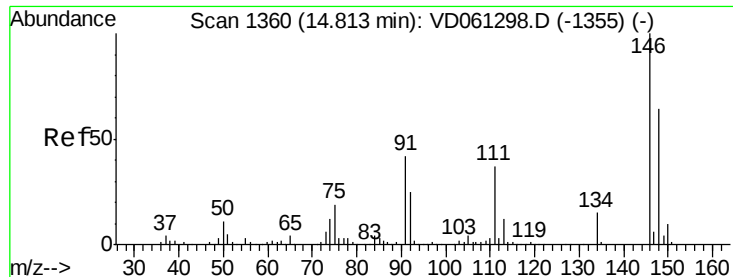
#88  
 1,4-Dichlorobenzene  
 Concen: 6.490 ug/l  
 RT: 14.54 min Scan# 1332  
 Delta R.T. -0.00 min  
 Lab File: VD061308.D  
 Acq: 25 Mar 2019 18:07

Tgt Ion:146 Resp: 81439  
 Ion Ratio Lower Upper  
 146 100  
 111 37.8 18.6 55.6  
 148 64.0 31.9 95.5



Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 110.90 (110.60 to 111.60): V  
 Ion 147.90 (147.60 to 148.60): V





#91

1,2-Dichlorobenzene

Concen: 9.687 ug/l

RT: 14.81 min Scan# 1360

Delta R.T. -0.00 min

Lab File: VD061308.D

Acq: 25 Mar 2019 18:07

Instrument :

MSVOA\_D

ClientSampleId :

WP022SB433-190319-(23-25)

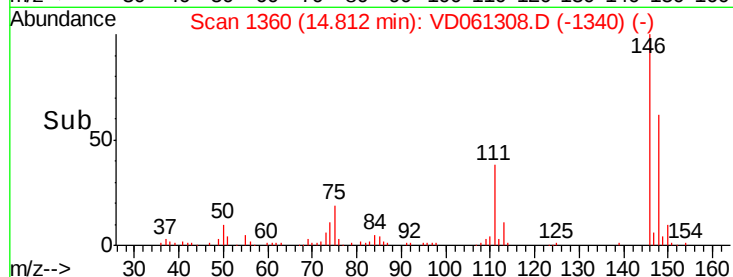
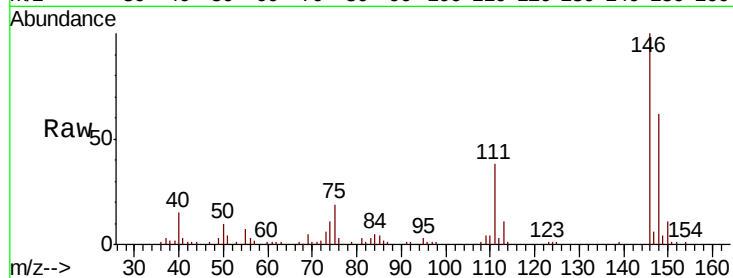
Tot Ion:146 Resp: 100122

Ion Ratio Lower Upper

146 100

111 37.9 18.3 54.8

148 62.5 31.9 95.7



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V

