

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD101419\  
 Data File : VD063959.D  
 Acq On : 14 Oct 2019 16:52  
 Operator : VA/SY  
 Sample : K5356-01  
 Misc : 6.58G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :

Quant Time: Oct 14 18:08:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D100219S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 05 03:51:17 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 150875   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 267737   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 267989   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 129890   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.33  | 65   | 83927    | 57.14 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 114.28% |          |
| 35) Dibromofluoromethane    | 7.91  | 113  | 82065    | 50.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.32% |          |
| 50) Toluene-d8              | 10.34 | 98   | 352319   | 53.05 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.10% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 104580   | 45.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.64%  |          |

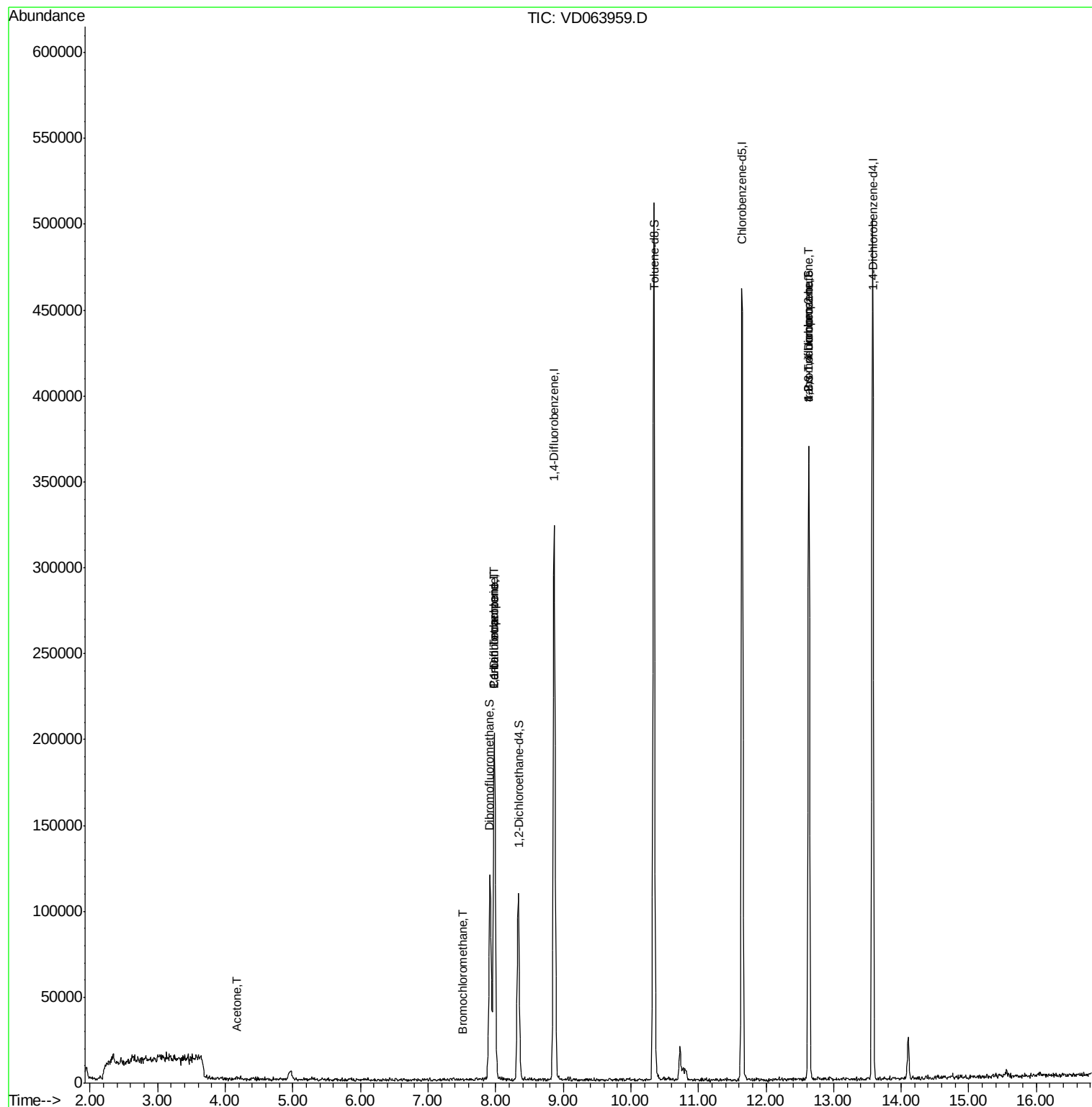
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 2.20  | 50   | 289      | Below Cal | #      | 40     |
| 11) Tert butyl alcohol         | 5.25  | 59   | 70       | Below Cal | #      | 71     |
| 16) Acetone                    | 4.17  | 43   | 583      | 1.524     | ug/l # | 58     |
| 20) Methylene Chloride         | 4.97  | 84   | 3925     | Below Cal | #      | 74     |
| 28) Bromochloromethane         | 7.51  | 49   | 75       | 1.936     | ug/l # | 10     |
| 31) Cyclohexane                | 7.99  | 56   | 3594     | Below Cal | #      | 51     |
| 36) 1,1-Dichloropropene        | 7.97  | 75   | 11777    | 4.811     | ug/l # | 49     |
| 37) Ethyl Acetate              | 7.32  | 43   | 129      | Below Cal | #      | 1      |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 14587    | 5.897     | ug/l # | 22     |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 59065    | 67.893    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.63 | 75   | 59065    | 120.144   | ug/l # | 12     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.52 | 75   | 188      | Below Cal | #      | 1      |

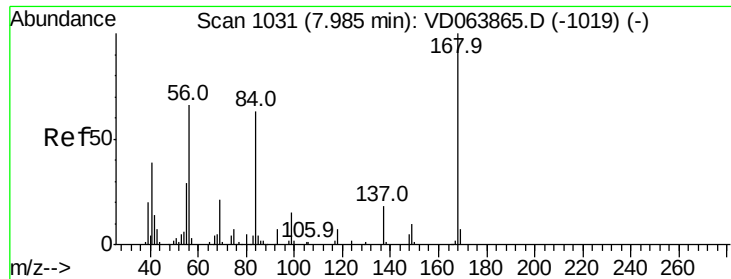
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : K5356-01  
Misc : 6.58G/5.00ml/MSVOA D/SOIL  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :

Quant Time: Oct 14 18:08:13 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D100219S.M  
Quant Title : SW846 8260  
QLast Update : Sat Oct 05 03:51:17 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.01 min

Lab File: VD063959.D

Acq: 14 Oct 2019 16:52

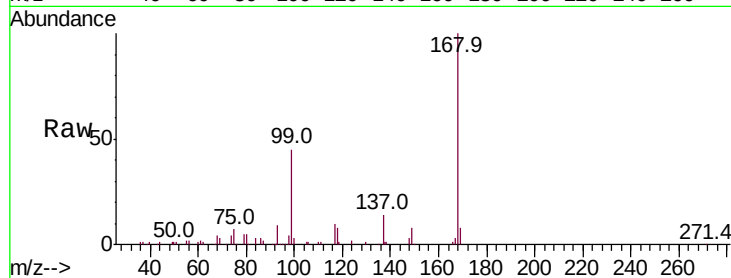
Instrument :  
MSVOA\_D  
ClientSampled :

Tot Ion:168 Resp: 150875

Ion Ratio Lower Upper

168 100

99 45.2 43.0 64.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

80000

60000

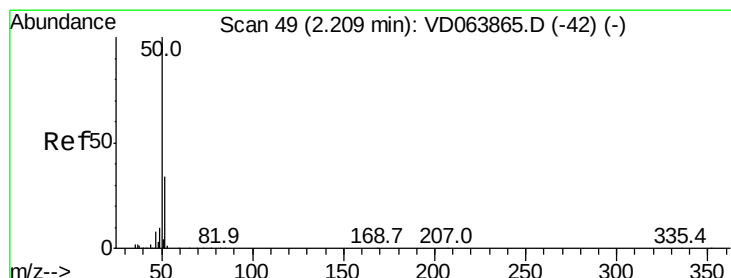
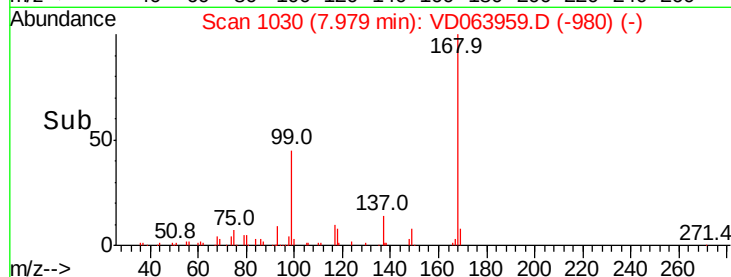
40000

20000

0

Time-->

7.90 8.00 8.10



#3

Chloromethane

Concen: Below Cal

RT: 2.20 min Scan# 48

Delta R.T. -0.01 min

Lab File: VD063959.D

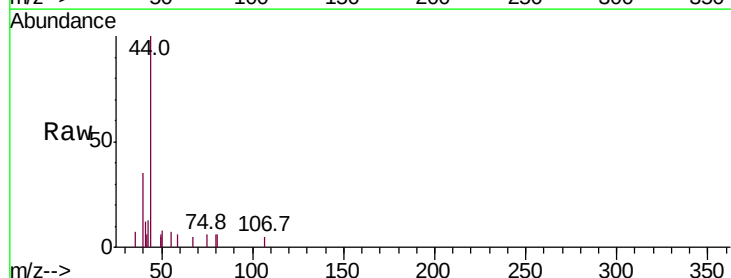
Acq: 14 Oct 2019 16:52

Tgt Ion: 50 Resp: 289

Ion Ratio Lower Upper

50 100

52 0.0 27.5 41.3#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC

500

400

300

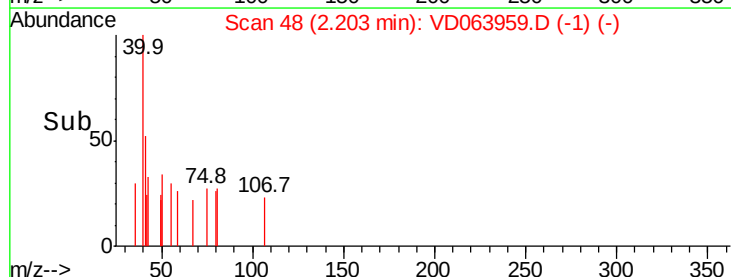
200

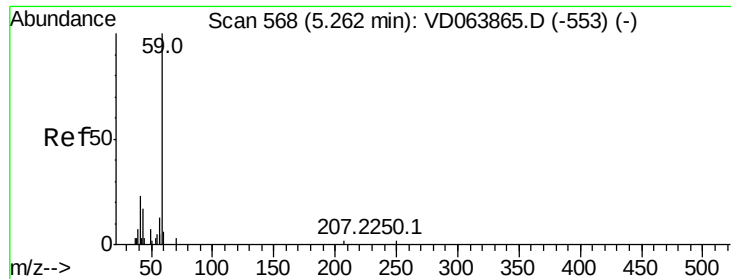
100

0

Time-->

2.18 2.20 2.22 2.24

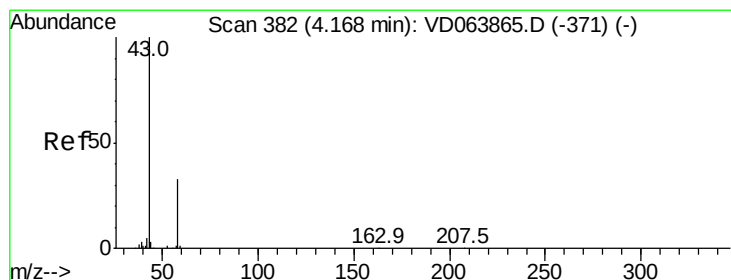
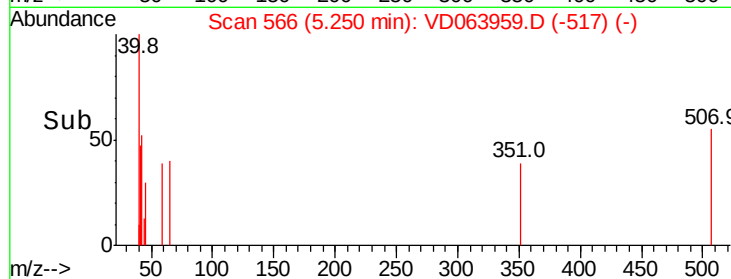
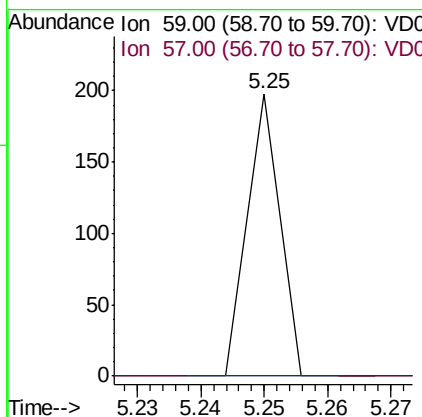
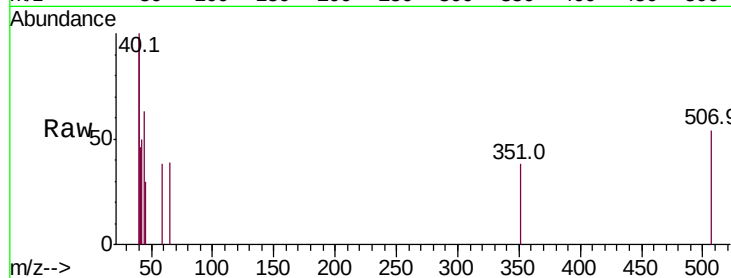




#11  
Tert butyl alcohol  
Concen: Below Cal  
RT: 5.25 min Scan# 566  
Delta R.T. -0.01 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

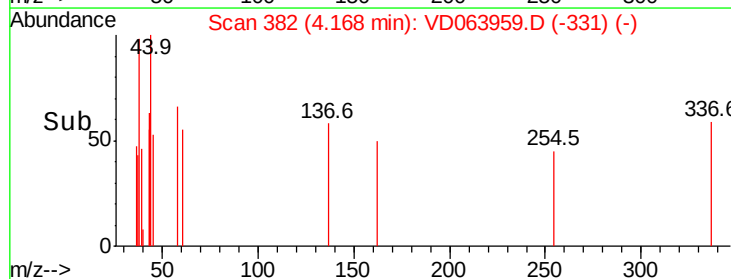
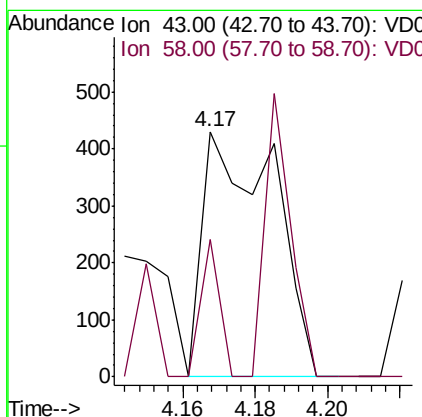
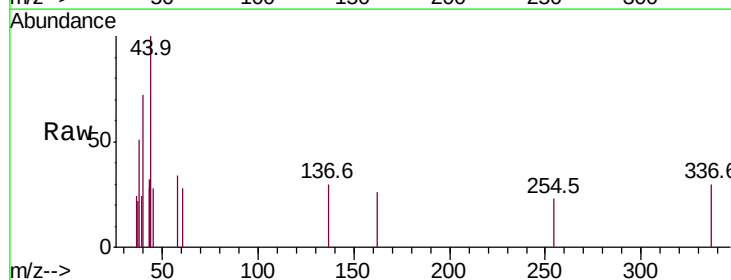
Instrument :  
MSVOA\_D  
ClientSampleId :

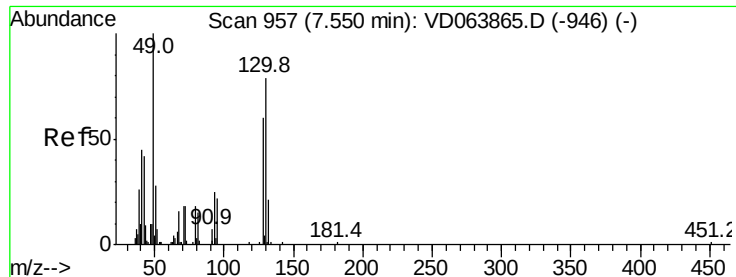
Tot Ion: 59 Resp: 70  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.8 13.2#



#16  
Acetone  
Concen: 1.524 ug/l  
RT: 4.17 min Scan# 382  
Delta R.T. -0.00 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

Tgt Ion: 43 Resp: 583  
Ion Ratio Lower Upper  
43 100  
58 56.3 26.2 39.4#

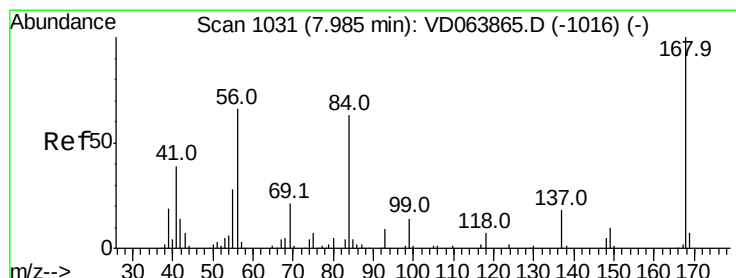
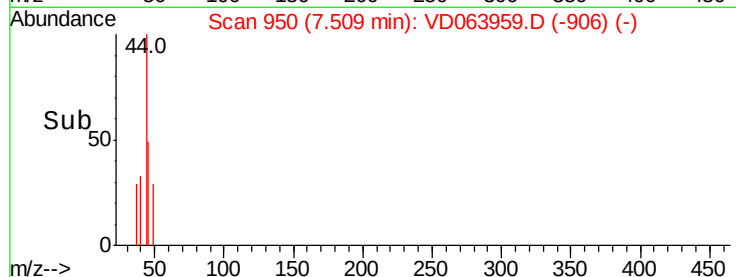
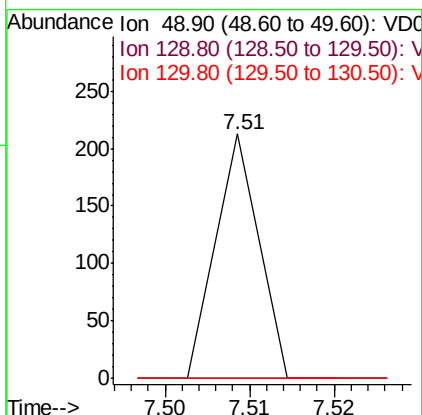
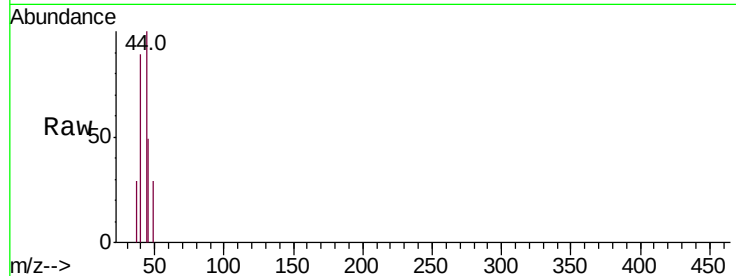




#28  
Bromochloromethane  
Concen: 1.936 ug/l  
RT: 7.51 min Scan# 950  
Delta R.T. -0.04 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

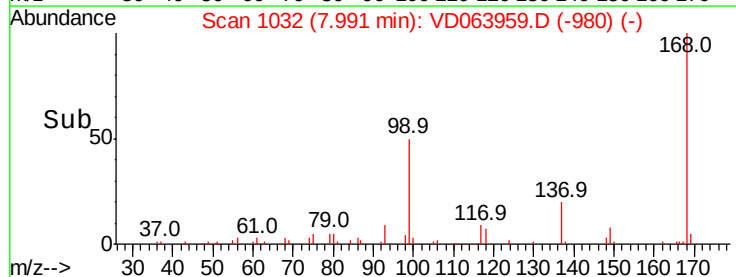
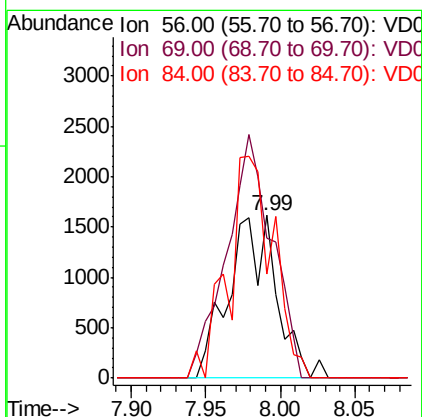
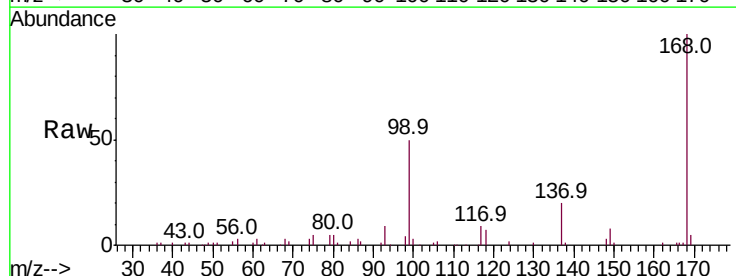
Instrument :  
MSVOA\_D  
ClientSampled :

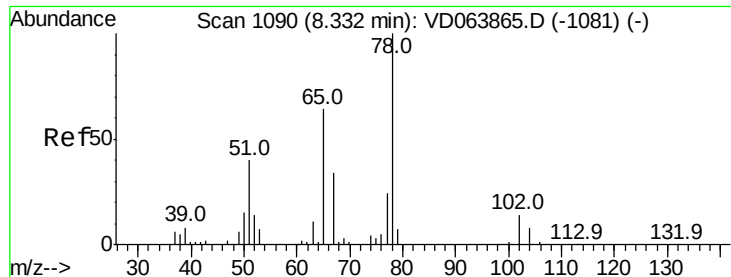
Tot Ion: 49 Resp: 75  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 5.6  
130 0.0 66.8 100.2#



#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.99 min Scan# 1032  
Delta R.T. 0.01 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

Tgt Ion: 56 Resp: 3594  
Ion Ratio Lower Upper  
56 100  
69 85.8 25.0 37.4#  
84 64.2 76.3 114.5#

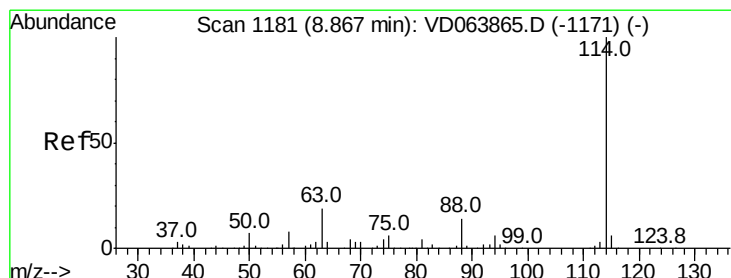
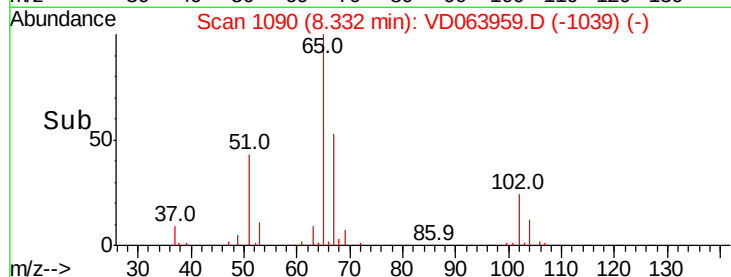
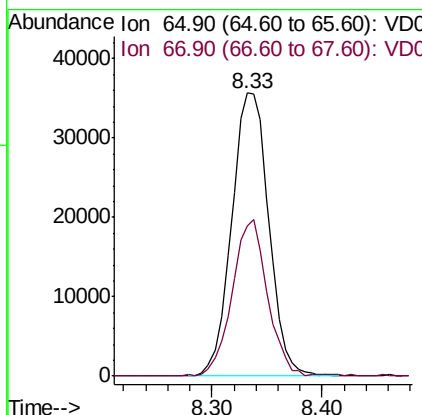
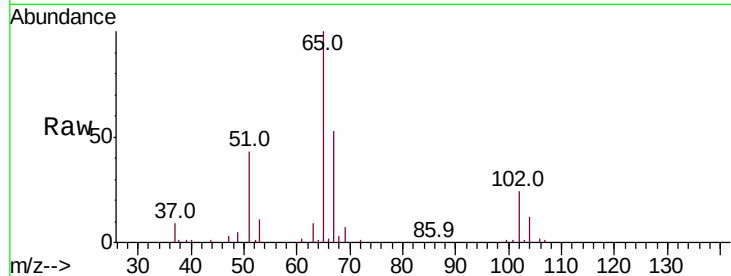




#33  
 1,2-Dichloroethane-d4  
 Concen: 57.137 ug/l  
 RT: 8.33 min Scan# 1090  
 Delta R.T. -0.00 min  
 Lab File: VD063959.D  
 Acq: 14 Oct 2019 16:52

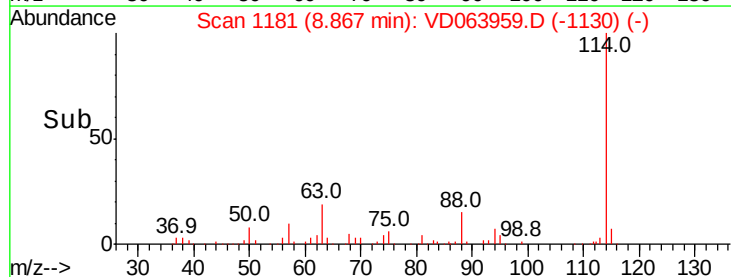
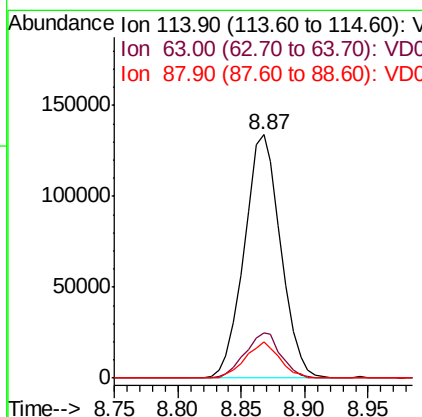
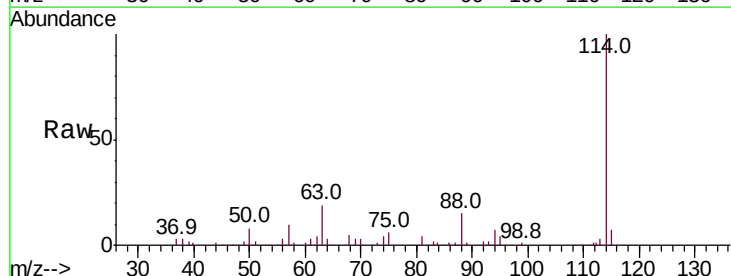
Instrument :  
 MSVOA\_D  
 ClientSampleId :

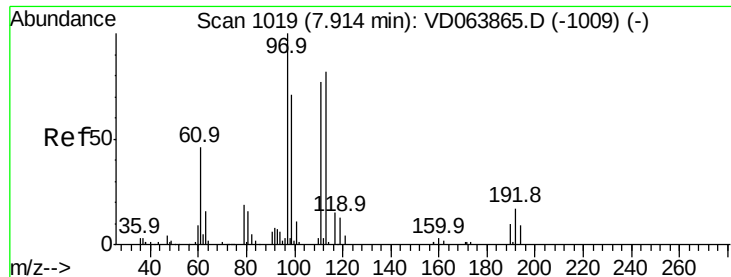
Tot Ion: 65 Resp: 83927  
 Ion Ratio Lower Upper  
 65 100  
 67 52.5 0.0 106.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. -0.00 min  
 Lab File: VD063959.D  
 Acq: 14 Oct 2019 16:52

Tgt Ion:114 Resp: 267737  
 Ion Ratio Lower Upper  
 114 100  
 63 18.6 0.0 38.4  
 88 15.1 0.0 27.4

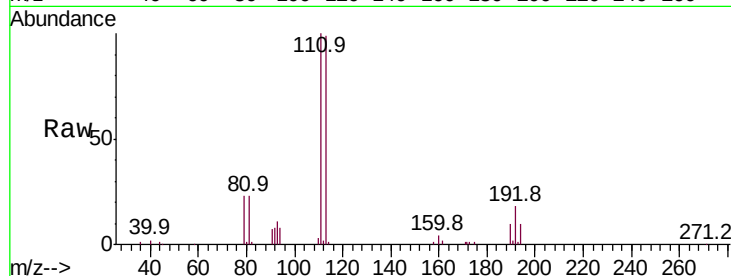




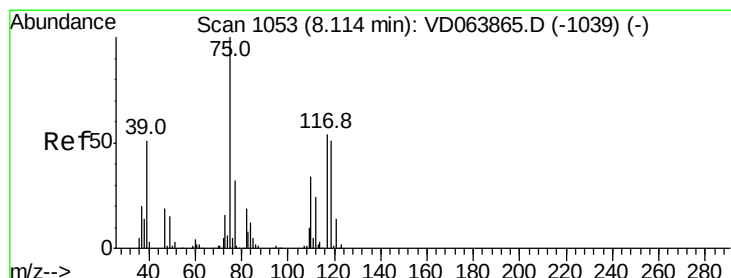
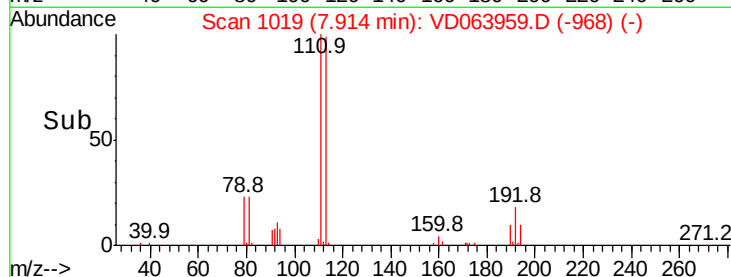
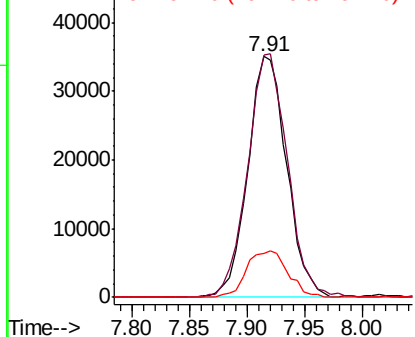
#35  
Dibromofluoromethane  
Concen: 50.155 ug/l  
RT: 7.91 min Scan# 1019  
Delta R.T. -0.00 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

Instrument :  
MSVOA\_D  
ClientSampleId :

Tot Ion:113 Resp: 82065  
Ion Ratio Lower Upper  
113 100  
111 103.9 82.6 123.8  
192 20.6 17.1 25.7

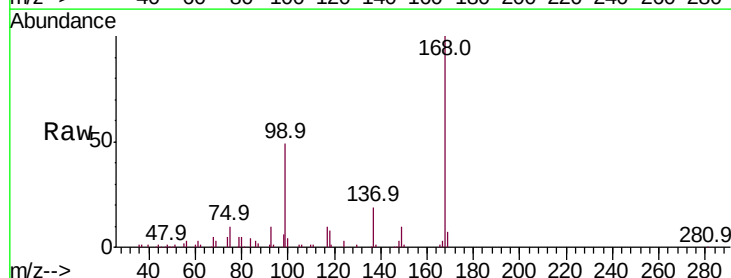


Abundance Ion 112.80 (112.50 to 113.50): V  
Ion 110.80 (110.50 to 111.50): V  
Ion 191.70 (191.40 to 192.40): V

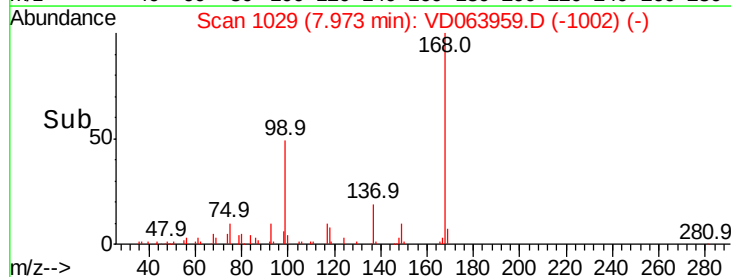
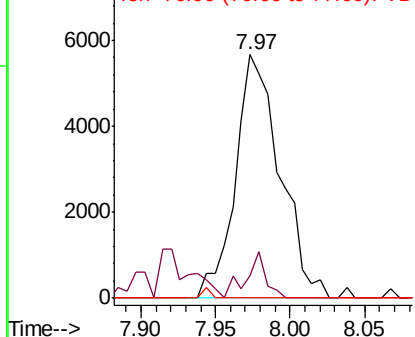


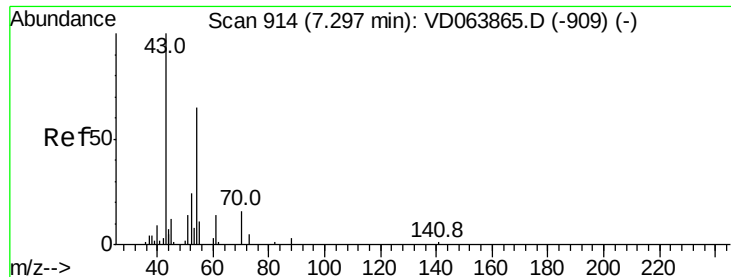
#36  
1,1-Dichloropropene  
Concen: 4.811 ug/l  
RT: 7.97 min Scan# 1029  
Delta R.T. -0.14 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

Tgt Ion: 75 Resp: 11777  
Ion Ratio Lower Upper  
75 100  
110 8.3 17.4 52.3#  
77 0.0 25.4 38.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC  
Ion 109.90 (109.60 to 110.60): V  
Ion 76.90 (76.60 to 77.60): VDC

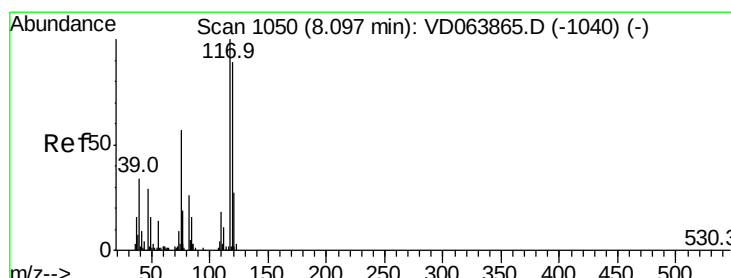
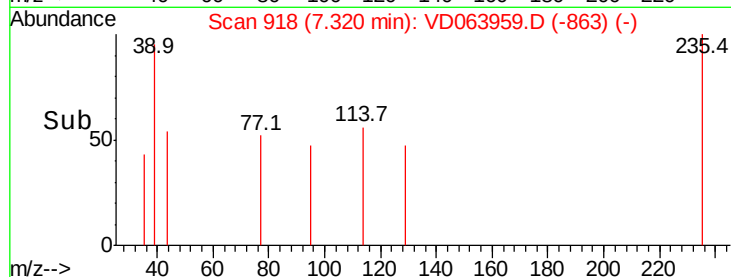
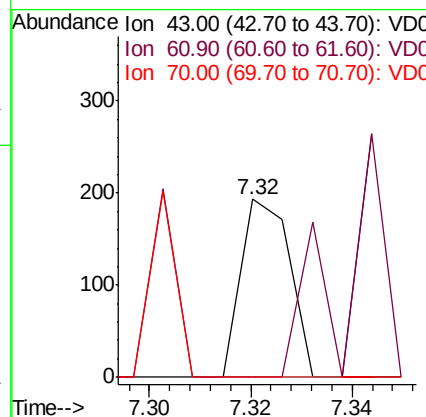
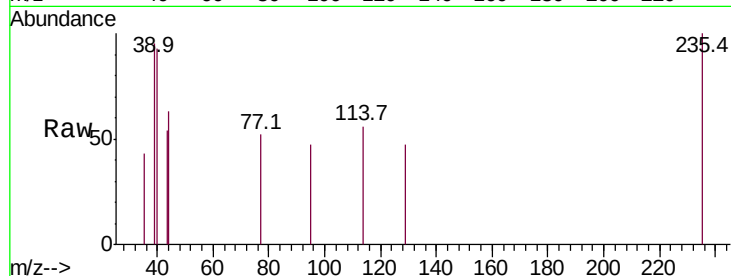




#37  
Ethyl Acetate  
Concen: Below Cal  
RT: 7.32 min Scan# 918  
Delta R.T. 0.02 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

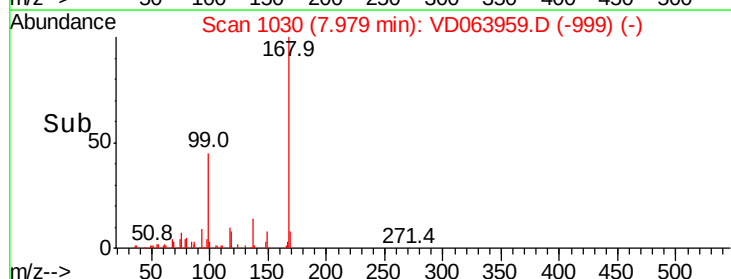
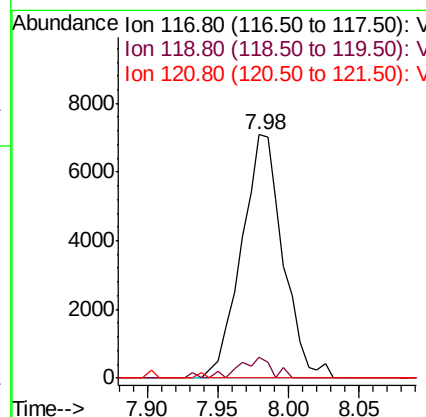
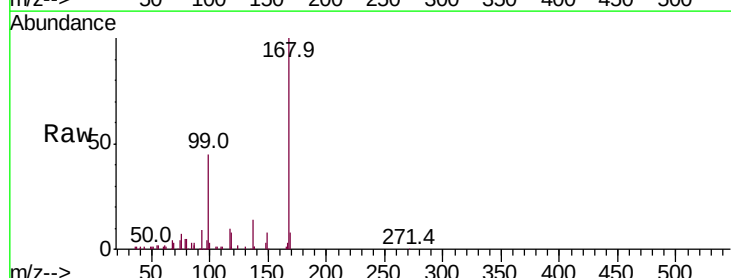
Instrument :  
MSVOA\_D  
ClientSampleID :

Tot Ion: 43 Resp: 129  
Ion Ratio Lower Upper  
43 100  
61 55.8 11.5 17.3#  
70 55.0 8.2 12.4#

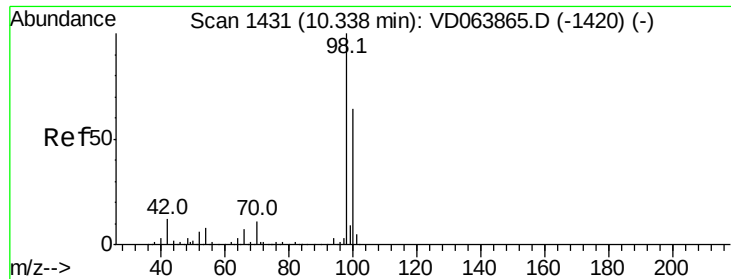


#38  
Carbon Tetrachloride  
Concen: 5.897 ug/l  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.12 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

Tgt Ion: 117 Resp: 14587  
Ion Ratio Lower Upper  
117 100  
119 8.3 70.8 106.2#  
121 0.0 21.4 32.0#



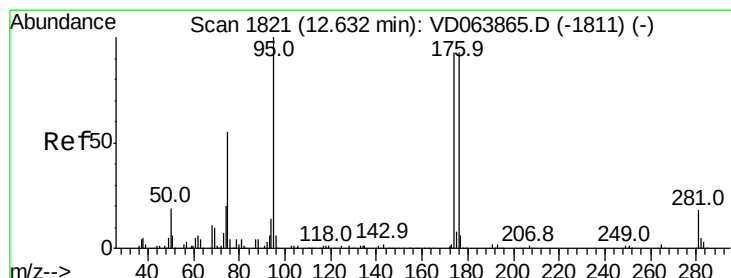
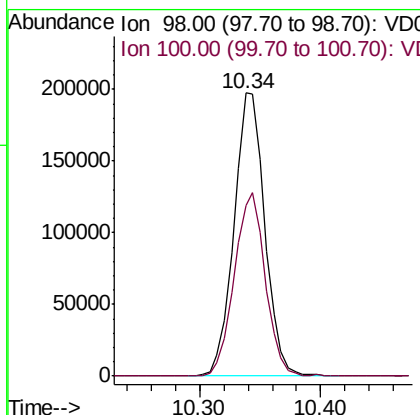
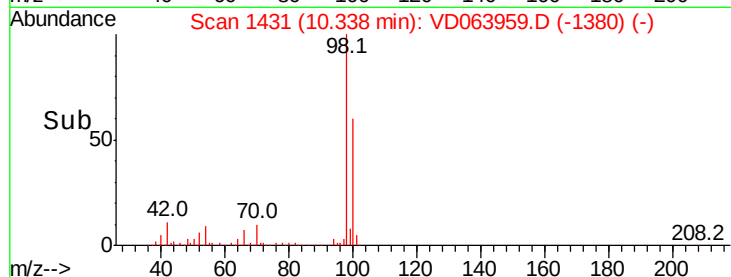
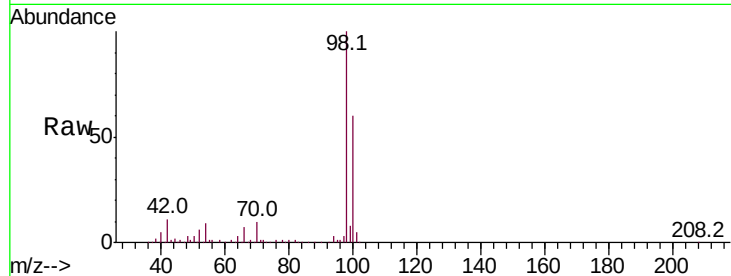




#50  
Toluene-d8  
Concen: 53.051 ug/l  
RT: 10.34 min Scan# 1431  
Delta R.T. -0.00 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

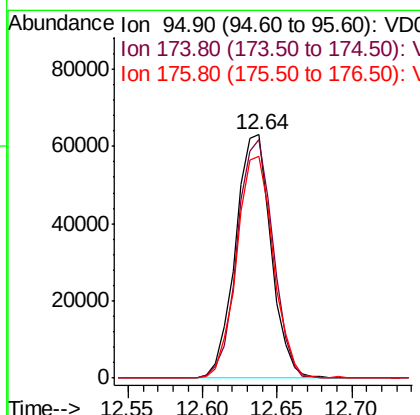
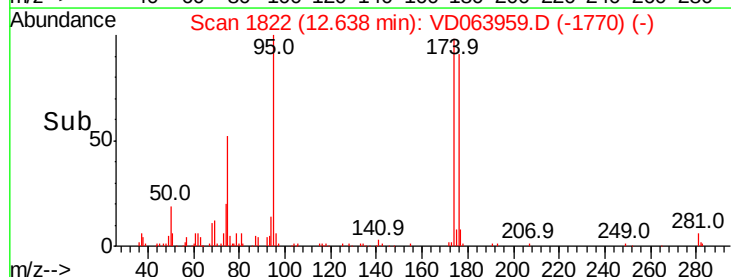
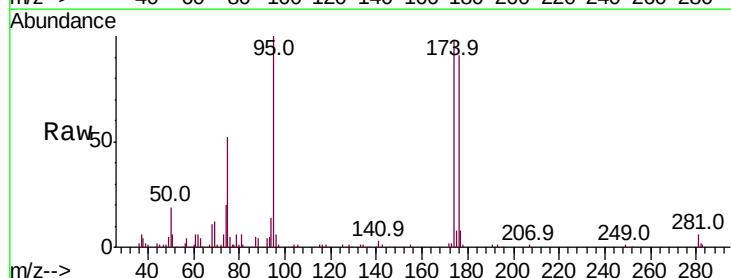
Instrument :  
MSVOA\_D  
ClientSampleId :

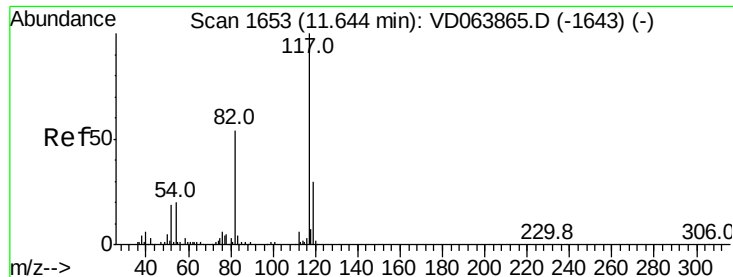
Tot Ion: 98 Resp: 352319  
Ion Ratio Lower Upper  
98 100  
100 64.9 52.1 78.1



#62  
4-Bromofluorobenzene  
Concen: 45.316 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.01 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

Tgt Ion: 95 Resp: 104580  
Ion Ratio Lower Upper  
95 100  
174 97.8 0.0 186.4  
176 93.1 0.0 184.2

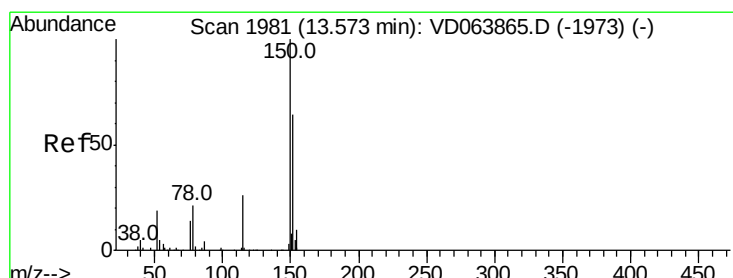
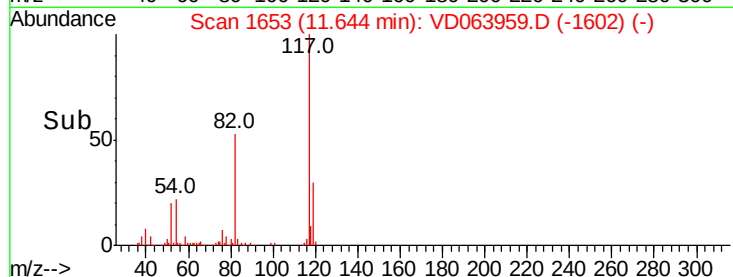
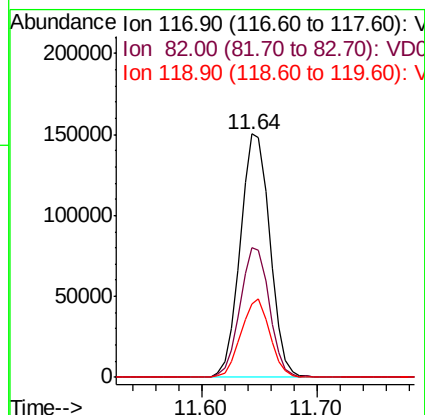
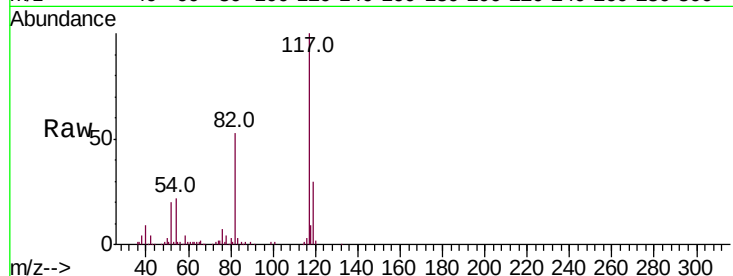




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1653  
Delta R.T. -0.00 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

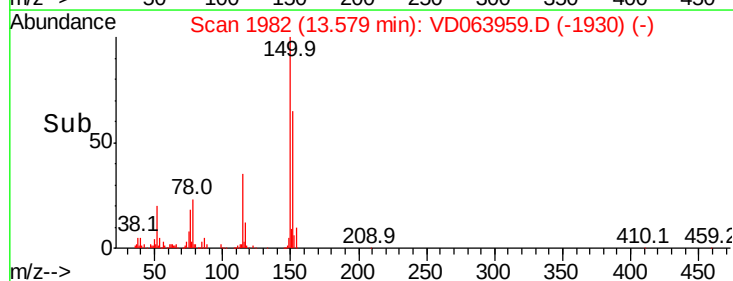
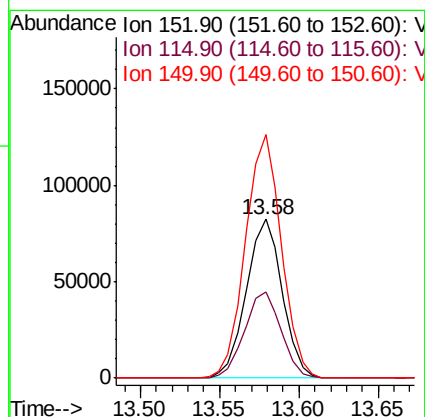
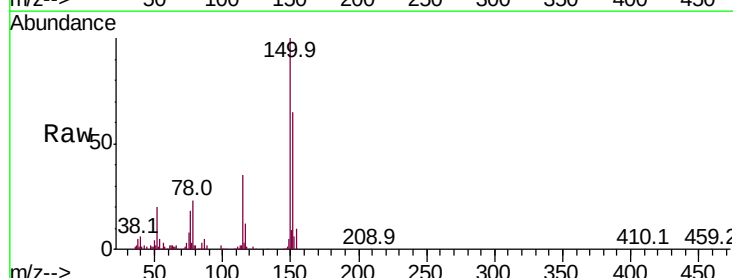
Instrument :  
MSVOA\_D  
ClientSampleId :

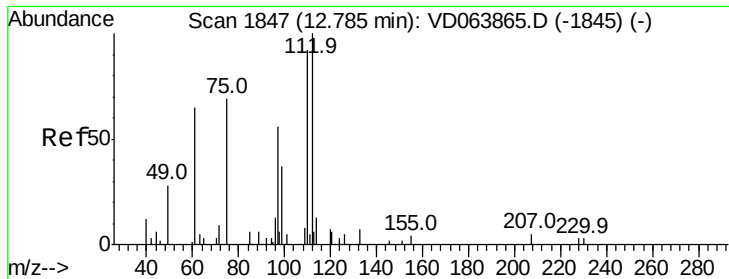
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.2  | 42.8  | 64.2  |
| 119     | 29.9  | 24.4  | 36.6  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. 0.01 min  
Lab File: VD063959.D  
Acq: 14 Oct 2019 16:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 54.9  | 25.9  | 77.7  |
| 150     | 153.5 | 0.0   | 344.2 |





#76

1,2,3-Trichloropropane

Concen: 67.893 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. -0.15 min

Lab File: VD063959.D

Acq: 14 Oct 2019 16:52

Instrument :

MSVOA\_D

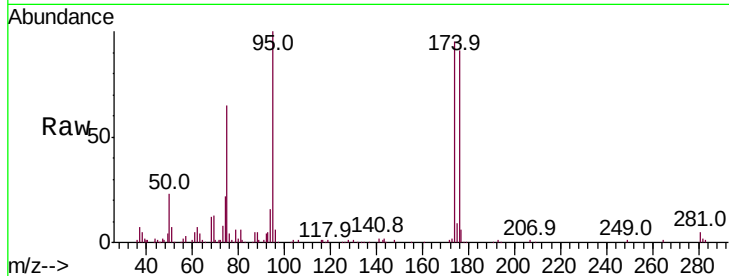
ClientSampleId :

Tot Ion: 75 Resp: 59065

Ion Ratio Lower Upper

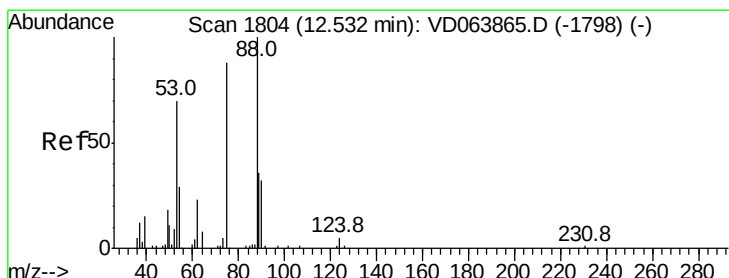
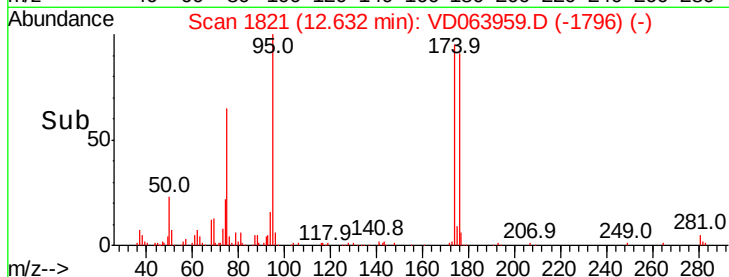
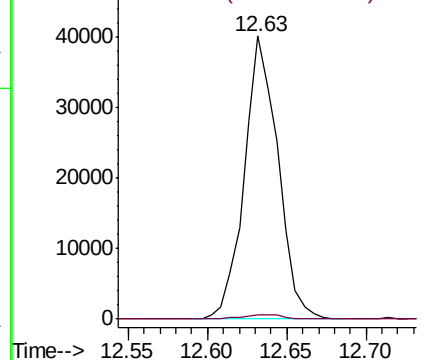
75 100

77 1.7 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 120.144 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. 0.10 min

Lab File: VD063959.D

Acq: 14 Oct 2019 16:52

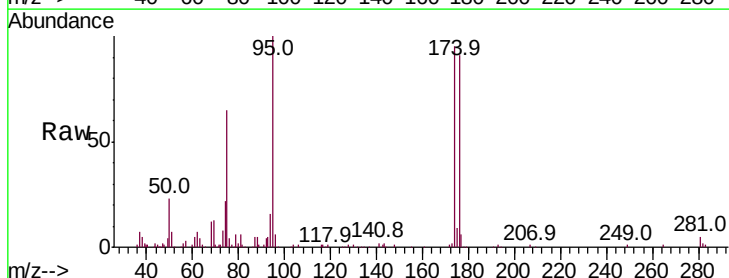
Tgt Ion: 75 Resp: 59065

Ion Ratio Lower Upper

75 100

53 0.0 75.0 112.6#

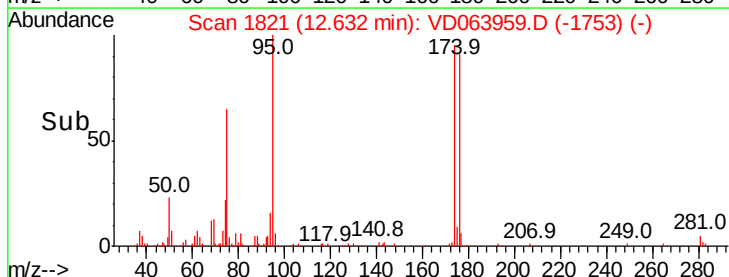
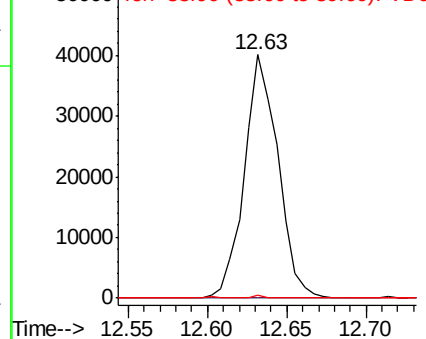
89 0.2 38.2 57.4#

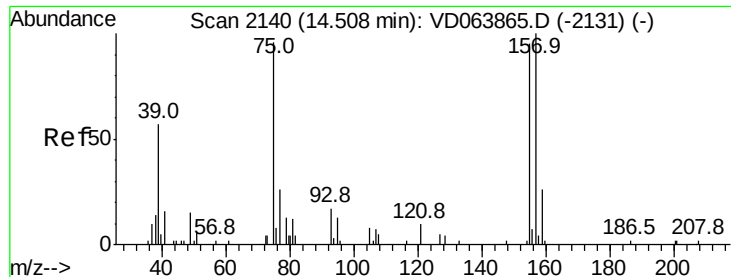


Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 88.90 (88.60 to 89.60): VDC





#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.52 min Scan# 2142

Delta R.T. 0.01 min

Lab File: VD063959.D

Acq: 14 Oct 2019 16:52

Instrument :

MSVOA\_D

ClientSampleId :

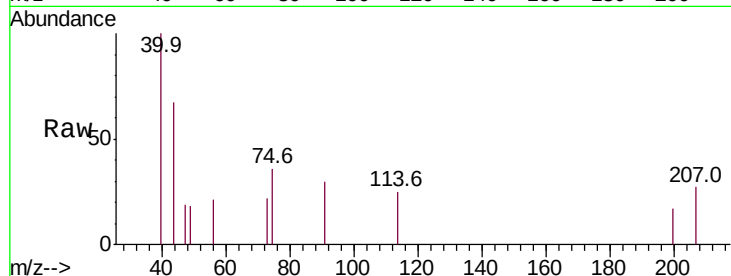
Tot Ion: 75 Resp: 188

Ion Ratio Lower Upper

75 100

155 0.0 43.9 131.6#

157 0.0 56.0 167.9#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

