

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD102120\  
 Data File : VD067344.D  
 Acq On : 21 Oct 2020 13:36  
 Operator : VA/SY  
 Sample : L4468-01  
 Misc : 6.29G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 72-11977

Quant Time: Oct 22 00:20:13 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D101320S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 19 19:13:29 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 341572   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 565007   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 550216   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 272904   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.34  | 65   | 184925   | 54.04 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.08% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 186113   | 49.50 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.00%  |          |
| 50) Toluene-d8              | 10.34 | 98   | 662876   | 48.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.42%  |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 247619   | 52.33 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.66% |          |

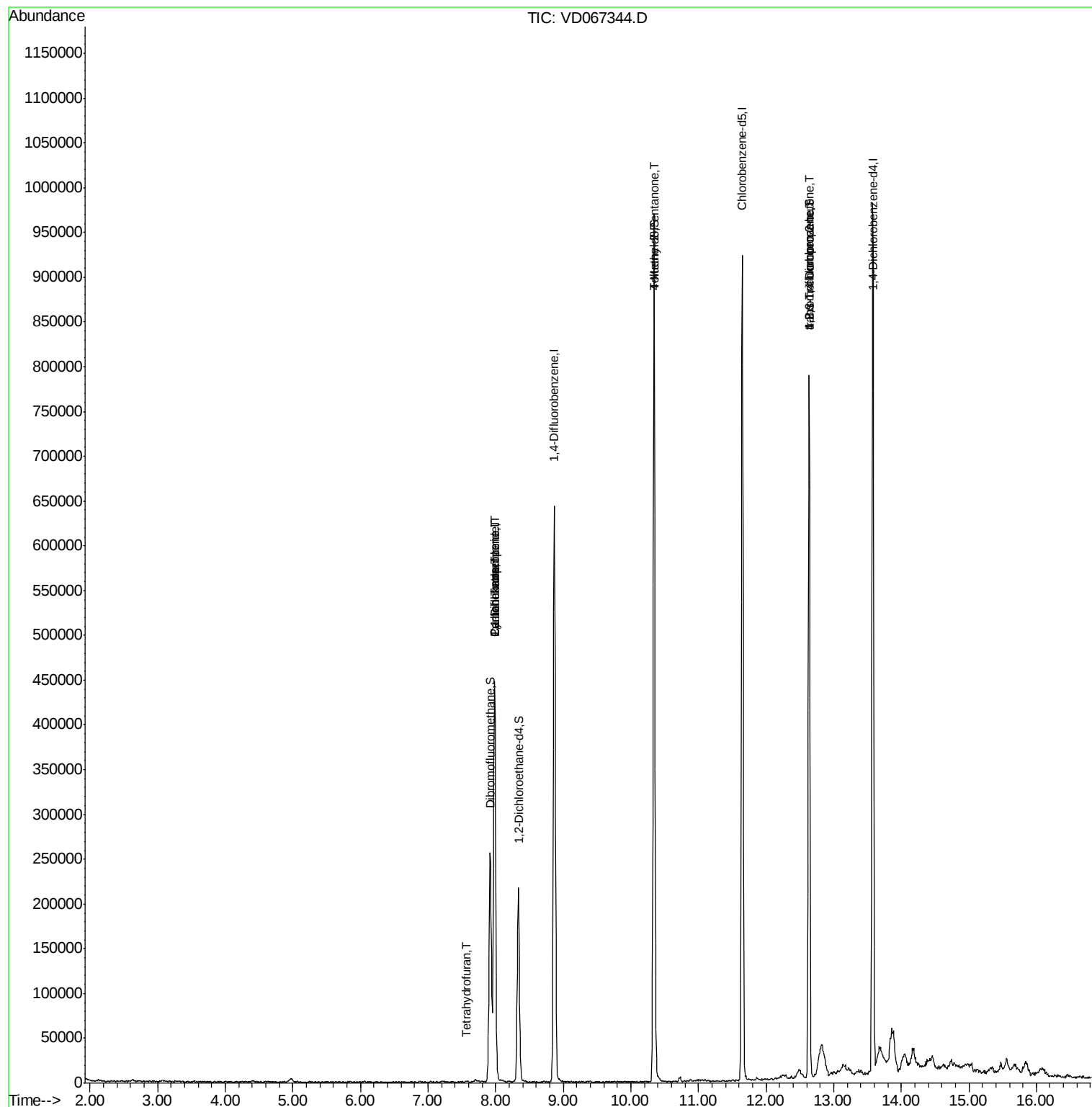
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85   | 243      | Below Cal | #      | 44     |
| 5) Bromomethane                | 2.76  | 94   | 106      | Below Cal | #      | 3      |
| 20) Methylene Chloride         | 4.97  | 84   | 3573     | Below Cal |        | 99     |
| 29) Tetrahydrofuran            | 7.56  | 42   | 334      | 1.100     | ug/l # | 69     |
| 31) Cyclohexane                | 7.99  | 56   | 6461     | 1.639     | ug/l # | 36     |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 23011    | 4.805     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 33978    | 5.551     | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 10.34 | 43   | 2157     | 1.547     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 126616   | 66.940    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 126616   | 151.800   | ug/l # | 10     |

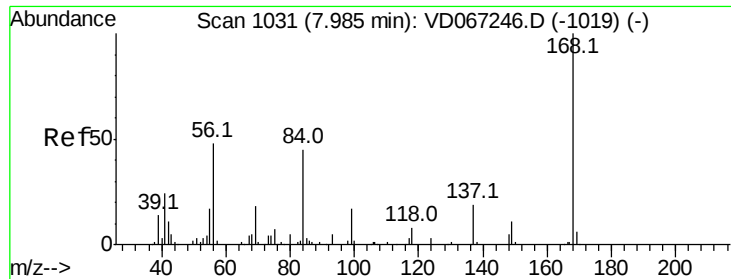
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Oct 19 19:13:29 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. 0.00 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

Instrument :

MSVOA\_D

ClientSampleId :

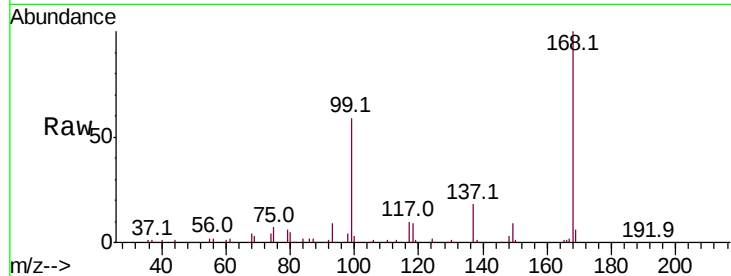
72-11977

Tot Ion:168 Resp: 341572

Ion Ratio Lower Upper

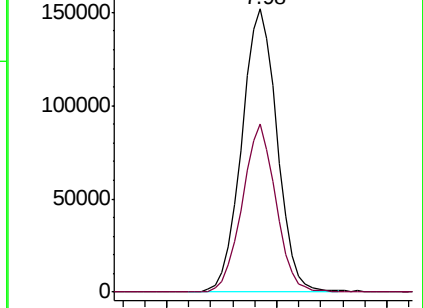
168 100

99 59.3 45.9 68.9

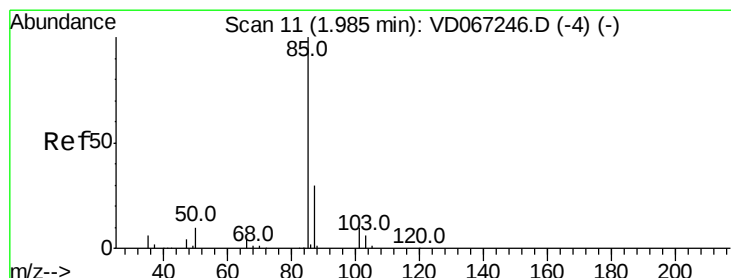
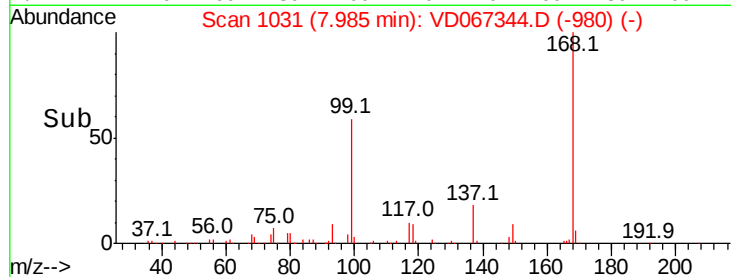


Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 11

Delta R.T. 0.00 min

Lab File: VD067344.D

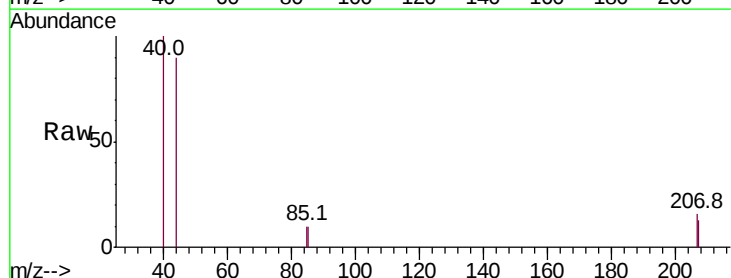
Acq: 21 Oct 2020 13:36

Tgt Ion: 85 Resp: 243

Ion Ratio Lower Upper

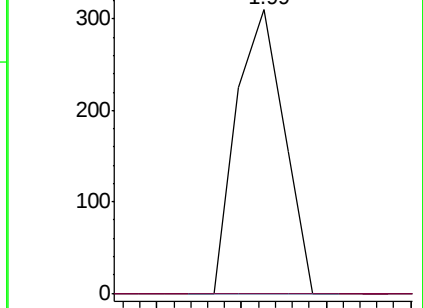
85 100

87 0.0 15.2 45.6#

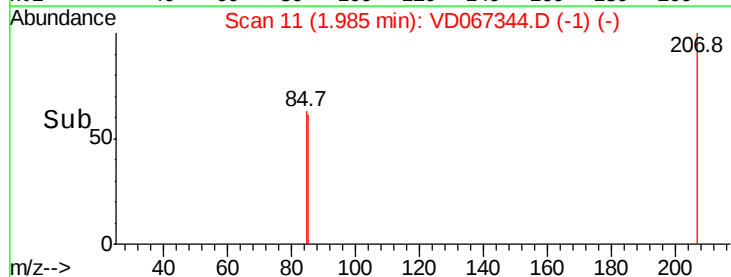


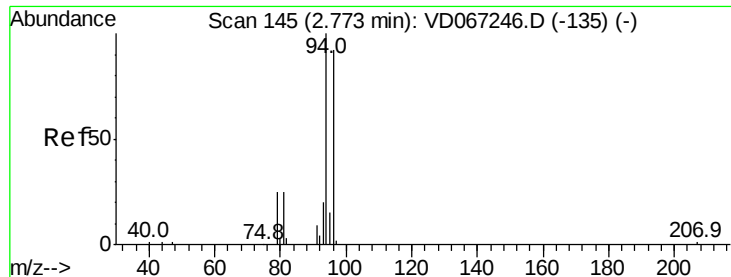
Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC



Time-->





#5

Bromomethane

Concen: Below Cal

RT: 2.76 min Scan# 143

Delta R.T. -0.01 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

Instrument :

MSVOA\_D

ClientSampleId :

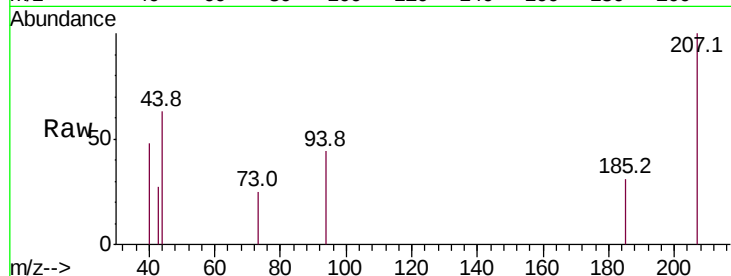
72-11977

Tot Ion: 94 Resp: 106

Ion Ratio Lower Upper

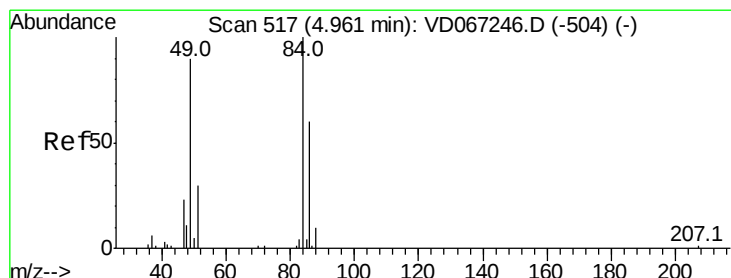
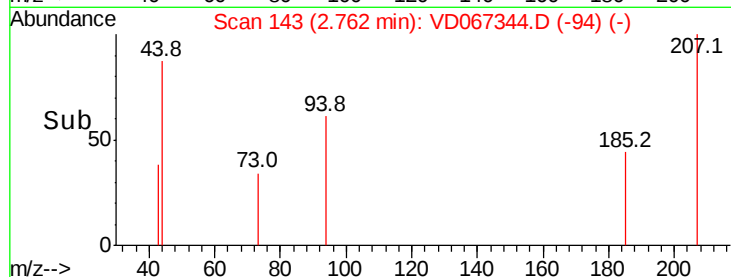
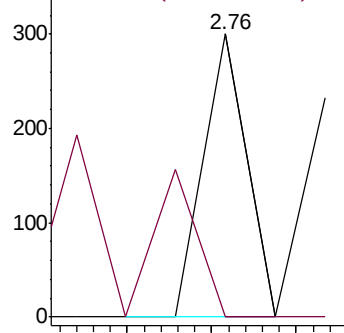
94 100

96 0.0 73.8 110.6#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC



#20

Methylene Chloride

Concen: Below Cal

RT: 4.97 min Scan# 519

Delta R.T. 0.01 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

Tgt Ion: 84 Resp: 3573

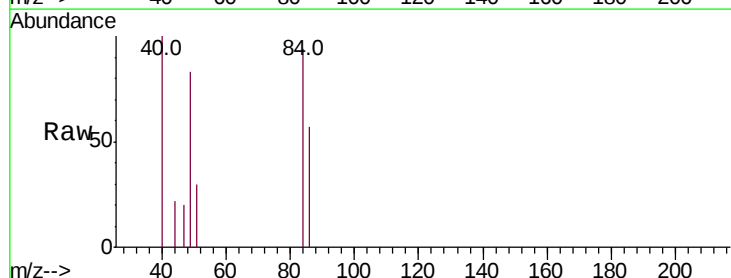
Ion Ratio Lower Upper

84 100

49 88.9 72.2 108.2

51 31.8 23.8 35.8

86 60.2 48.2 72.4

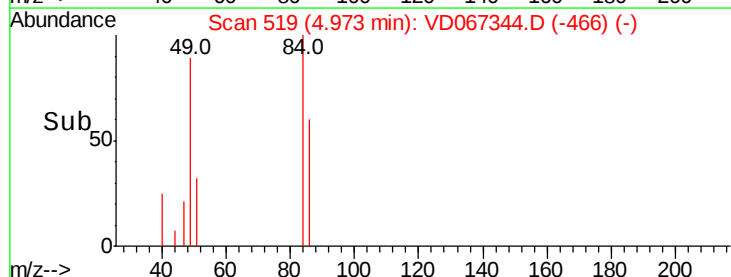
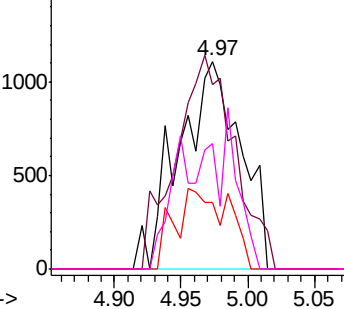


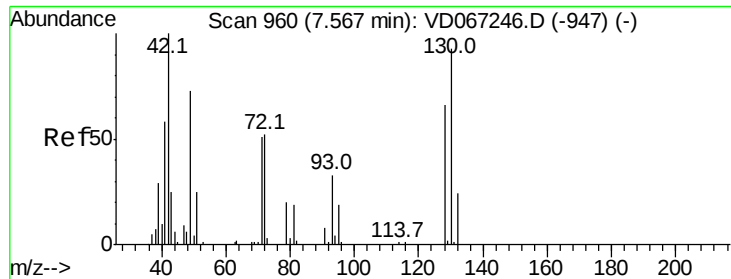
Abundance Ion 83.90 (83.60 to 84.60): VDC

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

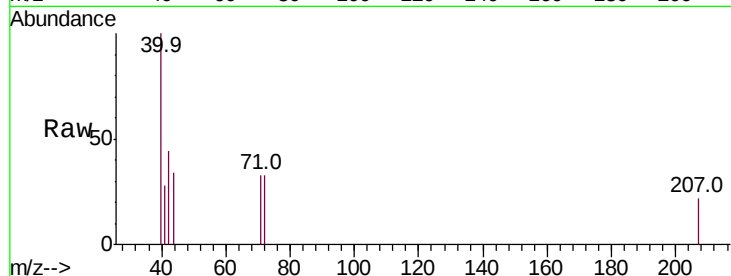




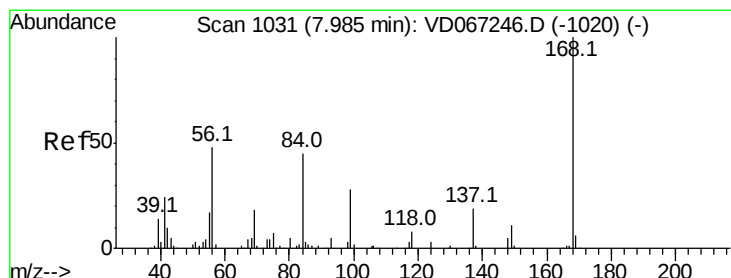
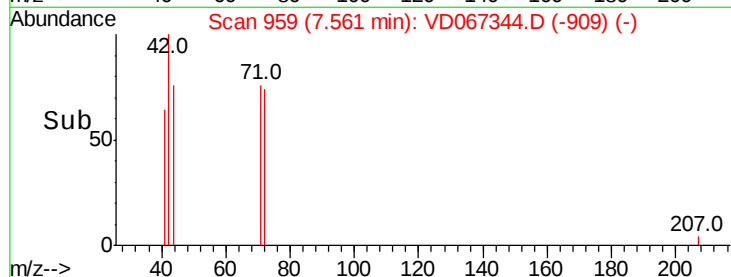
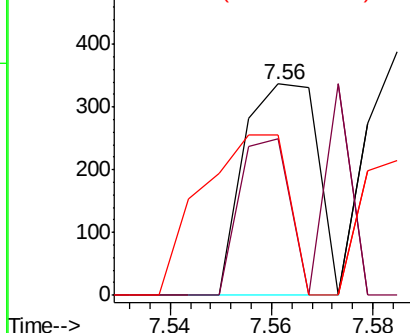
#29  
Tetrahydrofuran  
Concen: 1.100 ug/l  
RT: 7.56 min Scan# 959  
Delta R.T. -0.01 min  
Lab File: VD067344.D  
Acq: 21 Oct 2020 13:36

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MSVOA\_D  
ClientSampleId :  
72-11977

Tot Ion: 42 Resp: 334  
Ion Ratio Lower Upper  
42 100  
72 51.2 43.2 64.8  
71 90.7 39.4 59.0#

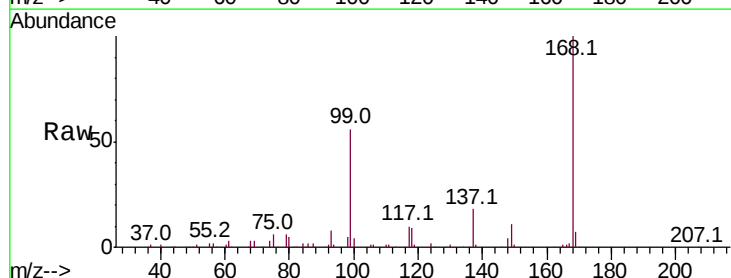


Abundance Ion 42.00 (41.70 to 42.70): VDC  
Ion 72.00 (71.70 to 72.70): VDC  
Ion 71.00 (70.70 to 71.70): VDC

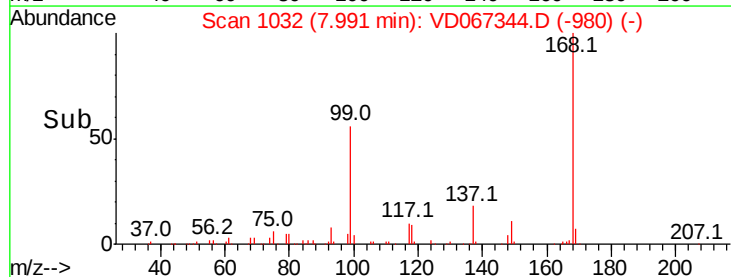
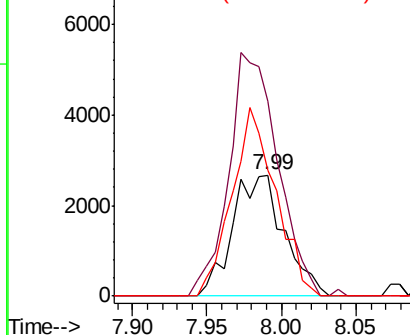


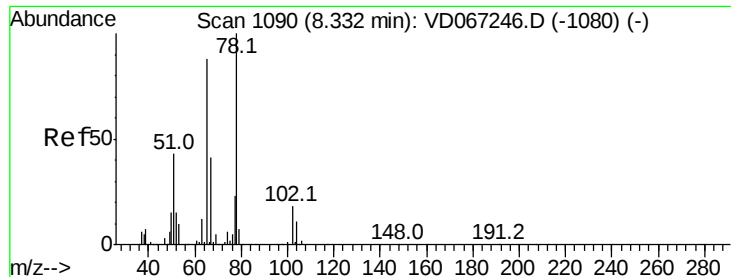
#31  
Cyclohexane  
Concen: 1.639 ug/l  
RT: 7.99 min Scan# 1032  
Delta R.T. 0.01 min  
Lab File: VD067344.D  
Acq: 21 Oct 2020 13:36

Tgt Ion: 56 Resp: 6461  
Ion Ratio Lower Upper  
56 100  
69 161.1 29.8 44.6#  
84 104.0 76.6 114.8



Abundance Ion 56.00 (55.70 to 56.70): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.00 (83.70 to 84.70): VDC





#33

1,2-Dichloroethane-d4

Concen: 54.039 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.01 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

Instrument :

MSVOA\_D

ClientSampleId :

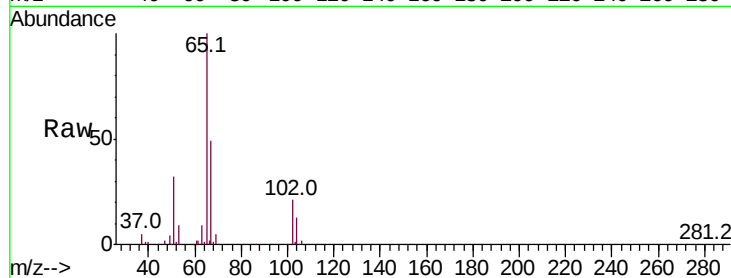
72-11977

Tot Ion: 65 Resp: 184925

Ion Ratio Lower Upper

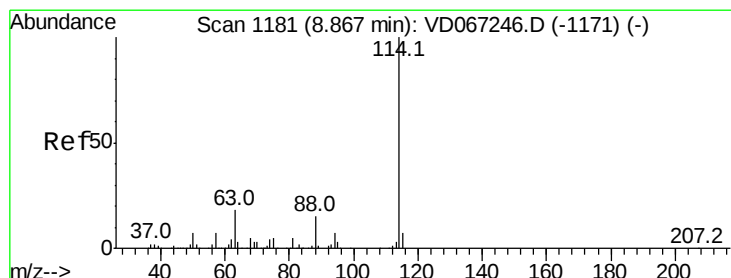
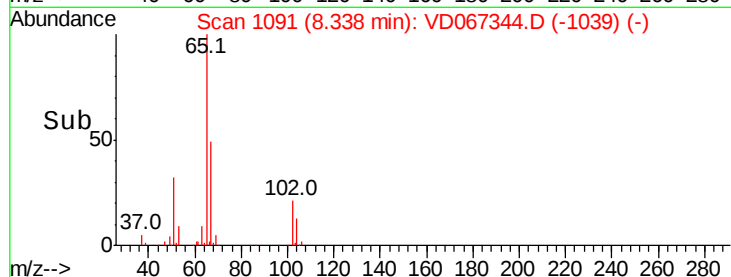
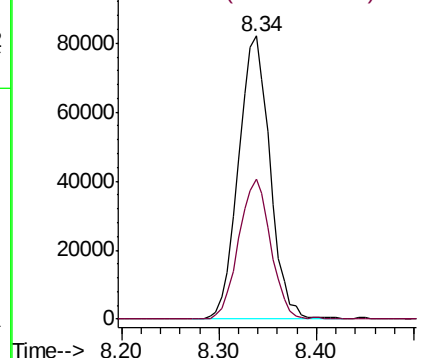
65 100

67 49.8 0.0 103.8



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

Delta R.T. 0.00 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

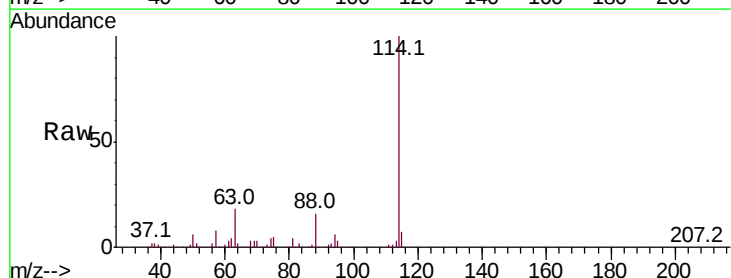
Tgt Ion:114 Resp: 565007

Ion Ratio Lower Upper

114 100

63 17.7 0.0 35.0

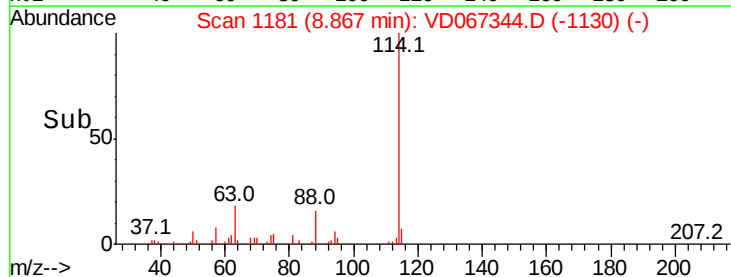
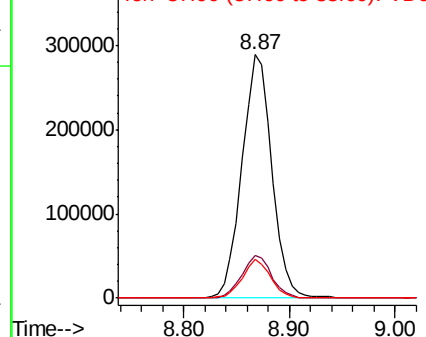
88 16.2 0.0 30.6

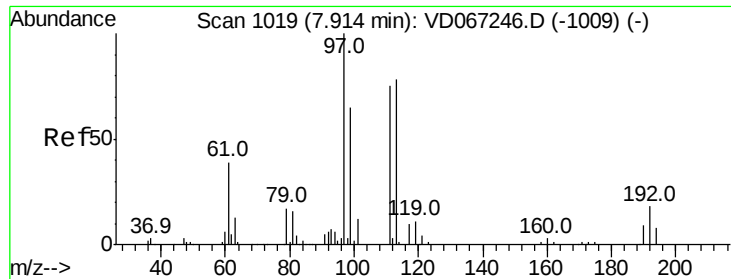


Abundance Ion 113.90 (113.60 to 114.60): VDC

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC

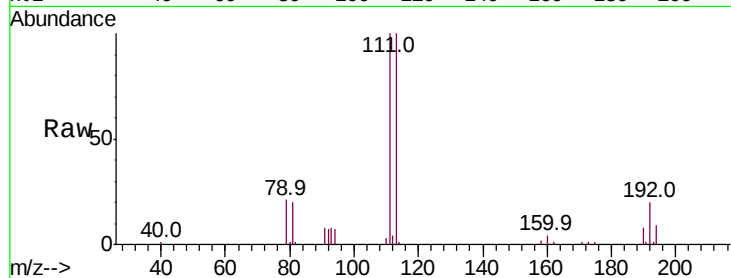




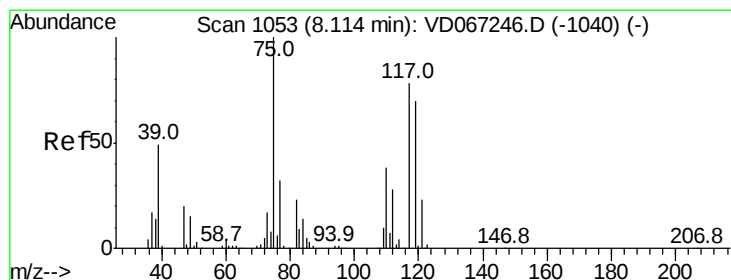
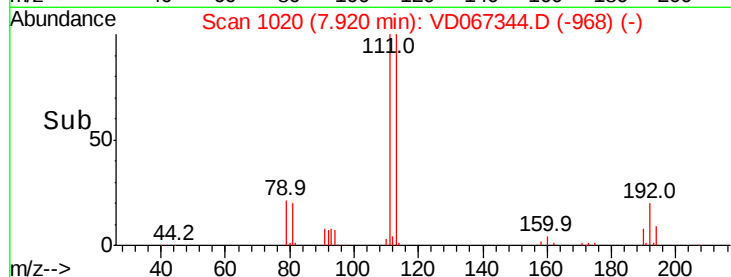
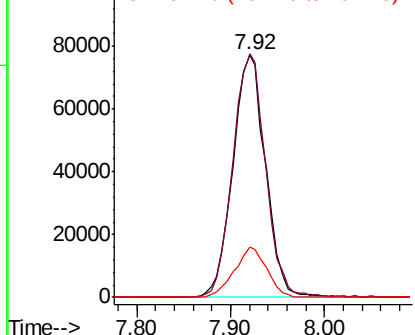
#35  
 Dibromofluoromethane  
 Concen: 49.496 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. 0.01 min  
 Lab File: VD067344.D  
 Acq: 21 Oct 2020 13:36

Instrument :  
 MSVOA\_D  
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Tot Ion:113 Resp: 186113  
 Ion Ratio Lower Upper  
 113 100  
 111 101.0 81.6 122.4  
 192 20.4 17.0 25.4

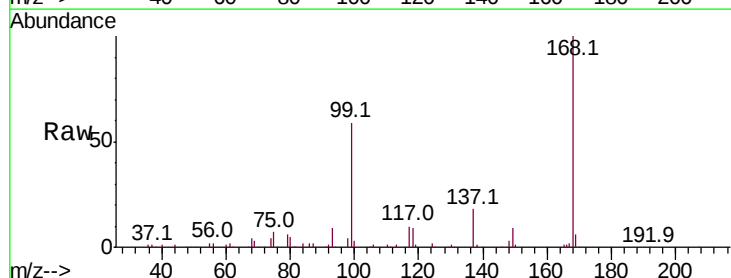


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

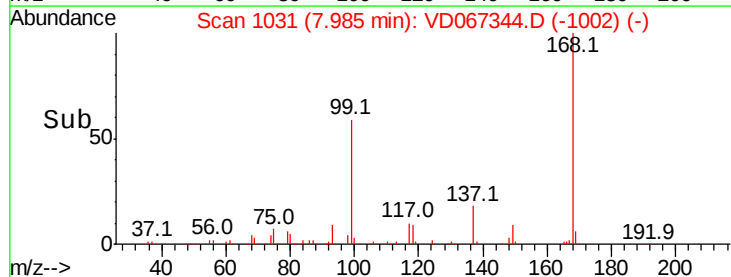
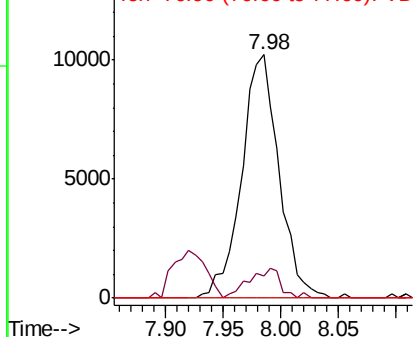


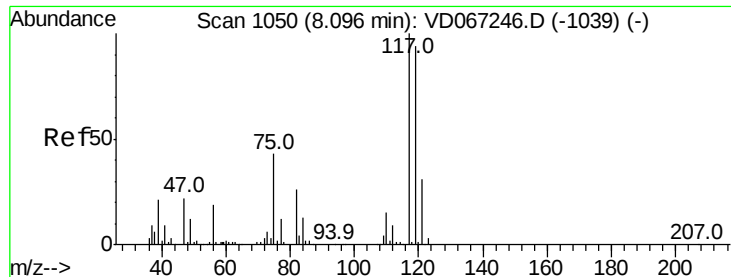
#36  
 1,1-Dichloropropene  
 Concen: 4.805 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.13 min  
 Lab File: VD067344.D  
 Acq: 21 Oct 2020 13:36

Tgt Ion: 75 Resp: 23011  
 Ion Ratio Lower Upper  
 75 100  
 110 10.2 19.6 58.7#  
 77 0.0 24.6 37.0#



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

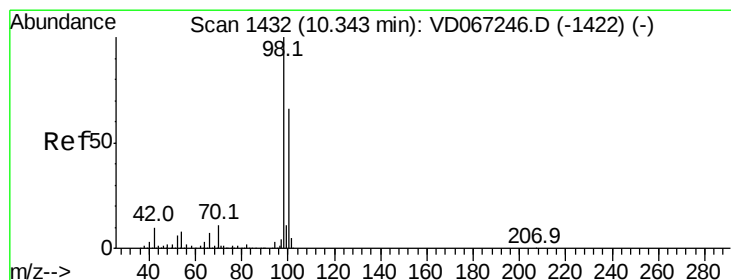
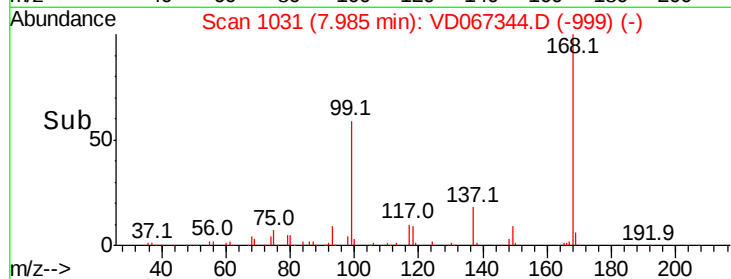
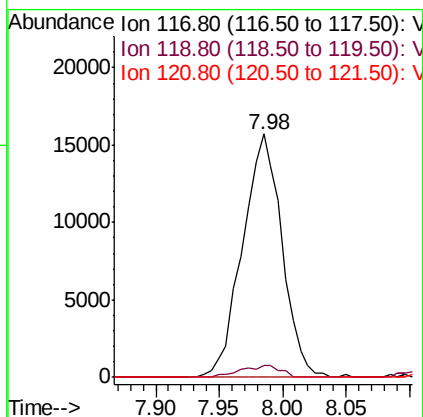
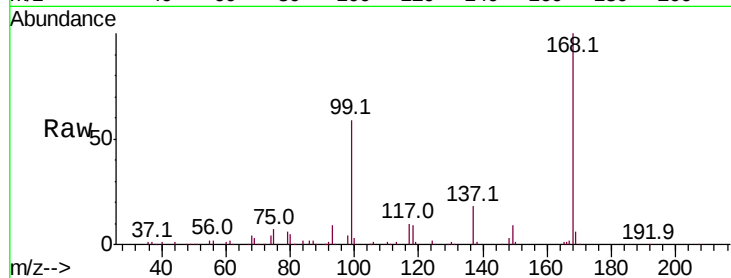




#38  
Carbon Tetrachloride  
Concen: 5.551 ug/l  
RT: 7.98 min Scan# 1031  
Delta R.T. -0.11 min  
Lab File: VD067344.D  
Acq: 21 Oct 2020 13:36

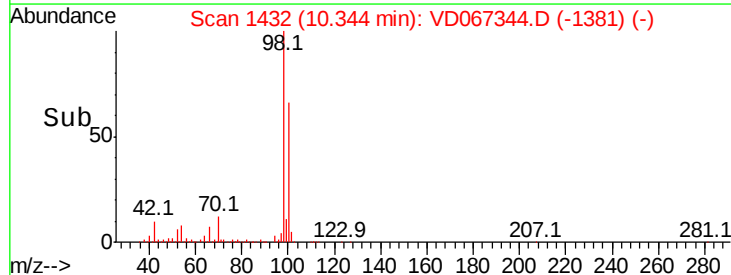
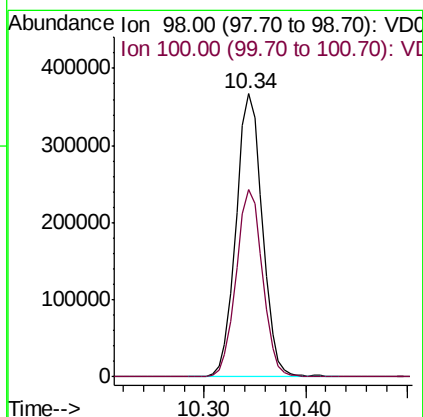
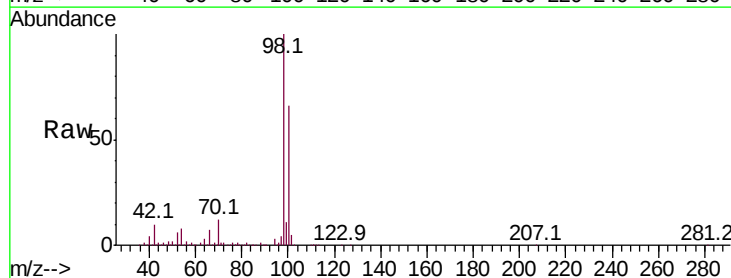
Instrument :  
MSVOA\_D  
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72-11977

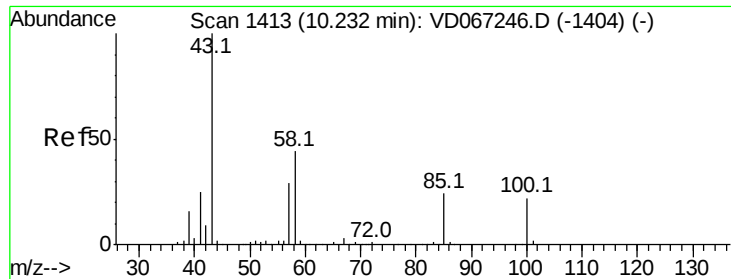
Tot Ion:117 Resp: 33978  
Ion Ratio Lower Upper  
117 100  
119 5.1 75.0 112.4#  
121 0.0 24.9 37.3#



#50  
Toluene-d8  
Concen: 48.714 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.00 min  
Lab File: VD067344.D  
Acq: 21 Oct 2020 13:36

Tgt Ion: 98 Resp: 662876  
Ion Ratio Lower Upper  
98 100  
100 66.6 53.1 79.7





#51

4-Methyl-2-Pentanone

Concen: 1.547 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. 0.11 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

Instrument :

MSVOA\_D

ClientSampleId :

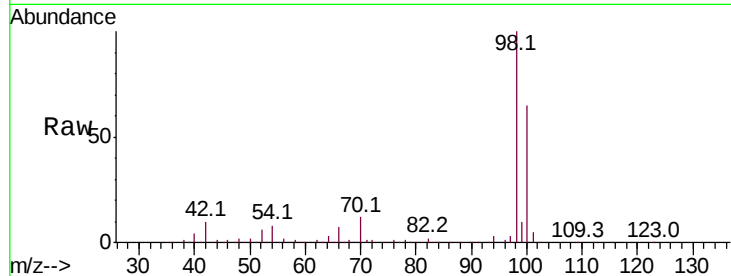
72-11977

Tot Ion: 43 Resp: 2157

Ion Ratio Lower Upper

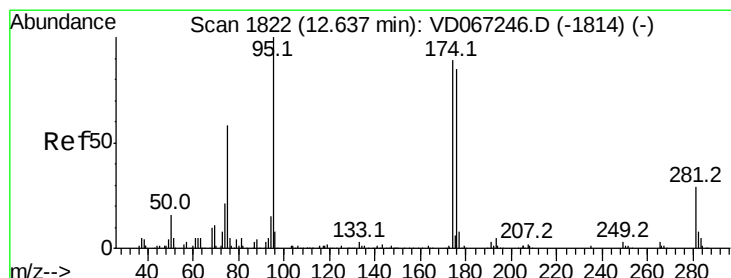
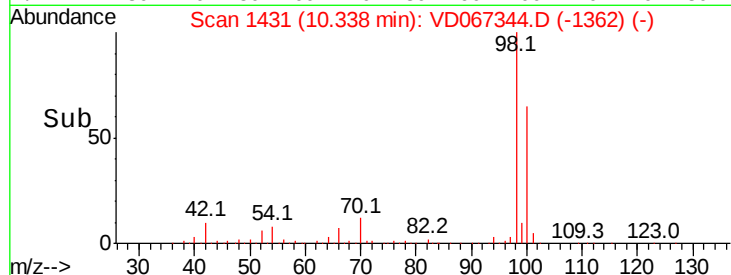
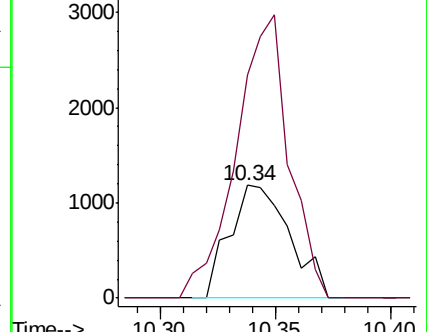
43 100

58 220.4 35.7 53.5#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC



#62

4-Bromofluorobenzene

Concen: 52.333 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.00 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

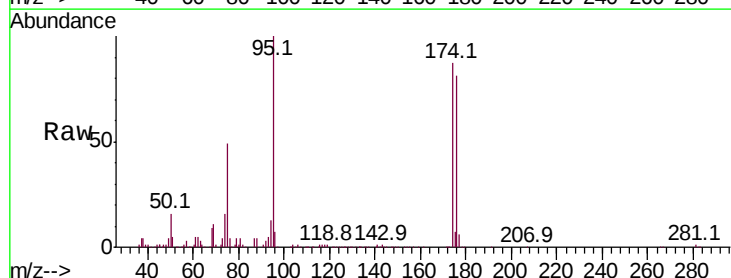
Tgt Ion: 95 Resp: 247619

Ion Ratio Lower Upper

95 100

174 88.0 0.0 175.2

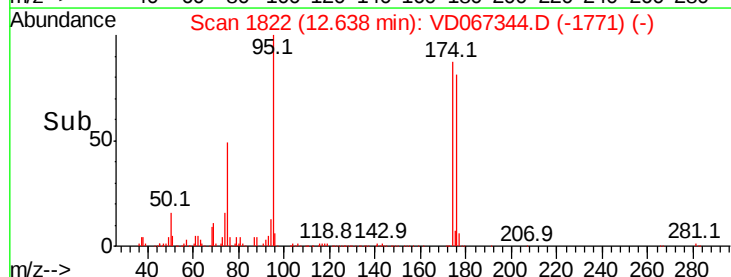
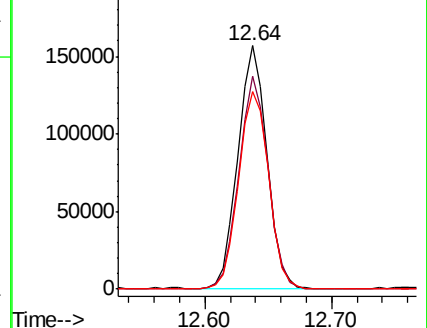
176 84.6 0.0 168.6

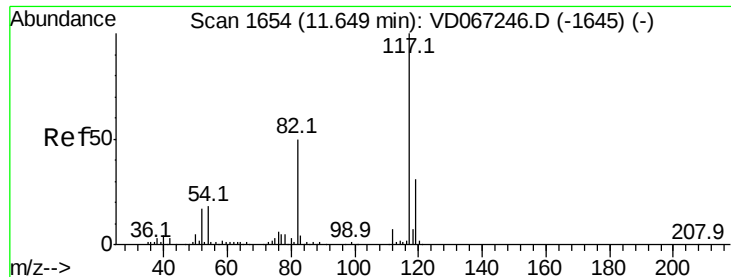


Abundance Ion 94.90 (94.60 to 95.60): VDC

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

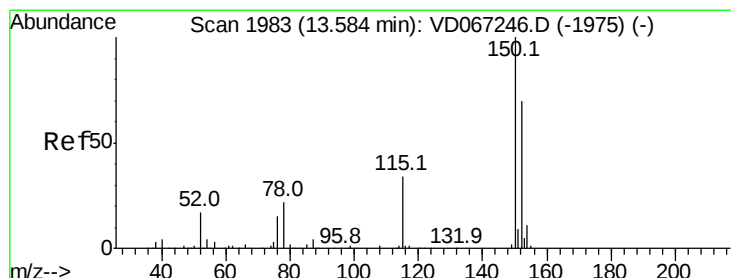
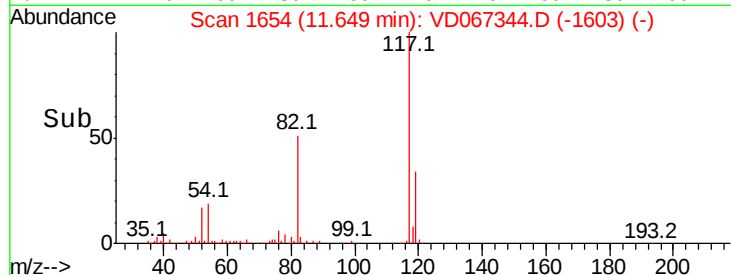
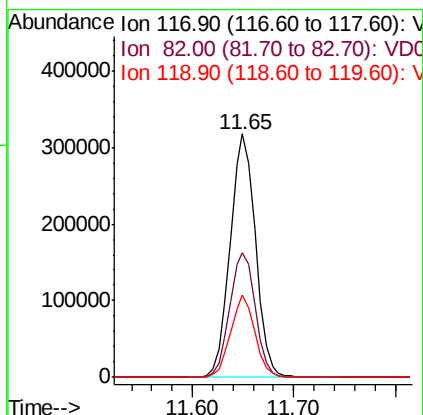
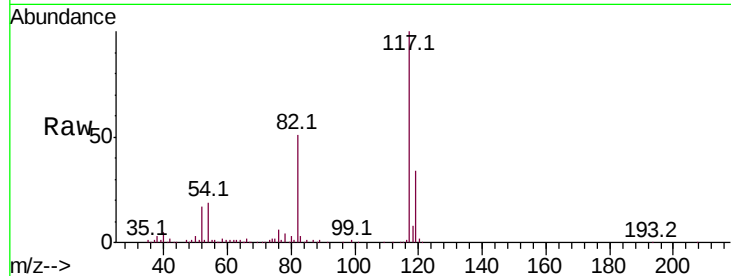




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD067344.D  
Acq: 21 Oct 2020 13:36

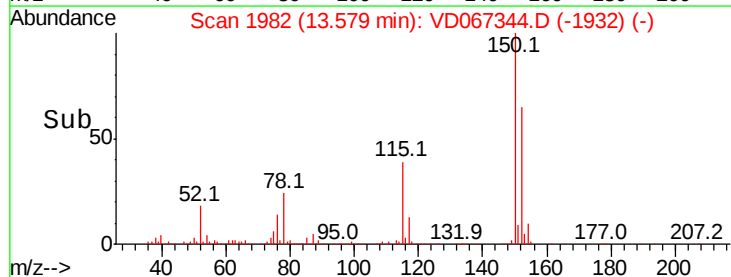
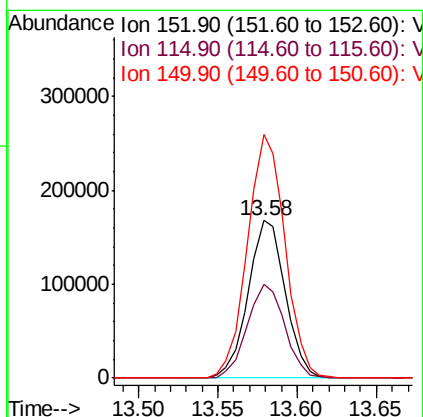
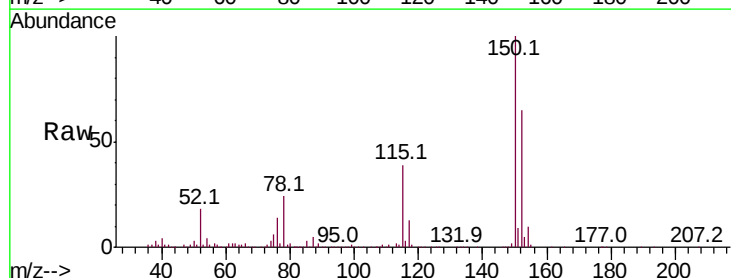
Instrument :  
MSVOA\_D  
ClientSampleId :  
72-11977

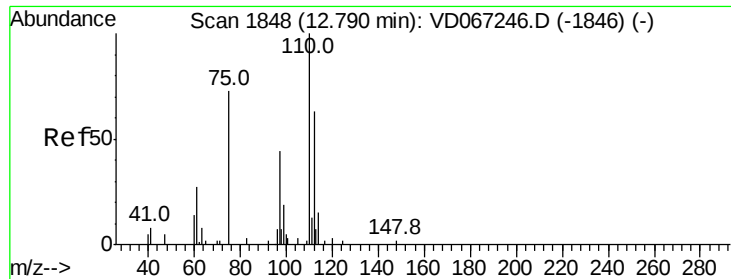
Tot Ion:117 Resp: 550216  
Ion Ratio Lower Upper  
117 100  
82 51.4 39.9 59.9  
119 33.9 24.9 37.3



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. -0.01 min  
Lab File: VD067344.D  
Acq: 21 Oct 2020 13:36

Tgt Ion:152 Resp: 272904  
Ion Ratio Lower Upper  
152 100  
115 60.5 29.3 87.9  
150 156.9 0.0 339.0





#76

1,2,3-Trichloropropane

Concen: 66.940 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

Instrument :

MSVOA\_D

ClientSampleId :

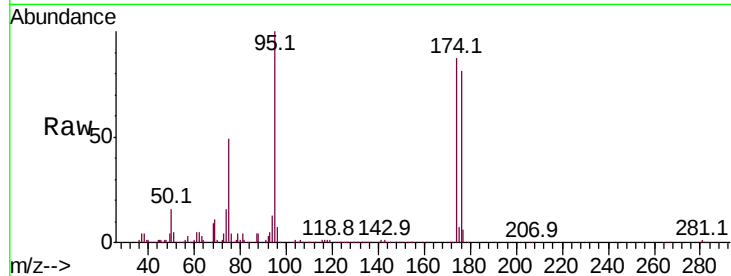
72-11977

Tot Ion: 75 Resp: 126616

Ion Ratio Lower Upper

75 100

77 1.6 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC

12.64

80000

60000

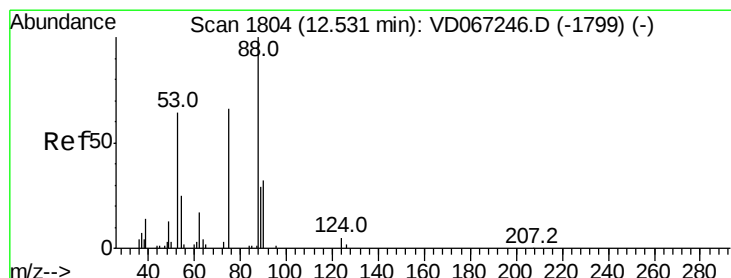
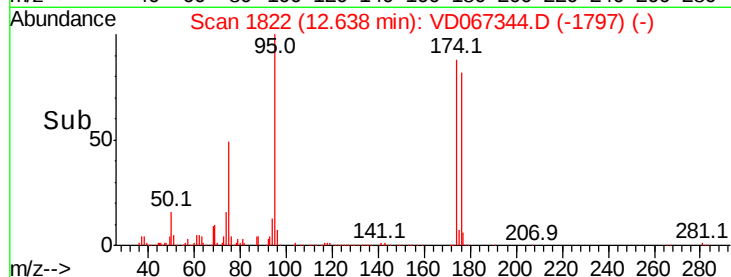
40000

20000

0

12.55 12.60 12.65 12.70

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 151.800 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD067344.D

Acq: 21 Oct 2020 13:36

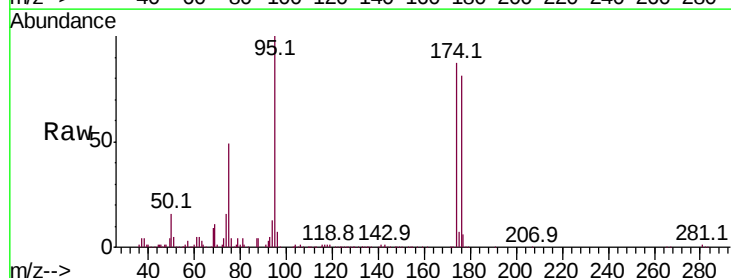
Tgt Ion: 75 Resp: 126616

Ion Ratio Lower Upper

75 100

53 0.3 78.5 117.7#

89 0.1 39.9 59.9#



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

100000

80000

60000

40000

20000

0

12.55 12.60 12.65 12.70

Time-->

