

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD102220\  
 Data File : VD067368.D  
 Acq On : 22 Oct 2020 17:56  
 Operator : VA/SY  
 Sample : L4496-01  
 Misc : 5.63G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SA-01-102220

Quant Time: Oct 23 06:10:20 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  | 103030   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 162386   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 170590   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 83320    | 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   | 74244    | 71.93 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 143.86% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 61263    | 56.69 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 113.38% |          |
| 50) Toluene-d8              | 10.34 | 98   | 197856   | 50.59 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.18% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 71071    | 52.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.52% |          |

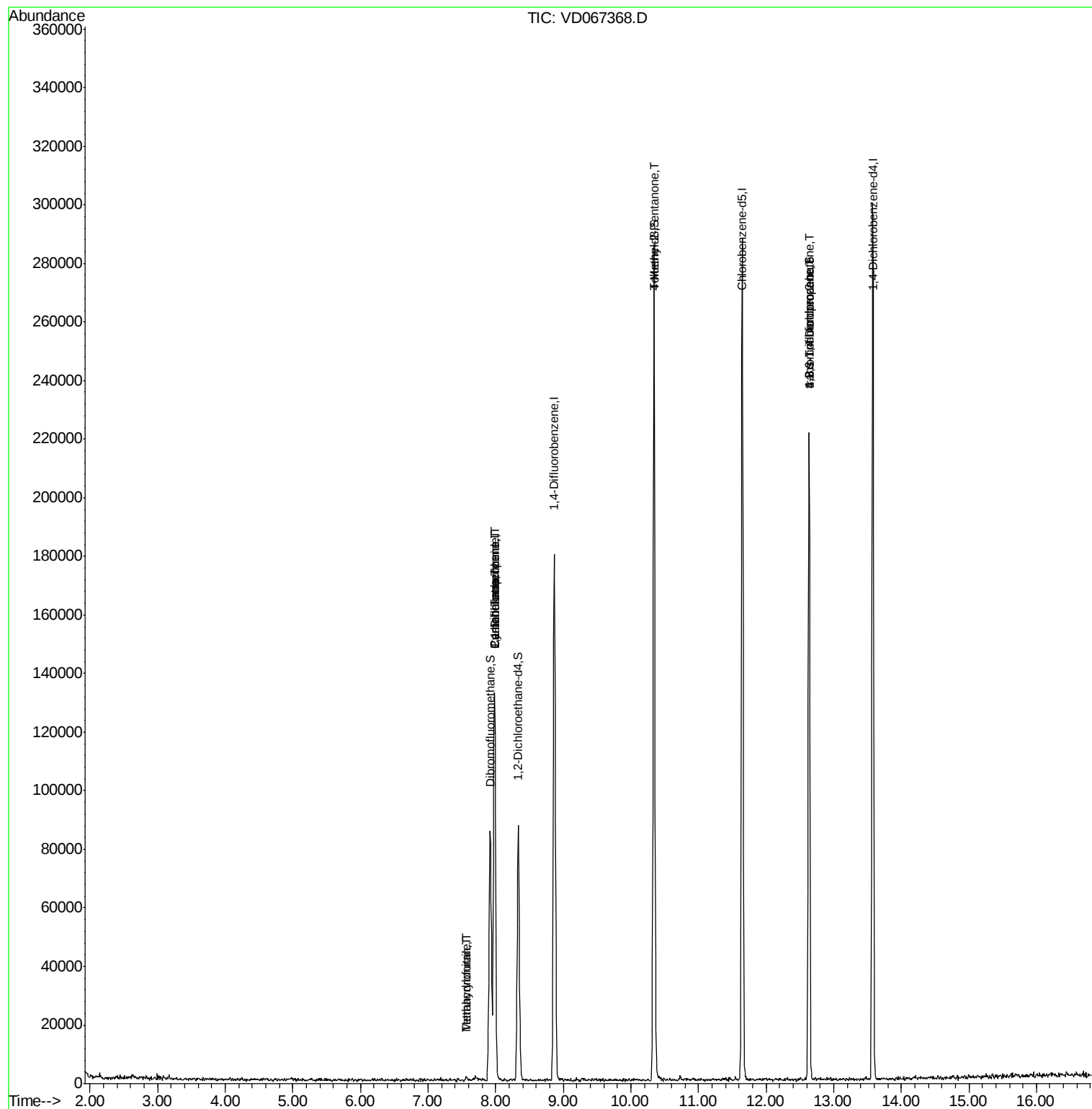
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.79  | 94   | 67       | Below Cal | #      | 3      |
| 20) Methylene Chloride         | 4.97  | 84   | 632      | Below Cal | #      | 16     |
| 29) Tetrahydrofuran            | 7.57  | 42   | 591      | 6.452     | ug/l # | 57     |
| 31) Cyclohexane                | 7.98  | 56   | 1595     | 1.342     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 6793     | 4.936     | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 10205    | 5.801     | ug/l # | 13     |
| 41) Methacrylonitrile          | 7.56  | 41   | 386      | 1.764     | ug/l # | 21     |
| 51) 4-Methyl-2-Pentanone       | 10.34 | 43   | 804      | 2.006     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 36518    | 63.236    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 36518    | 143.401   | ug/l # | 10     |

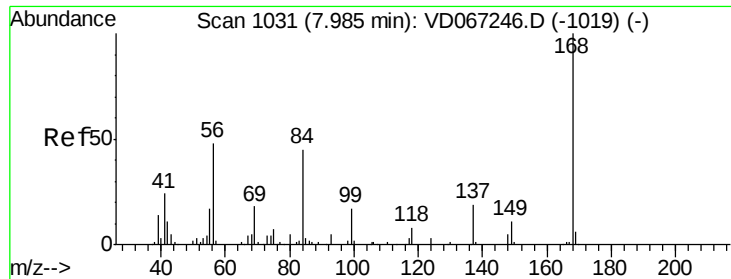
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D101320S.M  
Quant Title : SW846 8260  
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: VD067368.D

Acq: 22 Oct 2020 17:56

Instrument :

MSVOA\_D

ClientSampleId :

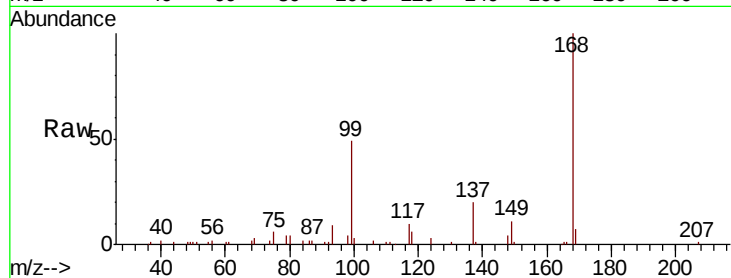
SA-01-102220

Tot Ion:168 Resp: 103030

Ion Ratio Lower Upper

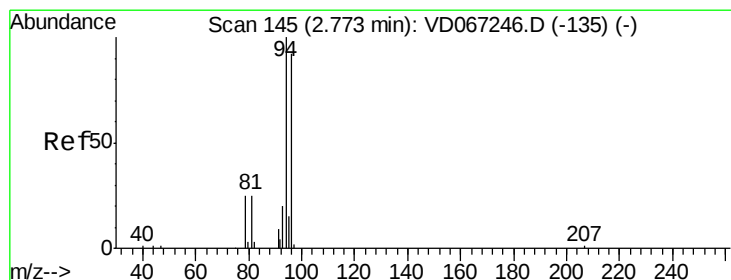
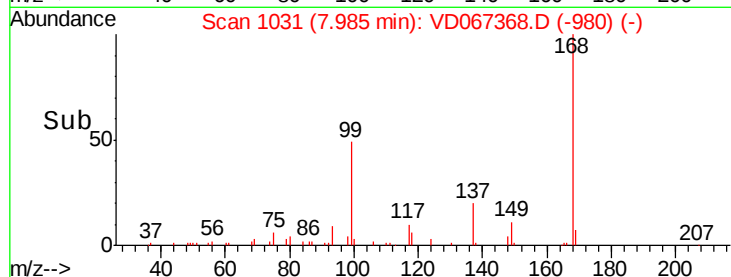
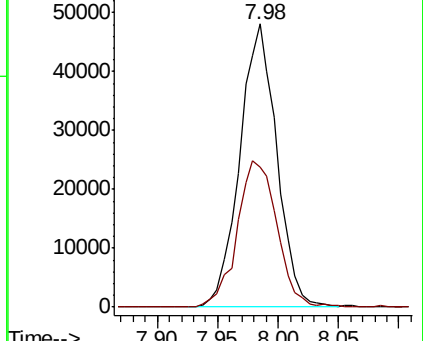
168 100

99 49.3 45.9 68.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#5

Bromomethane

Concen: Below Cal

RT: 2.79 min Scan# 147

Delta R.T. 0.01 min

Lab File: VD067368.D

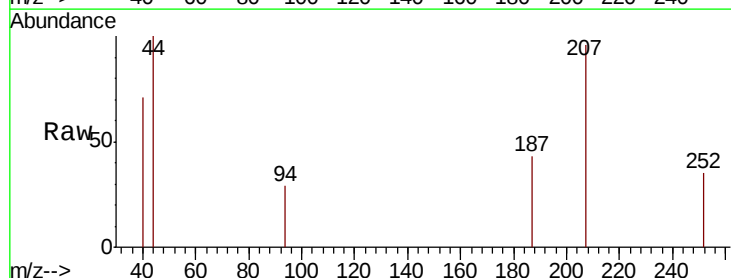
Acq: 22 Oct 2020 17:56

Tgt Ion: 94 Resp: 67

Ion Ratio Lower Upper

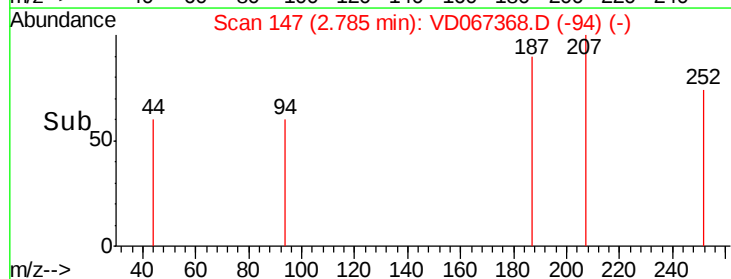
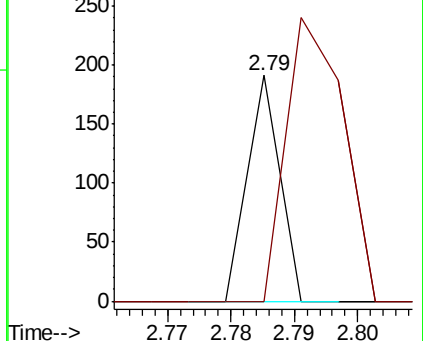
94 100

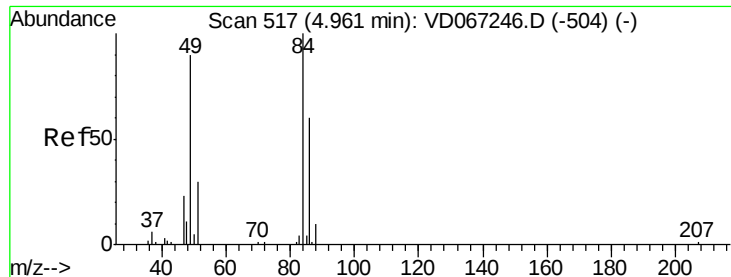
96 0.0 73.8 110.6#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC





#20

Methvlene Chloride

Concen: Below Cal

RT: 4.97 min Scan# 519

Delta R.T. 0.01 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

Instrument :

MSVOA\_D

ClientSampleId :

SA-01-102220

Tot Ion: 84 Resp: 632

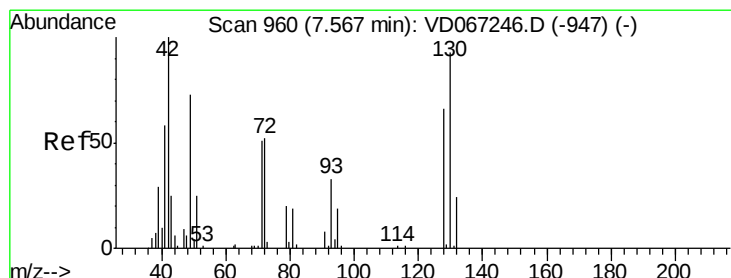
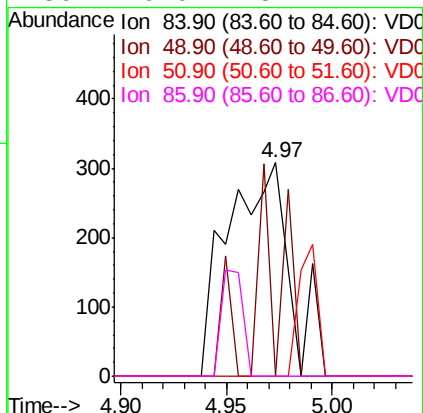
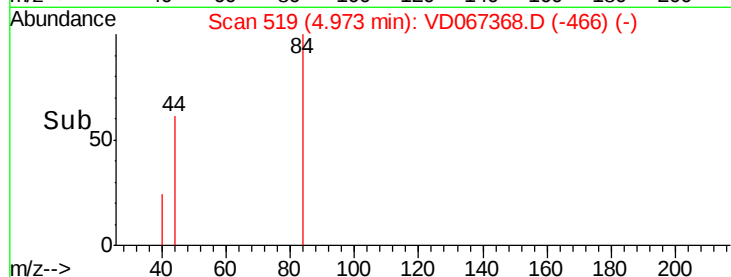
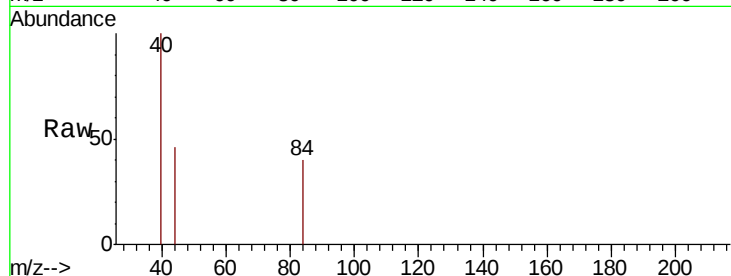
Ion Ratio Lower Upper

84 100

49 0.0 72.2 108.2#

51 0.0 23.8 35.8#

86 0.0 48.2 72.4#



#29

Tetrahydrofuran

Concen: 6.452 ug/l

RT: 7.57 min Scan# 960

Delta R.T. 0.00 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

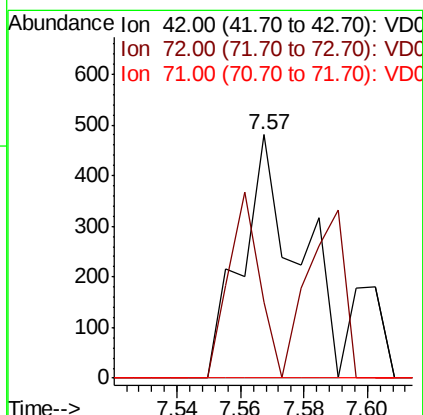
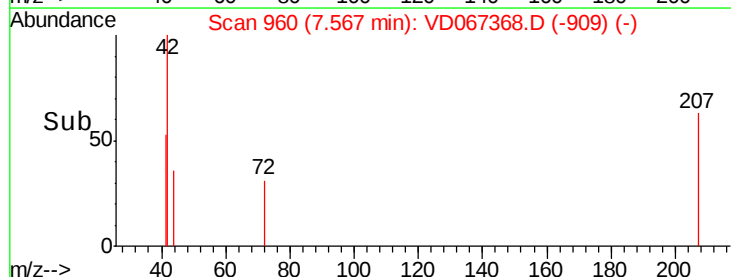
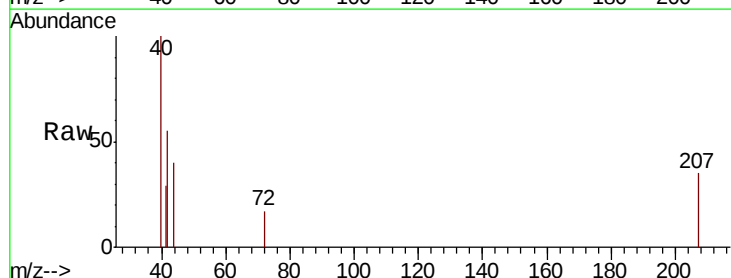
Tgt Ion: 42 Resp: 591

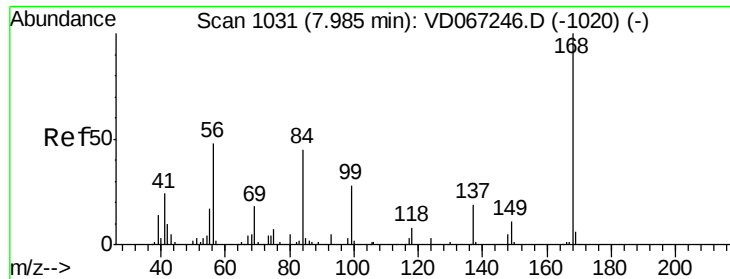
Ion Ratio Lower Upper

42 100

72 41.8 43.2 64.8#

71 0.0 39.4 59.0#

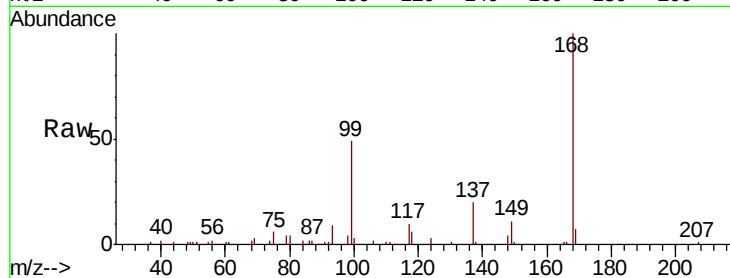




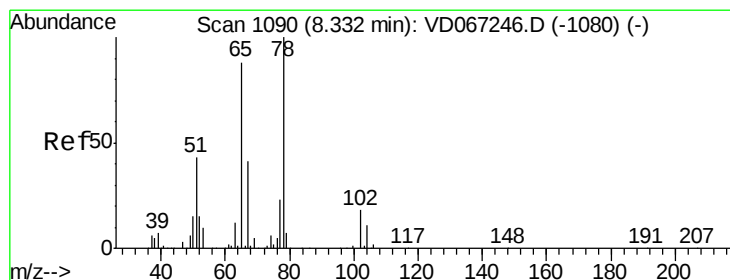
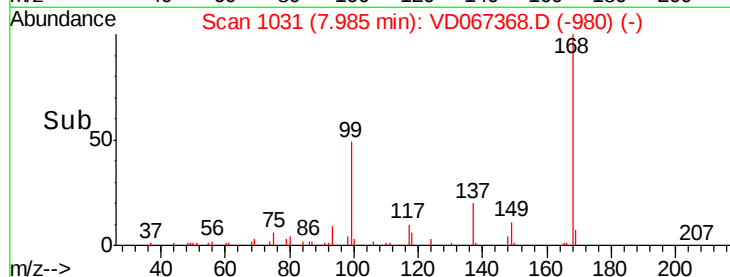
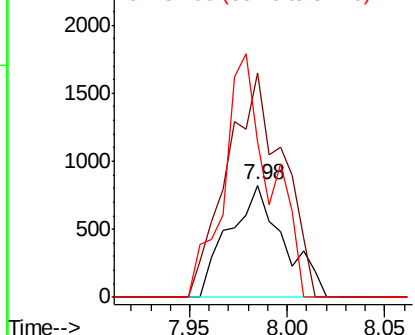
#31  
Cyclohexane  
Concen: 1.342 ug/l  
RT: 7.98 min Scan# 1031  
Delta R.T. 0.00 min  
Lab File: VD067368.D  
Acq: 22 Oct 2020 17:56

Instrument :  
MSVOA\_D  
ClientSampleId :  
SA-01-102220

Tot Ion: 56 Resp: 1595  
Ion Ratio Lower Upper  
56 100  
69 200.2 29.8 44.6#  
84 138.4 76.6 114.8#

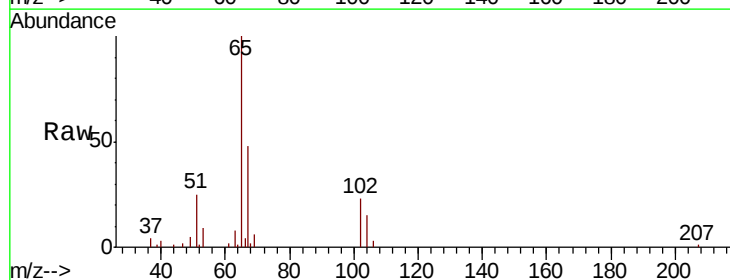


Abundance Ion 56.00 (55.70 to 56.70): VDC  
Ion 69.00 (68.70 to 69.70): VDC  
Ion 84.00 (83.70 to 84.70): VDC

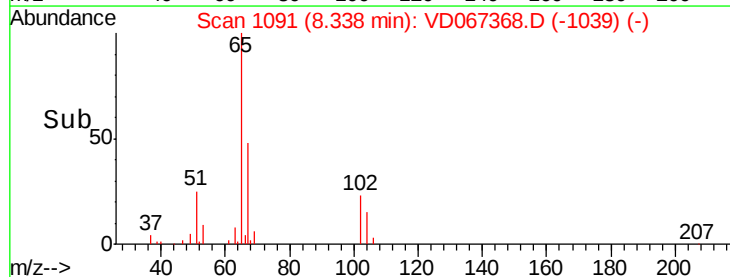
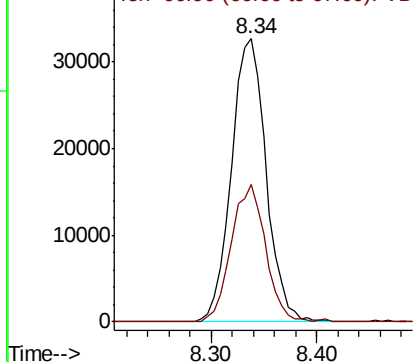


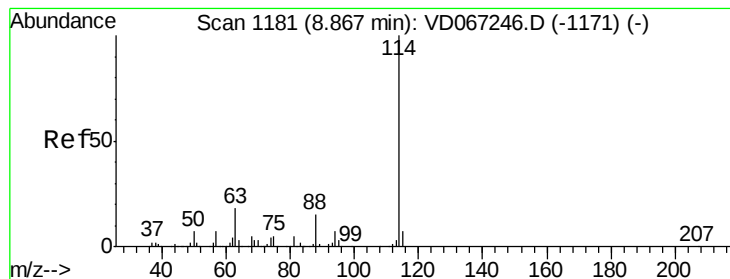
#33  
1,2-Dichloroethane-d4  
Concen: 71.927 ug/l  
RT: 8.34 min Scan# 1091  
Delta R.T. 0.01 min  
Lab File: VD067368.D  
Acq: 22 Oct 2020 17:56

Tgt Ion: 65 Resp: 74244  
Ion Ratio Lower Upper  
65 100  
67 47.8 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: VD067368.D

Acq: 22 Oct 2020 17:56

Instrument :

MSVOA\_D

ClientSampleId :

SA-01-102220

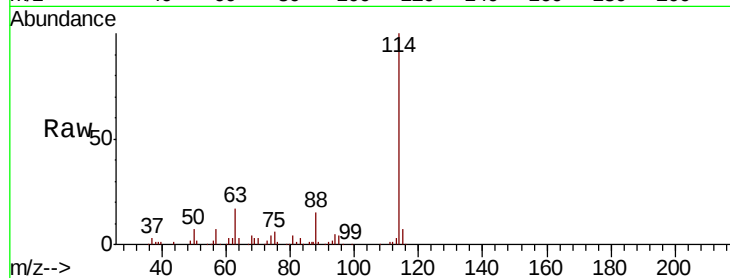
Tot Ion:114 Resp: 162386

Ion Ratio Lower Upper

114 100

63 17.4 0.0 35.0

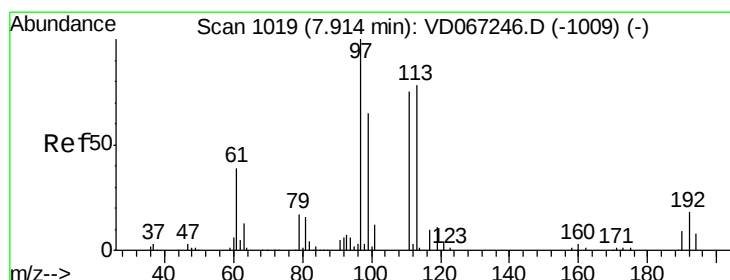
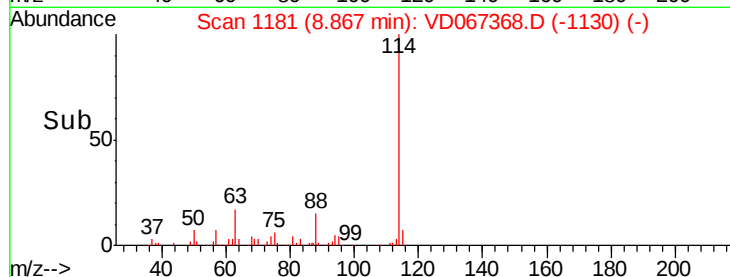
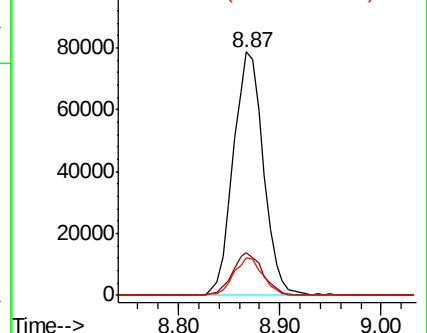
88 15.2 0.0 30.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 56.689 ug/l

RT: 7.92 min Scan# 1020

Delta R.T. 0.01 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

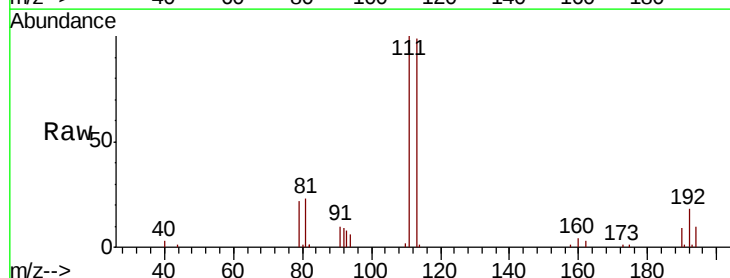
Tgt Ion:113 Resp: 61263

Ion Ratio Lower Upper

113 100

111 104.4 81.6 122.4

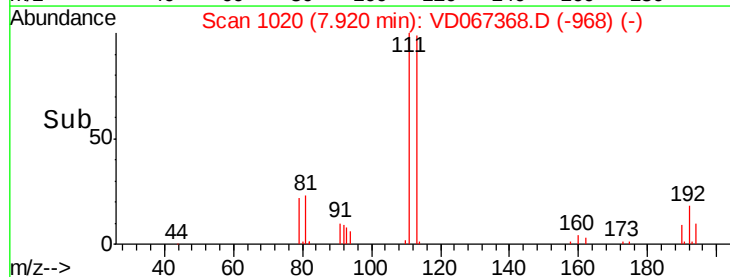
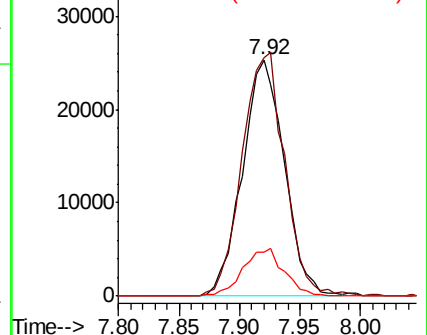
192 19.7 17.0 25.4

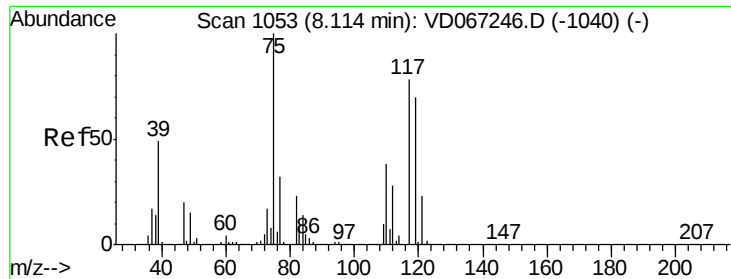


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

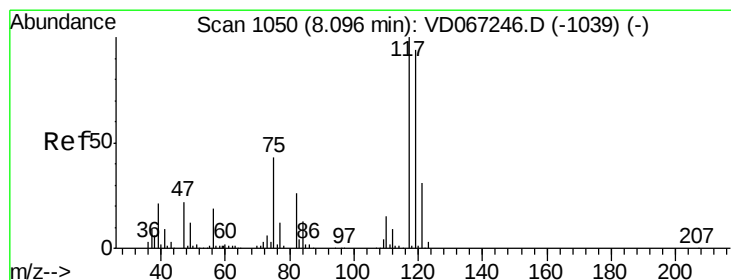
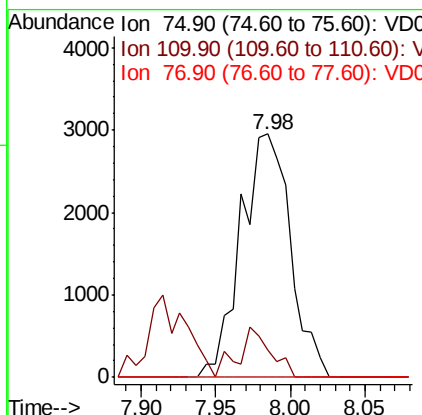
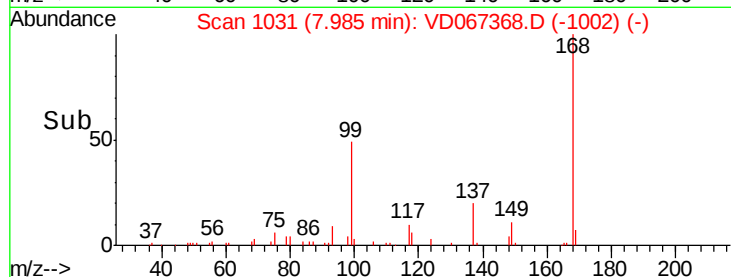
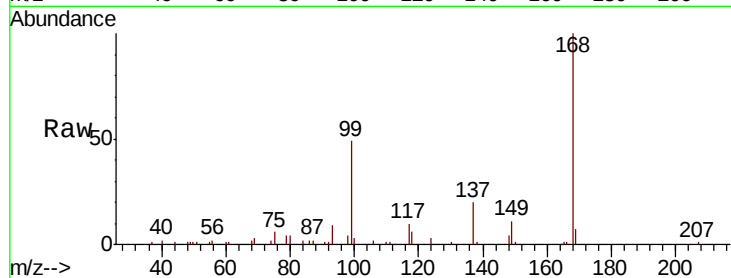




#36  
 1,1-Dichloropropene  
 Concen: 4.936 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.13 min  
 Lab File: VD067368.D  
 Acq: 22 Oct 2020 17:56

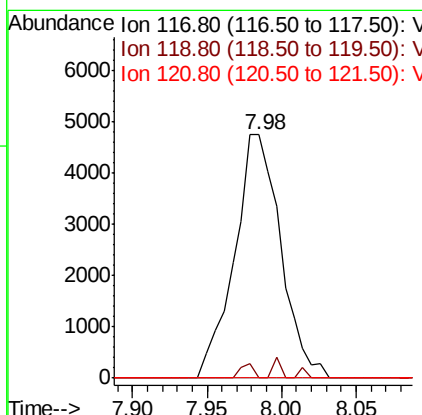
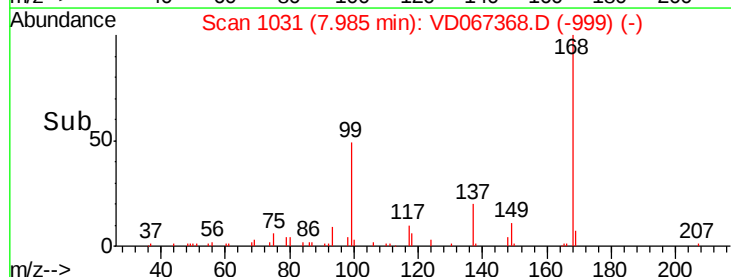
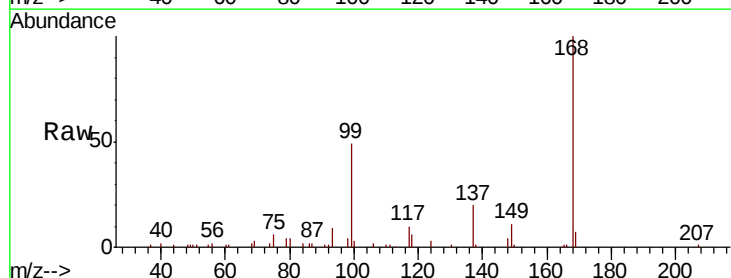
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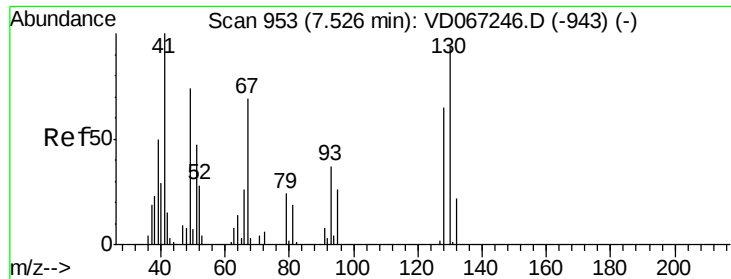
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 13.2  | 19.6  | 58.7# |
| 77      | 0.0   | 24.6  | 37.0# |



#38  
 Carbon Tetrachloride  
 Concen: 5.801 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.11 min  
 Lab File: VD067368.D  
 Acq: 22 Oct 2020 17:56

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 0.0   | 75.0  | 112.4# |
| 121     | 0.0   | 24.9  | 37.3#  |

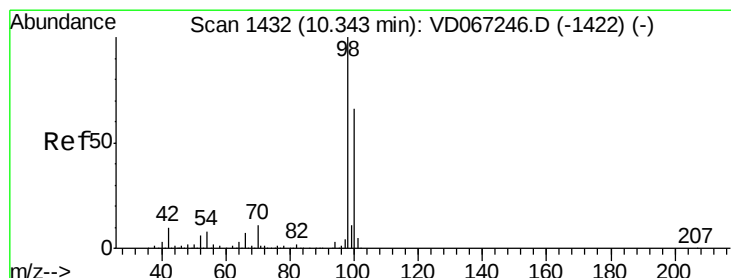
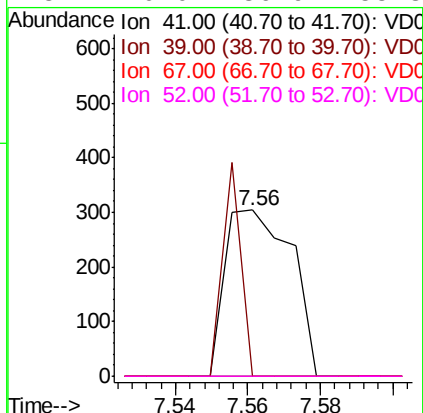
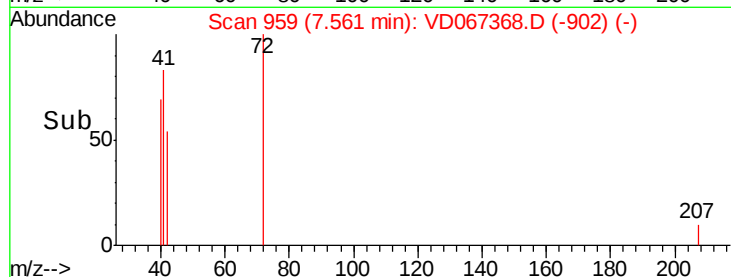
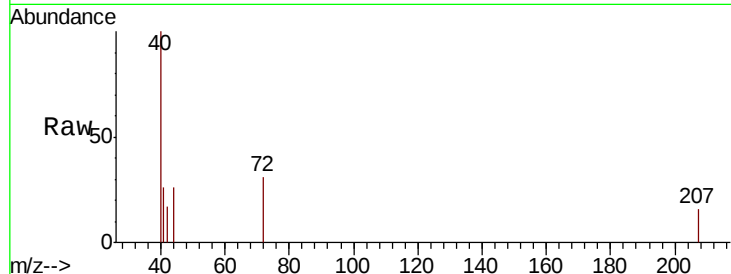




#41  
Methacrylonitrile  
Concen: 1.764 ug/l  
RT: 7.56 min Scan# 959  
Delta R.T. 0.04 min  
Lab File: VD067368.D  
Acq: 22 Oct 2020 17:56

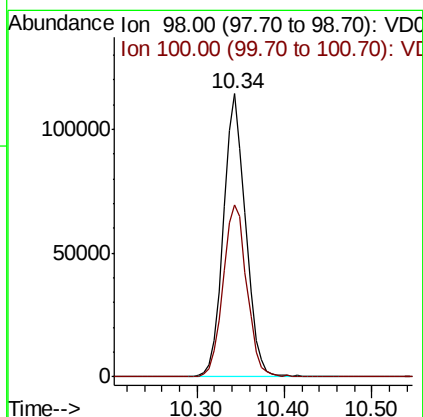
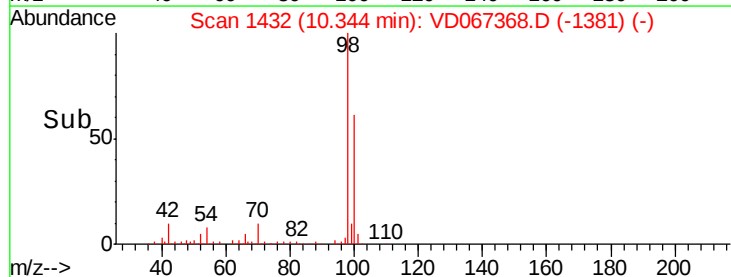
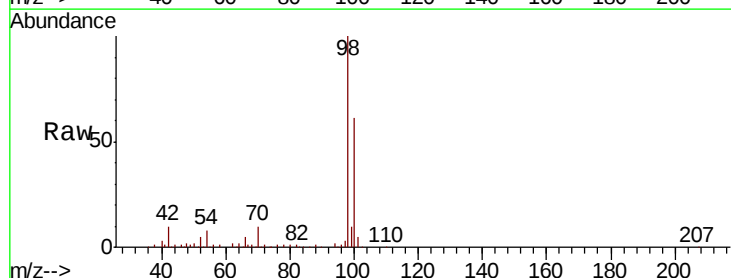
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MSVOA\_D  
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SA-01-102220

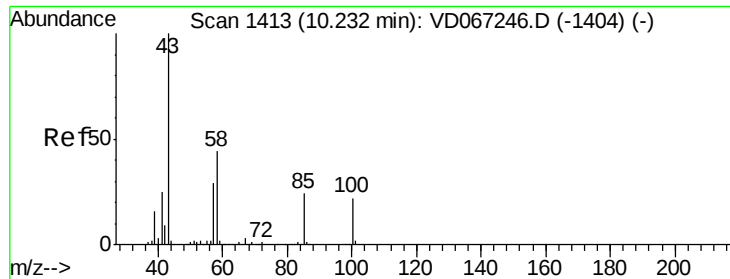
Tot Ion: 41 Resp: 386  
Ion Ratio Lower Upper  
41 100  
39 35.8 60.0 90.0#  
67 0.0 88.9 133.3#  
52 0.0 36.9 55.3#



#50  
Toluene-d8  
Concen: 50.591 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.00 min  
Lab File: VD067368.D  
Acq: 22 Oct 2020 17:56

Tgt Ion: 98 Resp: 197856  
Ion Ratio Lower Upper  
98 100  
100 65.0 53.1 79.7





#51

4-Methyl-2-Pentanone

Concen: 2.006 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. 0.11 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

Instrument :

MSVOA\_D

ClientSampleId :

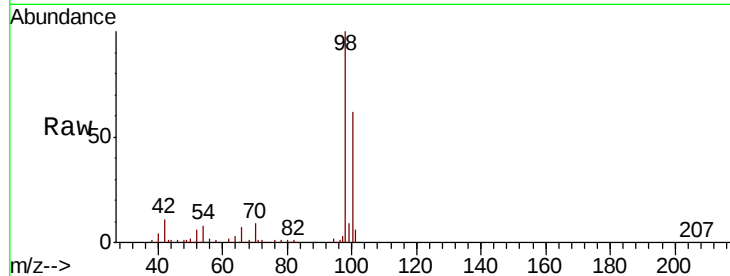
SA-01-102220

Tot Ion: 43 Resp: 804

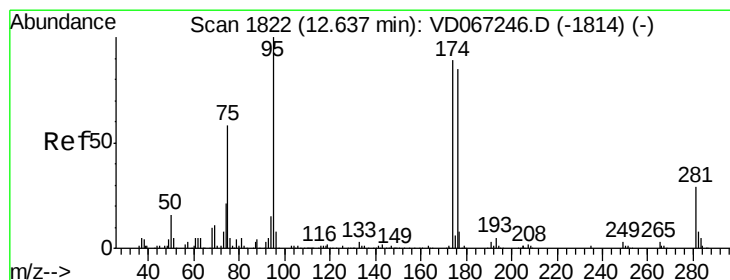
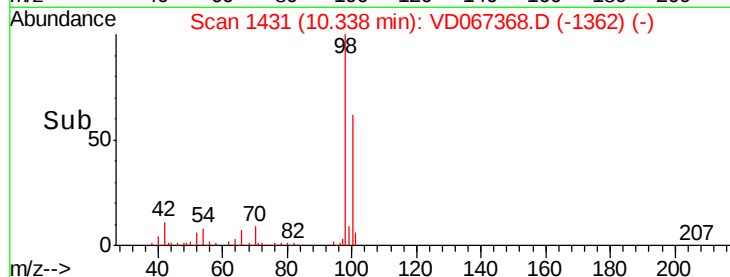
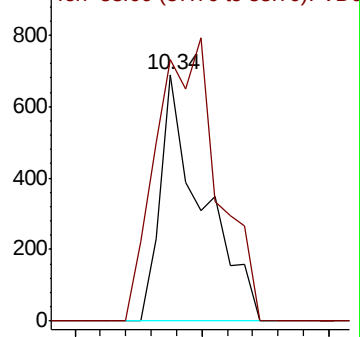
Ion Ratio Lower Upper

43 100

58 166.4 35.7 53.5#



Abundance Ion 43.00 (42.70 to 43.70): VDC



#62

4-Bromofluorobenzene

Concen: 52.262 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.00 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

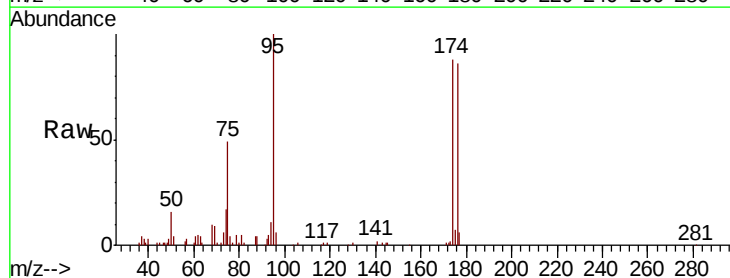
Tgt Ion: 95 Resp: 71071

Ion Ratio Lower Upper

95 100

174 90.5 0.0 175.2

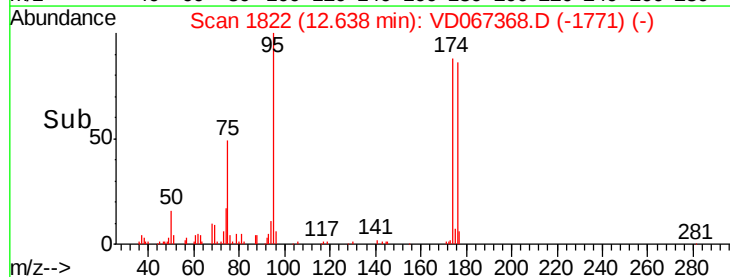
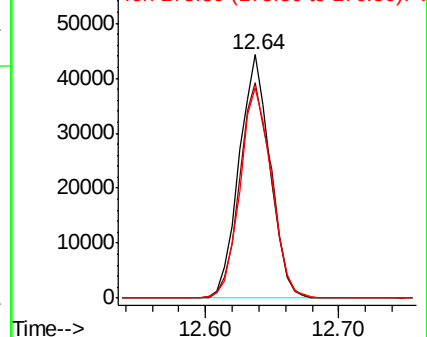
176 88.0 0.0 168.6

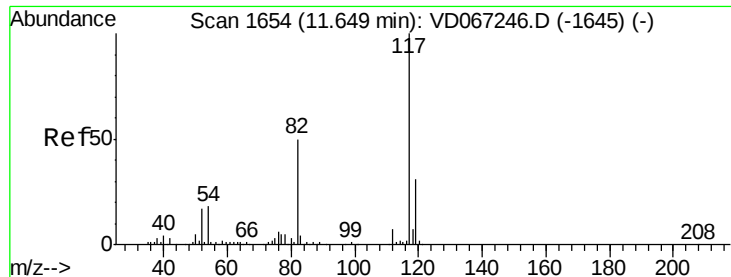


Abundance Ion 94.90 (94.60 to 95.60): VDC

Ion 173.80 (173.50 to 174.50): VDC

Ion 175.80 (175.50 to 176.50): VDC

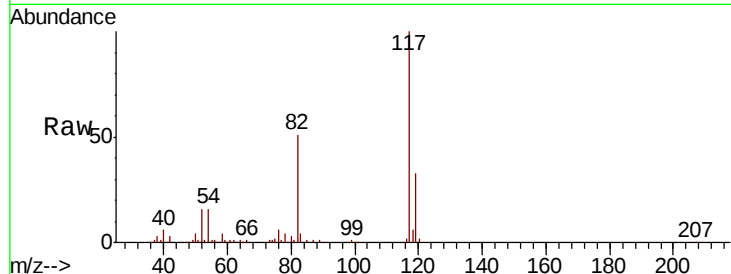




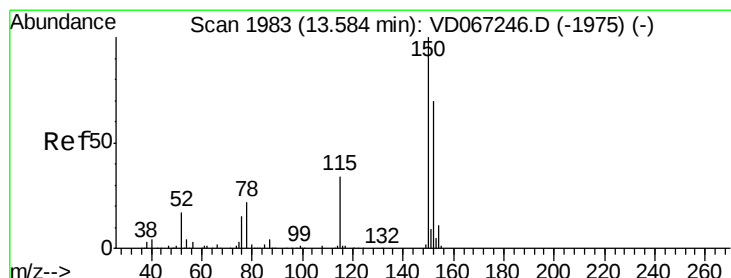
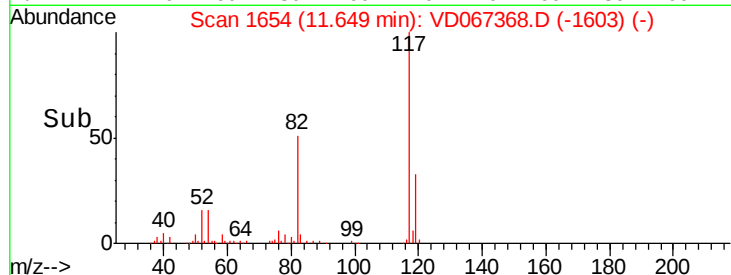
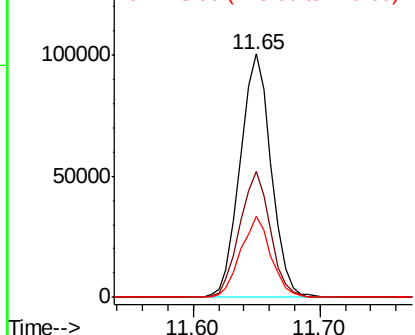
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD067368.D  
Acq: 22 Oct 2020 17:56

Instrument :  
MSVOA\_D  
ClientSampleId :  
SA-01-102220

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 51.5  | 39.9  | 59.9  |
| 119     | 33.4  | 24.9  | 37.3  |

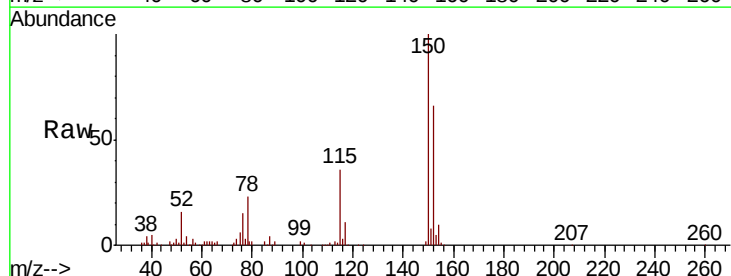


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

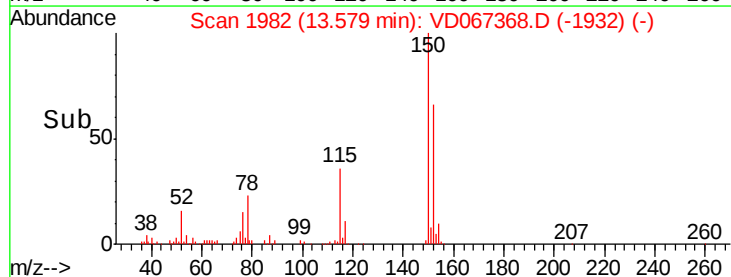
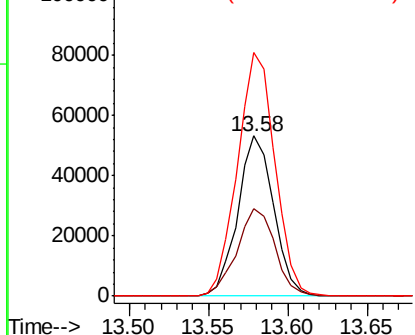


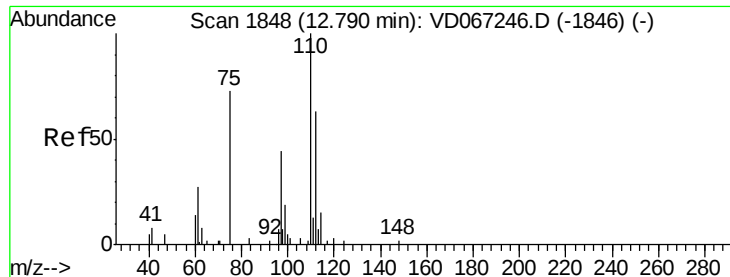
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. -0.01 min  
Lab File: VD067368.D  
Acq: 22 Oct 2020 17:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 58.0  | 29.3  | 87.9  |
| 150     | 158.8 | 0.0   | 339.0 |



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 63.236 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

Instrument :

MSVOA\_D

ClientSampleId :

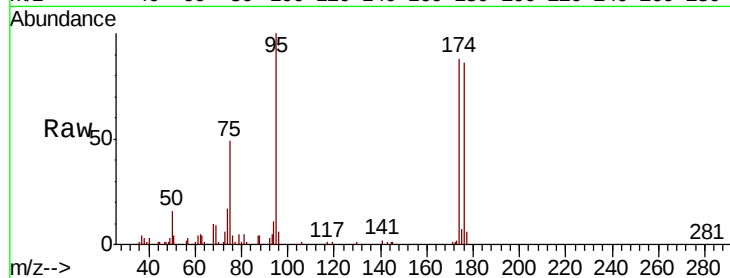
SA-01-102220

Tot Ion: 75 Resp: 36518

Ion Ratio Lower Upper

75 100

77 0.6 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC

25000

20000

15000

10000

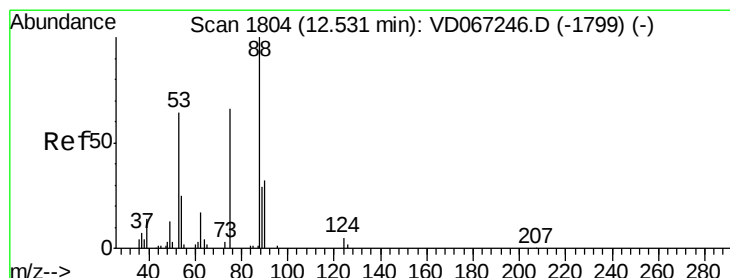
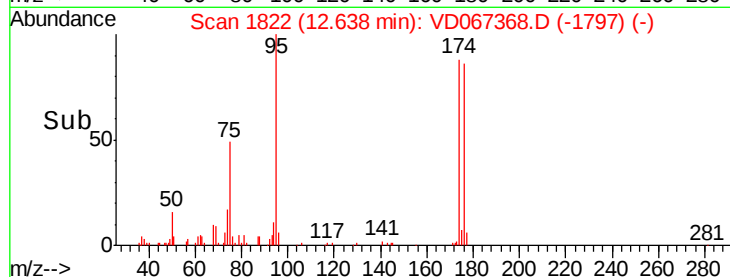
5000

0

12.55 12.60 12.65 12.70

12.64

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 143.401 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD067368.D

Acq: 22 Oct 2020 17:56

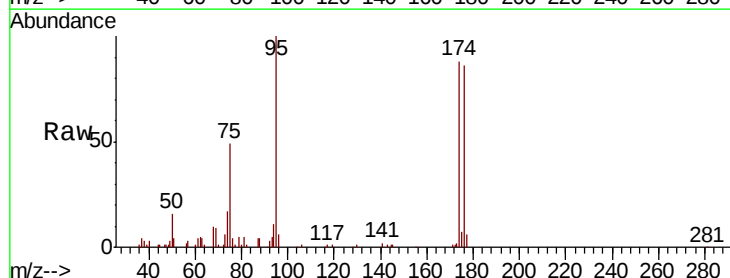
Tgt Ion: 75 Resp: 36518

Ion Ratio Lower Upper

75 100

53 0.0 78.5 117.7#

89 0.0 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

30000

25000

20000

15000

10000

5000

0

12.55 12.60 12.65 12.70

12.64

Time-->

