

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD100820\  
 Data File : VD067193.D  
 Acq On : 08 Oct 2020 14:36  
 Operator : VA/SY  
 Sample : L4313-04  
 Misc : 7.34G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TR-3

Quant Time: Oct 09 03:04:24 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D100120S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 01 15:19:17 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 377854   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 606589   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 562136   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 267163   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 179276   | 49.26 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.52% |      |
| 35) Dibromofluoromethane  | 7.91   | 113 | 188293   | 47.41 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.82% |      |
| 50) Toluene-d8            | 10.34  | 98  | 701055   | 48.45 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.90% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 233716   | 47.58 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.16% |      |

## Target Compounds

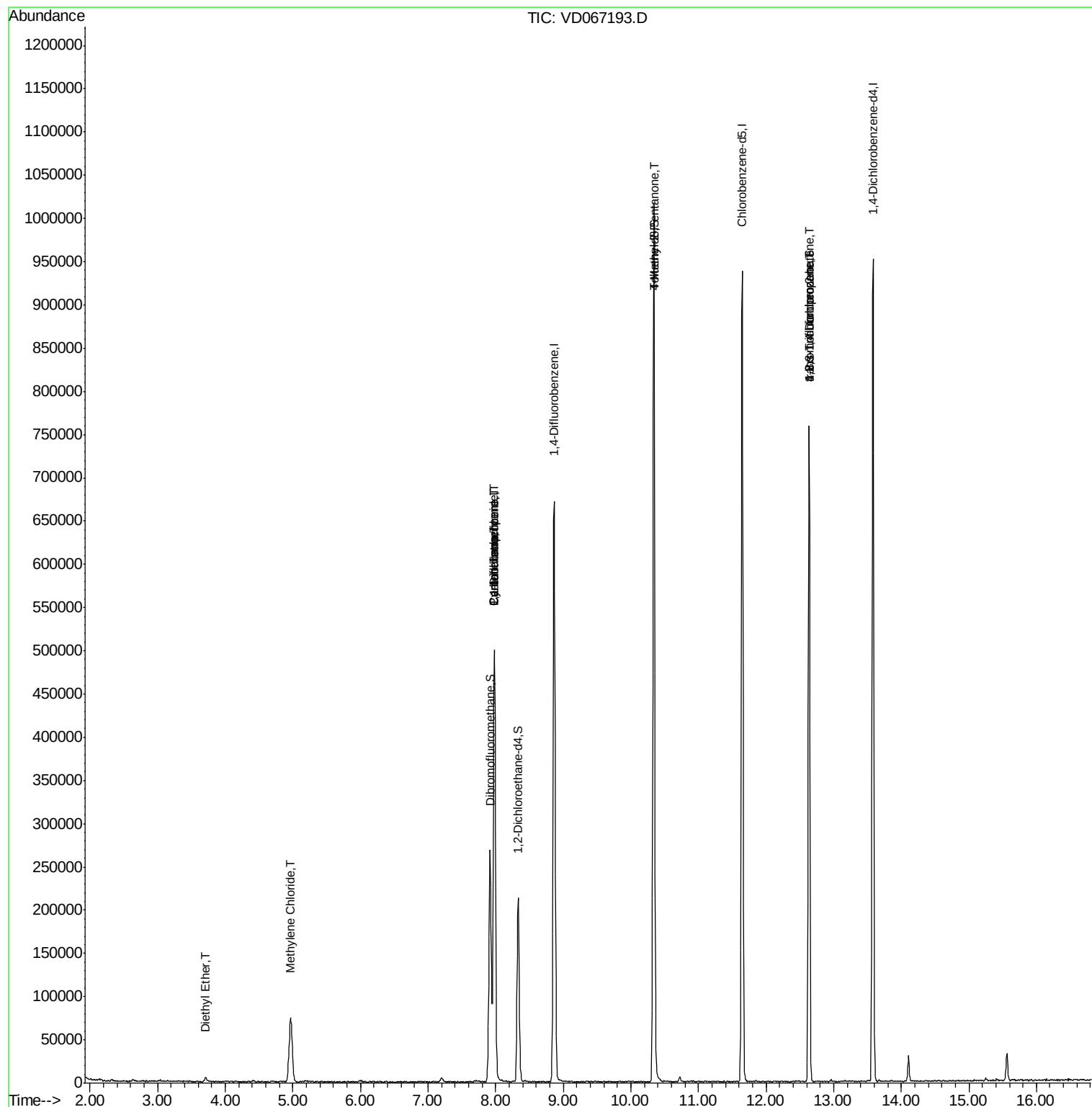
|                                |       |     |        |           |        | Qvalue |
|--------------------------------|-------|-----|--------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85  | 247    | Below Cal | #      | 59     |
| 5) Bromomethane                | 2.79  | 94  | 153    | Below Cal | #      | 3      |
| 8) Diethyl Ether               | 3.70  | 74  | 2432   | 1.463     | ug/l   | 87     |
| 11) Tert butyl alcohol         | 5.23  | 59  | 991    | Below Cal | #      | 72     |
| 20) Methylene Chloride         | 4.97  | 84  | 65571  | 10.950    | ug/l   | 90     |
| 26) 2,2-Dichloropropane        | 7.19  | 77  | 337    | Below Cal | #      | 53     |
| 31) Cyclohexane                | 7.97  | 56  | 6983   | 1.278     | ug/l # | 20     |
| 36) 1,1-Dichloropropene        | 7.98  | 75  | 26809  | 4.742     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.98  | 117 | 38596  | 6.309     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 10.34 | 43  | 3178   | 1.768     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75  | 121882 | 52.376    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75  | 121882 | 130.579   | ug/l # | 12     |

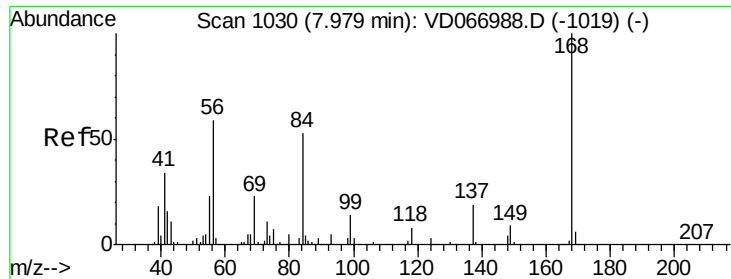
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_D  
ClientSampleId :  
TR-3

Quant Time: Oct 09 03:04:24 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D100120S.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 01 15:19:17 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

Instrument :

MSVOA\_D

ClientSampleId :

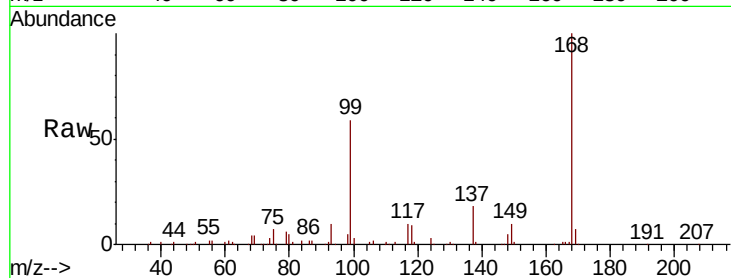
TR-3

Tot Ion:168 Resp: 377854

Ion Ratio Lower Upper

168 100

99 58.5 44.1 66.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

150000

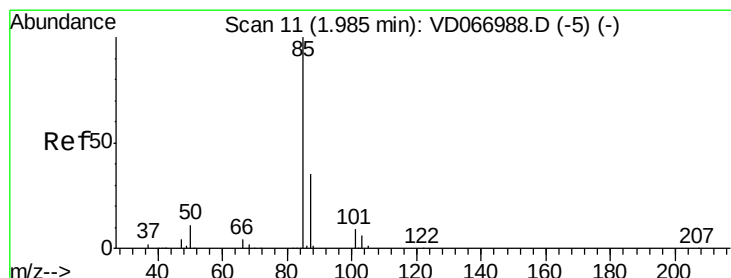
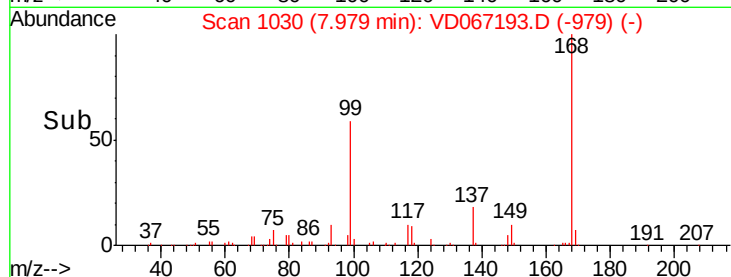
100000

50000

0

Time-->

7.90 8.00 8.10



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 11

Delta R.T. 0.00 min

Lab File: VD067193.D

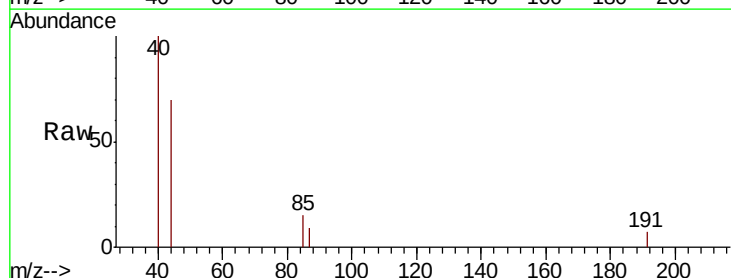
Acq: 08 Oct 2020 14:36

Tgt Ion: 85 Resp: 247

Ion Ratio Lower Upper

85 100

87 58.3 17.3 52.0#



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.99

400

300

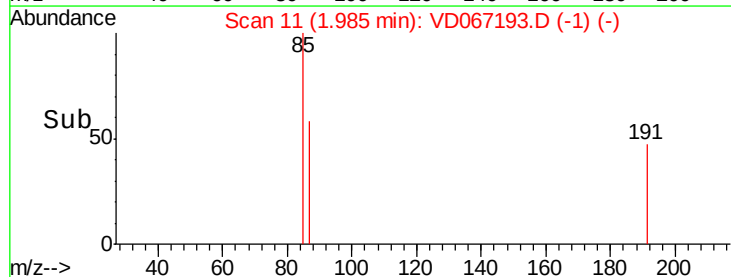
200

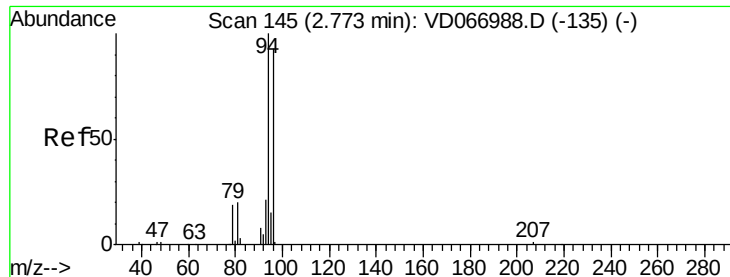
100

0

Time-->

1.96 1.98 2.00





#5

Bromomethane

Concen: Below Cal

RT: 2.79 min Scan# 147

Delta R.T. 0.01 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

Instrument :

MSVOA\_D

ClientSampled :

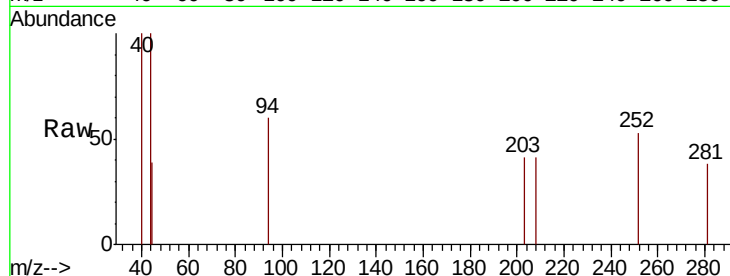
TR-3

Tot Ion: 94 Resp: 153

Ion Ratio Lower Upper

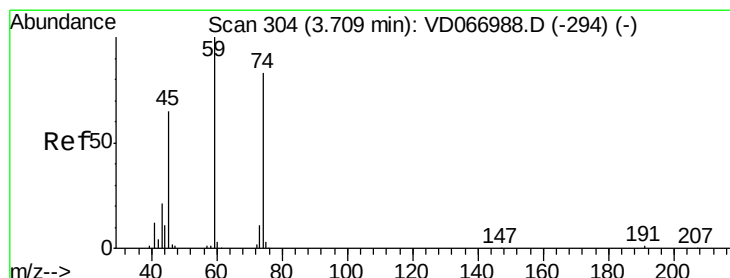
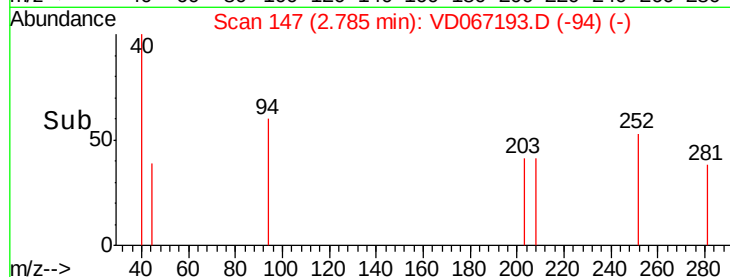
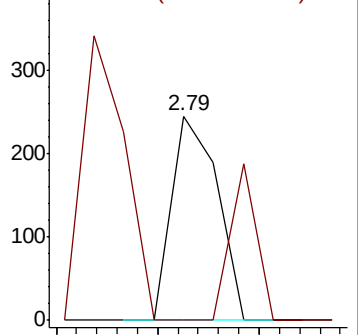
94 100

96 0.0 74.6 112.0#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC



#8

Diethyl Ether

Concen: 1.463 ug/l

RT: 3.70 min Scan# 303

Delta R.T. -0.01 min

Lab File: VD067193.D

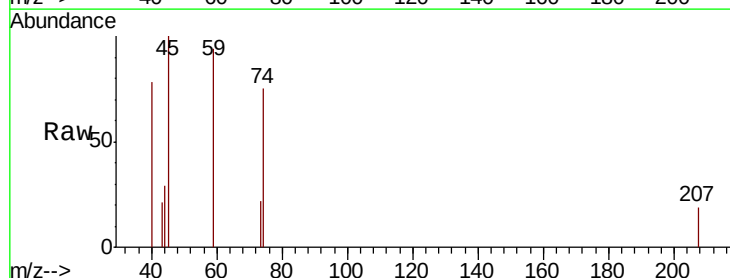
Acq: 08 Oct 2020 14:36

Tgt Ion: 74 Resp: 2432

Ion Ratio Lower Upper

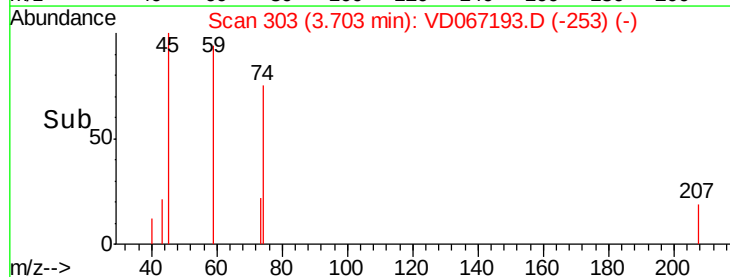
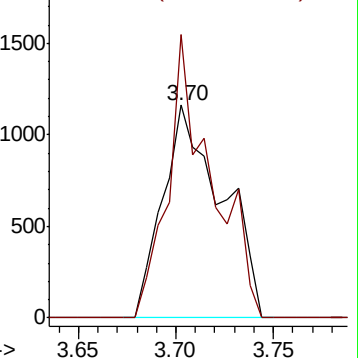
74 100

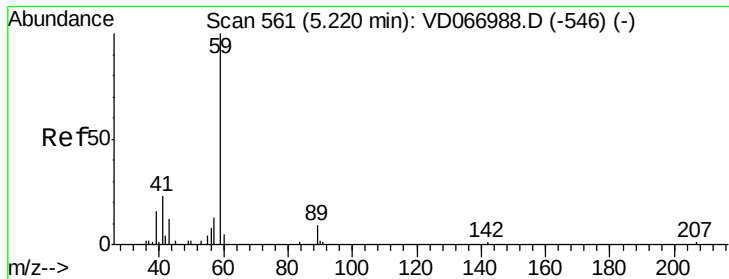
45 98.4 43.1 129.3



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.00 (44.70 to 45.70): VDC



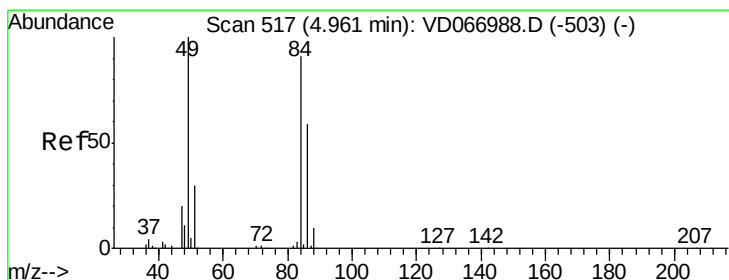
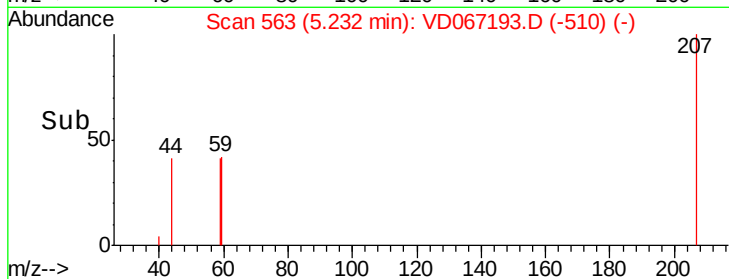
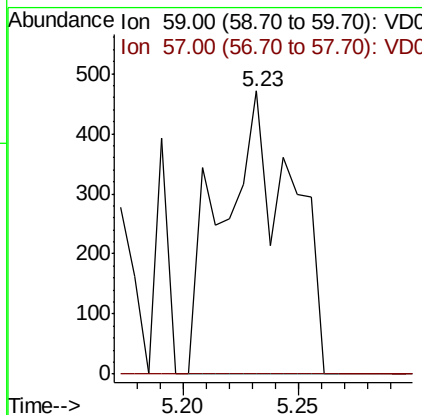
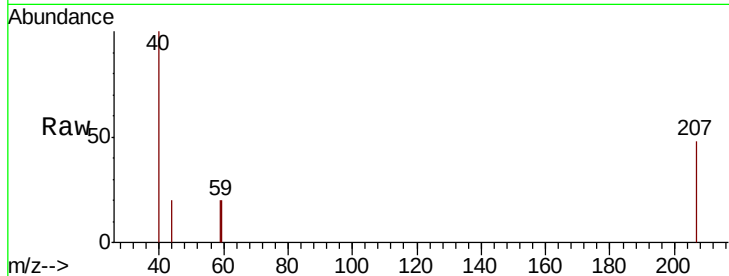


#11

Tert butyl alcohol  
 Concen: Below Cal  
 RT: 5.23 min Scan# 563  
 Delta R.T. 0.01 min  
 Lab File: VD067193.D  
 Acq: 08 Oct 2020 14:36

Instrument :  
 MSVOA\_D  
 ClientSampled :  
 TR-3

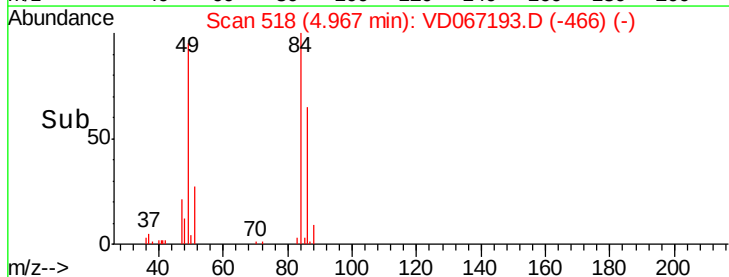
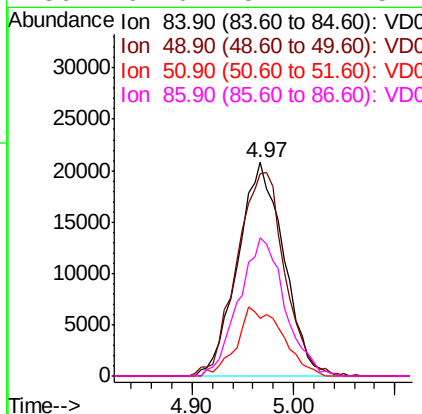
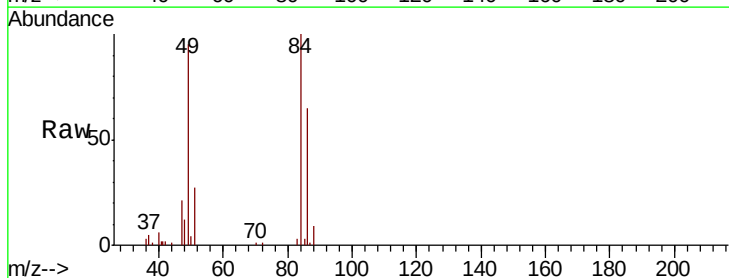
Tot Ion: 59 Resp: 991  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.2 12.4#

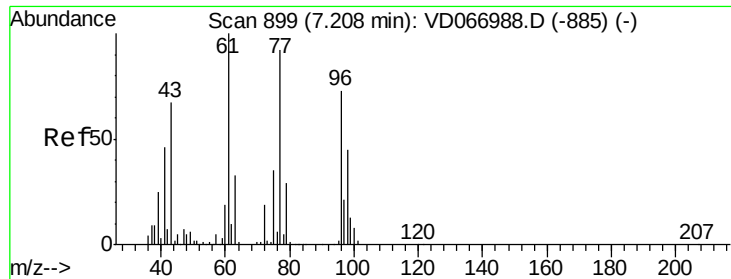


#20

Methylene Chloride  
 Concen: 10.950 ug/l  
 RT: 4.97 min Scan# 518  
 Delta R.T. 0.01 min  
 Lab File: VD067193.D  
 Acq: 08 Oct 2020 14:36

Tgt Ion: 84 Resp: 65571  
 Ion Ratio Lower Upper  
 84 100  
 49 94.9 88.2 132.2  
 51 27.1 26.6 39.8  
 86 64.6 52.1 78.1

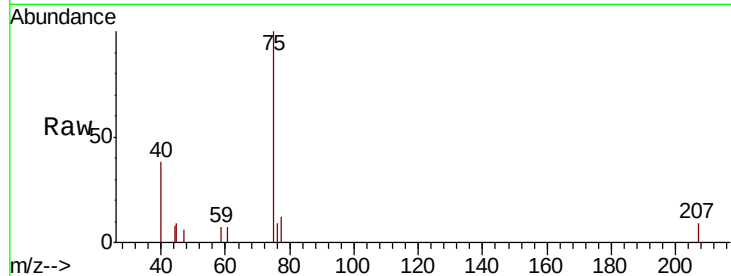




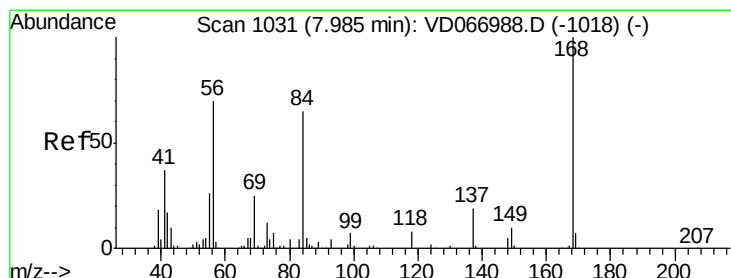
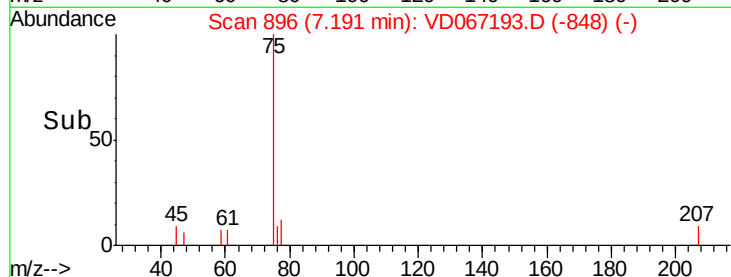
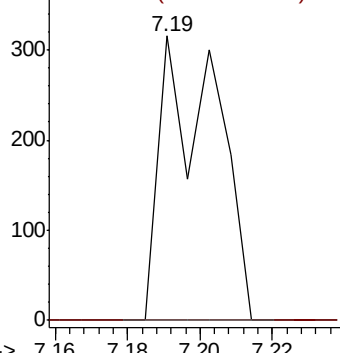
#26  
2,2-Dichloropropane  
Concen: Below Cal  
RT: 7.19 min Scan# 896  
Delta R.T. -0.02 min  
Lab File: VD067193.D  
Acq: 08 Oct 2020 14:36

Instrument :  
MSVOA\_D  
ClientSampleId :  
TR-3

Tot Ion: 77 Resp: 337  
Ion Ratio Lower Upper  
77 100  
97 0.0 11.4 34.2#

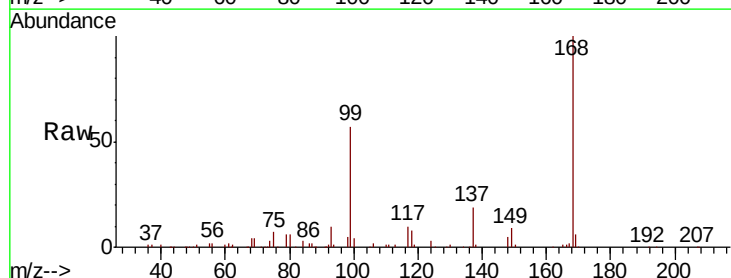


Abundance Ion 76.90 (76.60 to 77.60): VDC  
Ion 96.90 (96.60 to 97.60): VDC

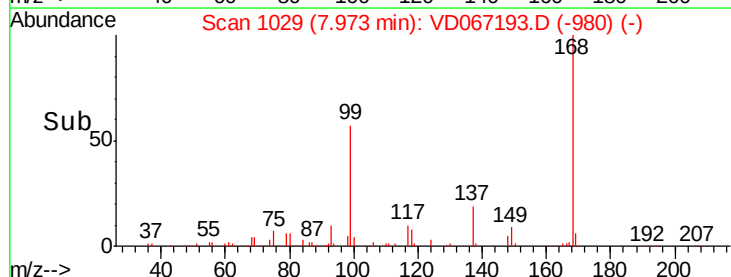
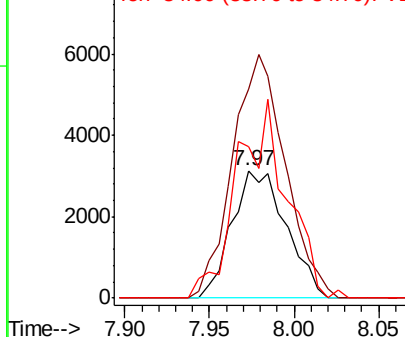


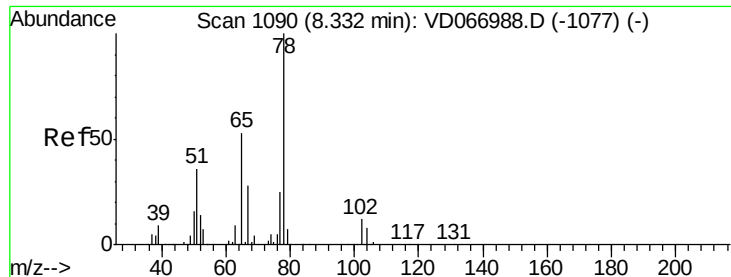
#31  
Cyclohexane  
Concen: 1.278 ug/l  
RT: 7.97 min Scan# 1029  
Delta R.T. -0.01 min  
Lab File: VD067193.D  
Acq: 08 Oct 2020 14:36

Tgt Ion: 56 Resp: 6983  
Ion Ratio Lower Upper  
56 100  
69 163.2 29.0 43.6#  
84 118.9 74.2 111.2#



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

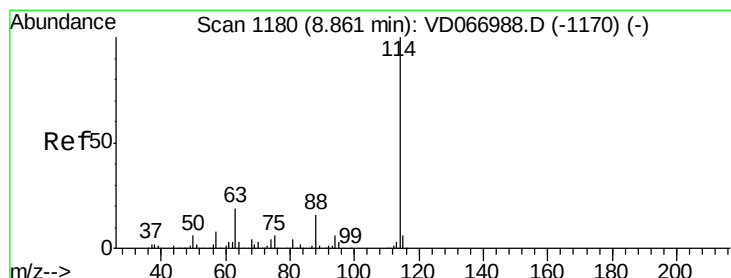
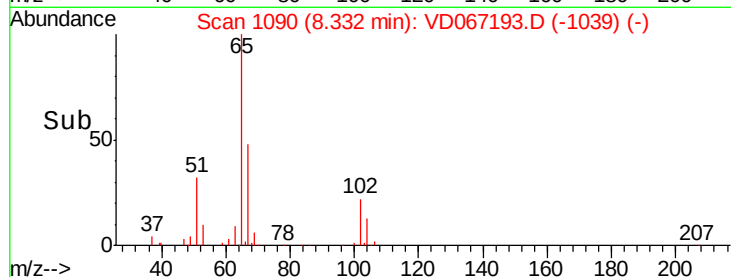
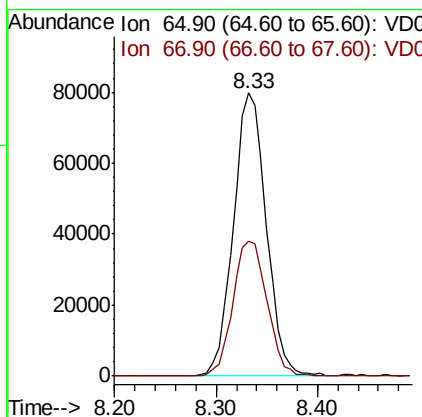
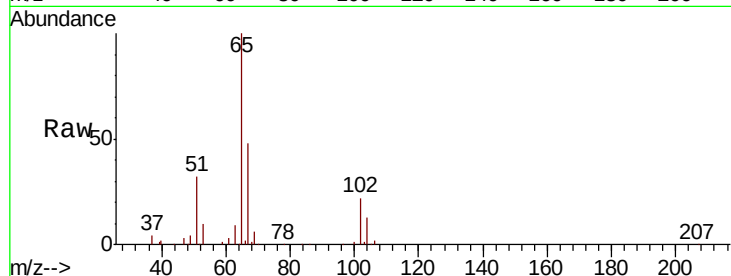




#33  
 1,2-Dichloroethane-d4  
 Concen: 49.259 ug/l  
 RT: 8.33 min Scan# 1090  
 Delta R.T. 0.00 min  
 Lab File: VD067193.D  
 Acq: 08 Oct 2020 14:36

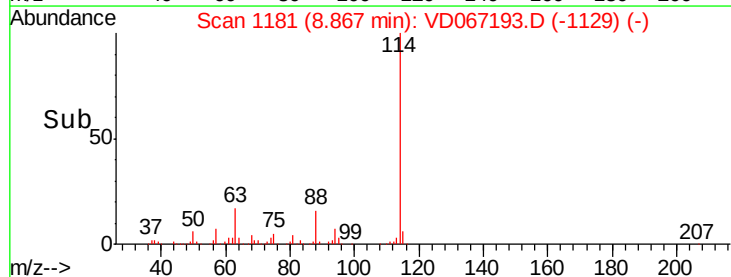
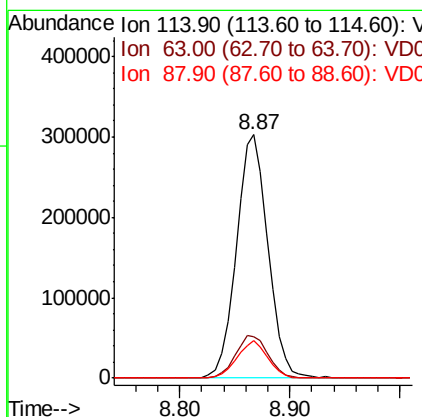
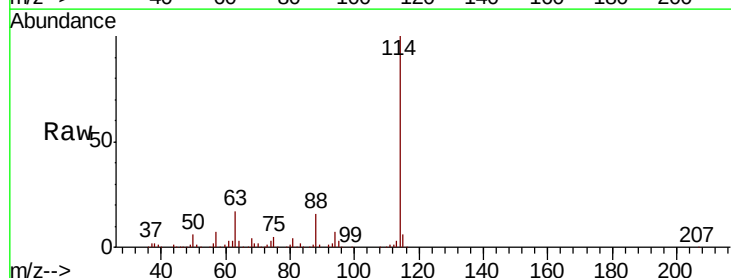
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 TR-3

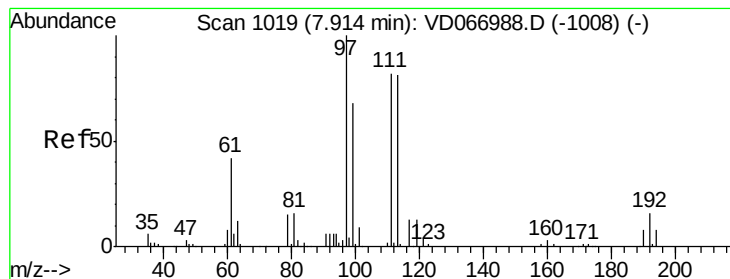
Tot Ion: 65 Resp: 179276  
 Ion Ratio Lower Upper  
 65 100  
 67 49.5 0.0 106.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. 0.01 min  
 Lab File: VD067193.D  
 Acq: 08 Oct 2020 14:36

Tgt Ion: 114 Resp: 606589  
 Ion Ratio Lower Upper  
 114 100  
 63 17.0 0.0 38.4  
 88 15.7 0.0 31.2





#35

Dibromofluoromethane

Concen: 47.414 ug/l

RT: 7.91 min Scan# 1019

Delta R.T. 0.00 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

Instrument :

MSVOA\_D

ClientSampleID :

TR-3

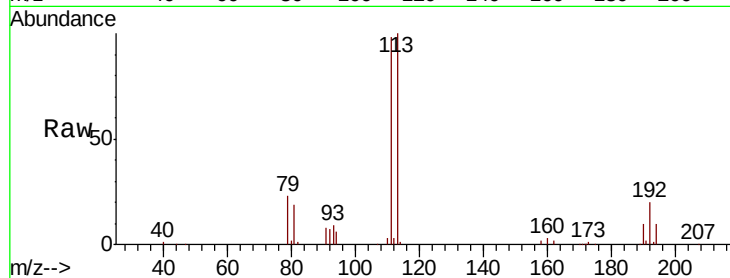
Tot Ion:113 Resp: 188293

Ion Ratio Lower Upper

113 100

111 102.8 83.0 124.4

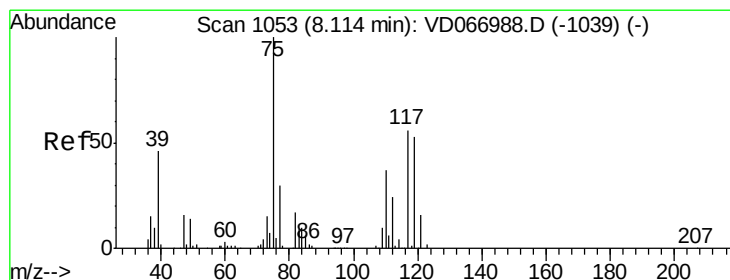
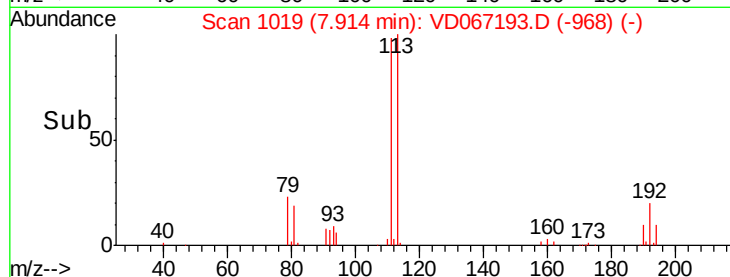
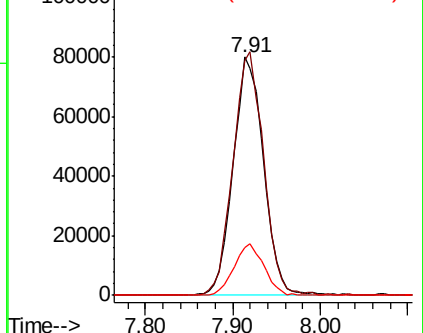
192 21.2 15.5 23.3



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: 4.742 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.14 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

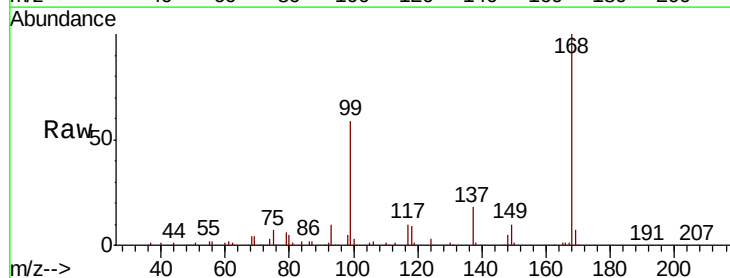
Tgt Ion: 75 Resp: 26809

Ion Ratio Lower Upper

75 100

110 10.6 18.4 55.0#

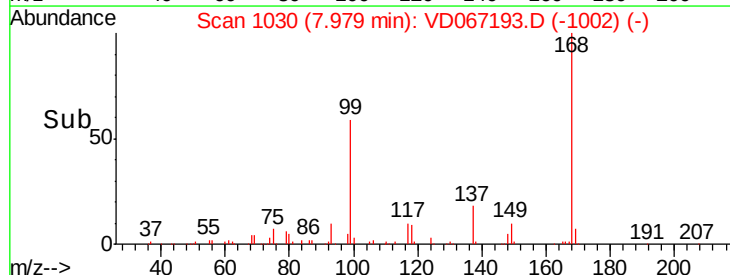
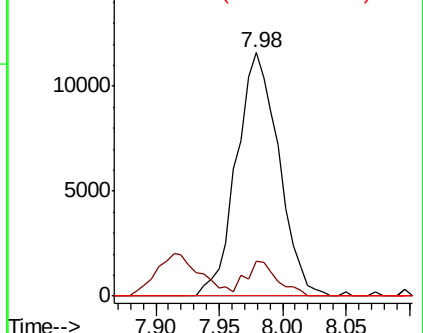
77 0.0 24.8 37.2#



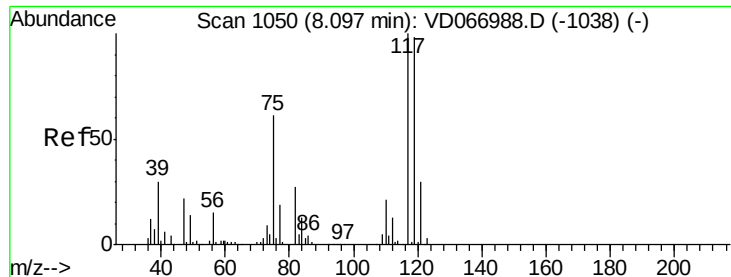
Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V







#38

Carbon Tetrachloride

Concen: 6.309 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.12 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

Instrument :

MSVOA\_D

ClientSampleId :

TR-3

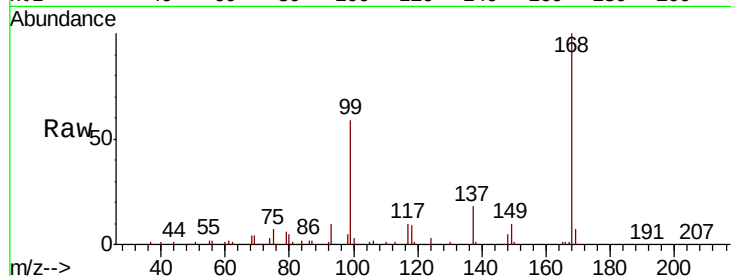
Tot Ion:117 Resp: 38596

Ion Ratio Lower Upper

117 100

119 6.9 78.7 118.1#

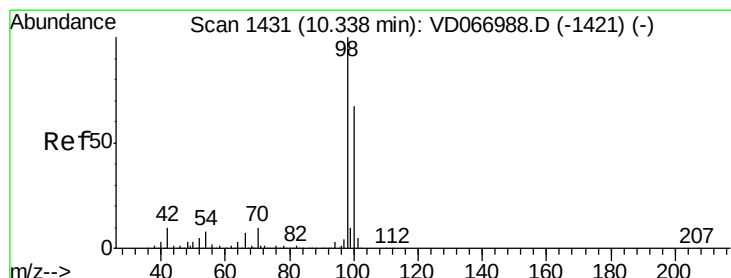
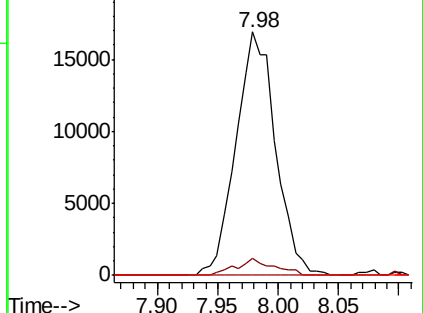
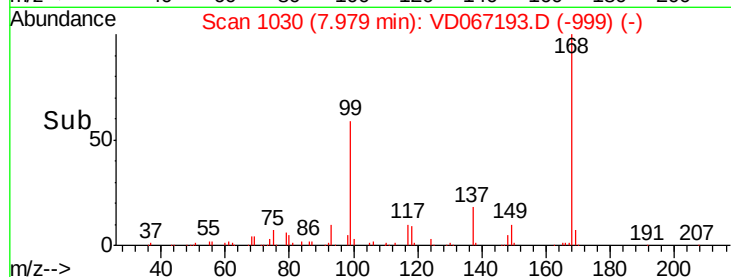
121 0.0 24.2 36.2#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#50

Toluene-d8

Concen: 48.447 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.01 min

Lab File: VD067193.D

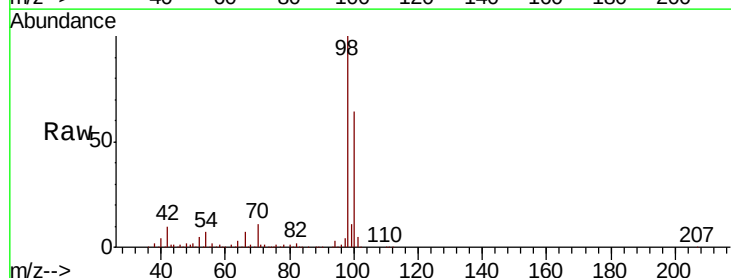
Acq: 08 Oct 2020 14:36

Tgt Ion: 98 Resp: 701055

Ion Ratio Lower Upper

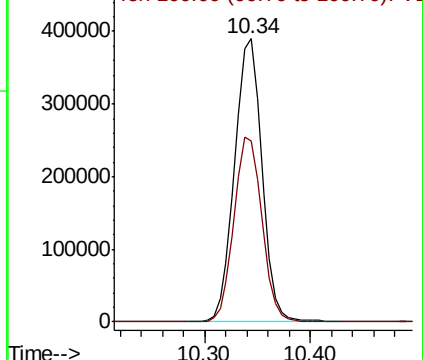
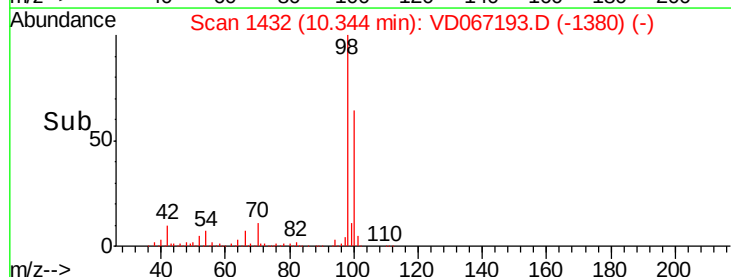
98 100

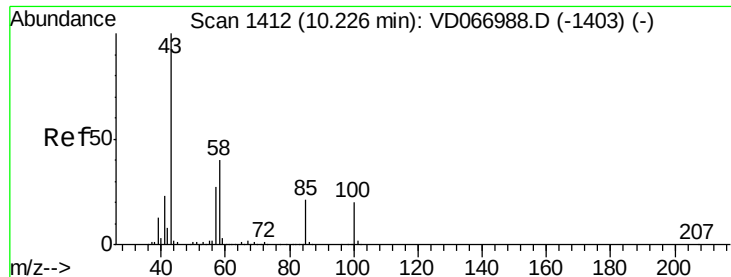
100 66.8 52.8 79.2



Abundance Ion 98.00 (97.70 to 98.70): V

Ion 100.00 (99.70 to 100.70): V

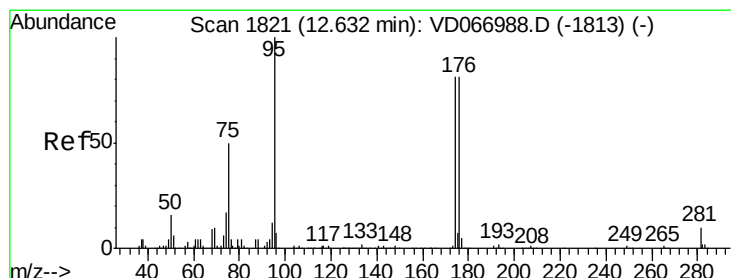
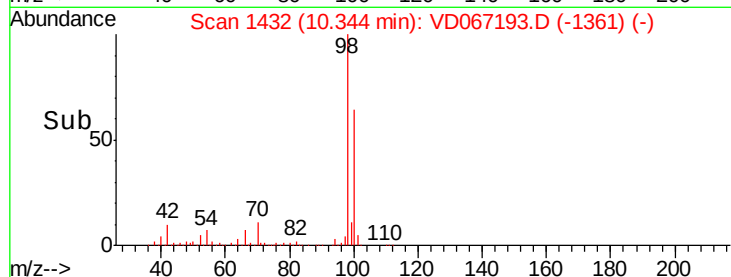
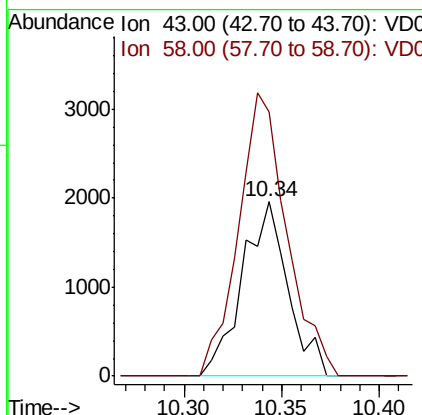
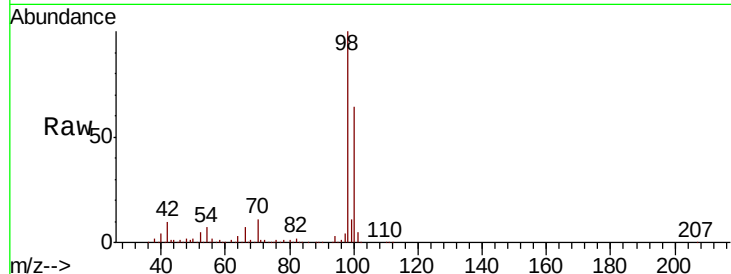




#51  
4-Methyl-2-Pentanone  
Concen: 1.768 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.12 min  
Lab File: VD067193.D  
Acq: 08 Oct 2020 14:36

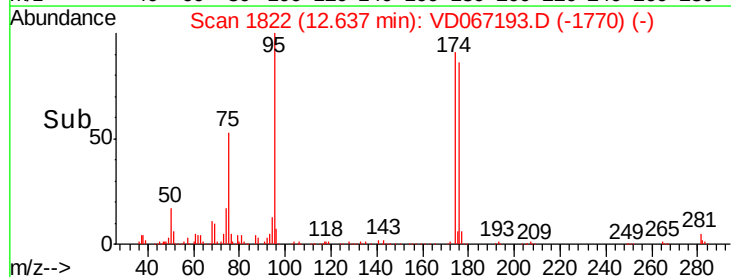
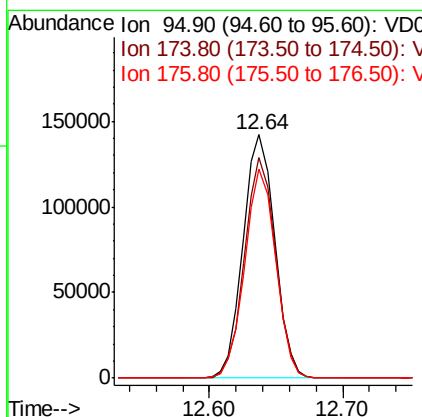
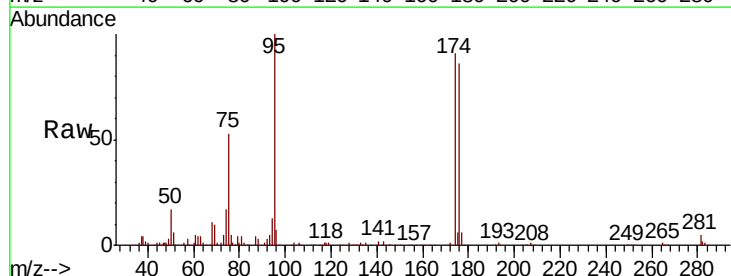
Instrument :  
MSVOA\_D  
ClientSampled :  
TR-3

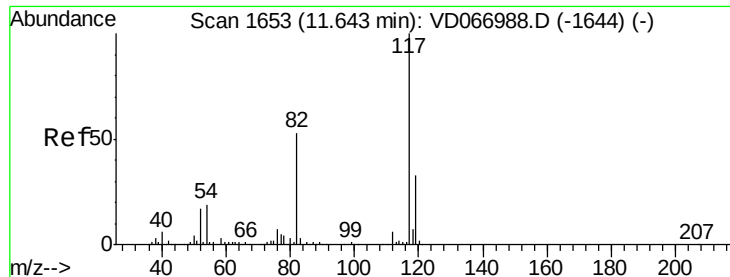
Tot Ion: 43 Resp: 3178  
Ion Ratio Lower Upper  
43 100  
58 172.1 33.8 50.8#



#62  
4-Bromofluorobenzene  
Concen: 47.576 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.01 min  
Lab File: VD067193.D  
Acq: 08 Oct 2020 14:36

Tgt Ion: 95 Resp: 233716  
Ion Ratio Lower Upper  
95 100  
174 88.5 0.0 167.6  
176 83.7 0.0 162.4

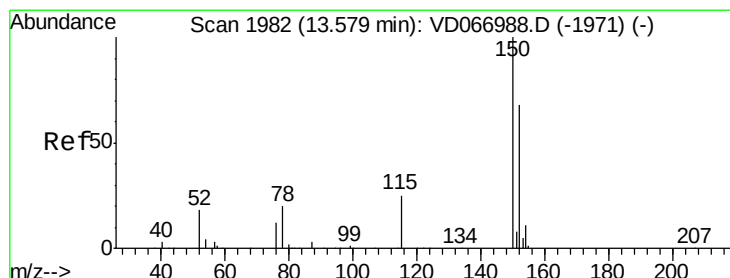
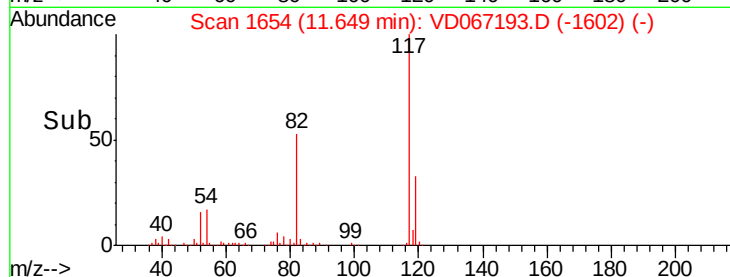
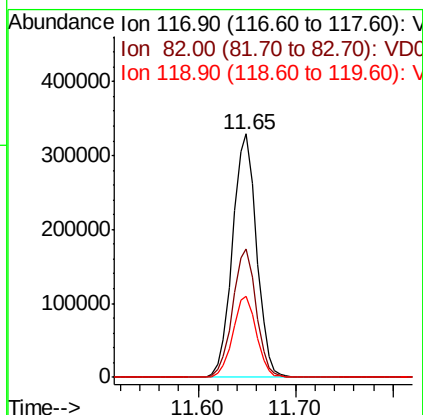
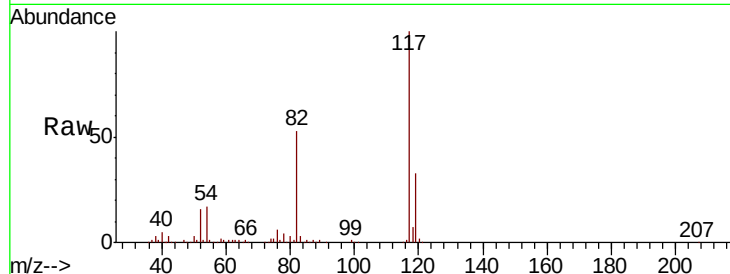




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.01 min  
Lab File: VD067193.D  
Acq: 08 Oct 2020 14:36

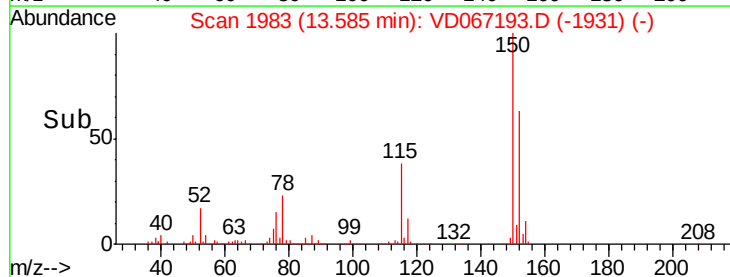
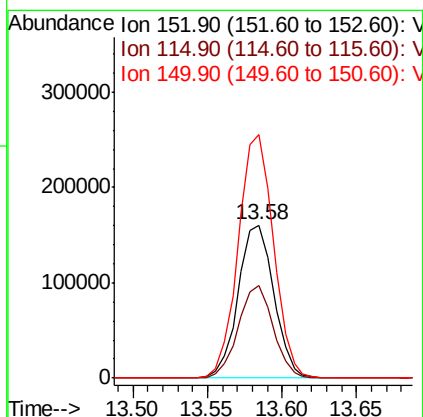
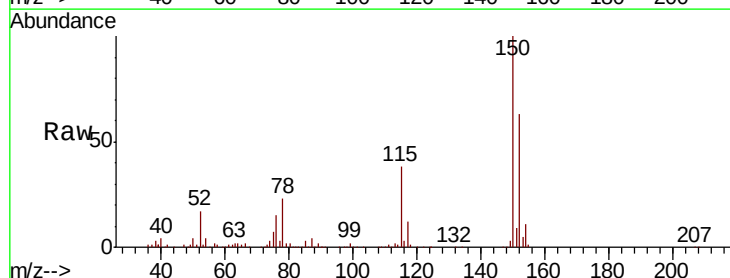
Instrument :  
MSVOA\_D  
ClientSampleId :  
TR-3

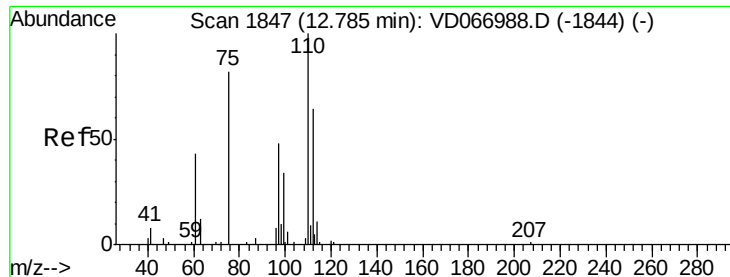
Tot Ion:117 Resp: 562136  
Ion Ratio Lower Upper  
117 100  
82 52.5 42.6 63.8  
119 33.2 26.3 39.5



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1983  
Delta R.T. 0.01 min  
Lab File: VD067193.D  
Acq: 08 Oct 2020 14:36

Tgt Ion:152 Resp: 267163  
Ion Ratio Lower Upper  
152 100  
115 59.2 29.6 88.8  
150 156.7 0.0 344.8





#76

1,2,3-Trichloropropane

Concen: 52.376 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

Instrument :

MSVOA\_D

ClientSampleId :

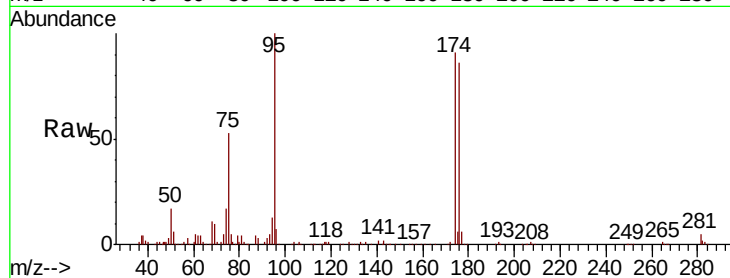
TR-3

Tot Ion: 75 Resp: 121882

Ion Ratio Lower Upper

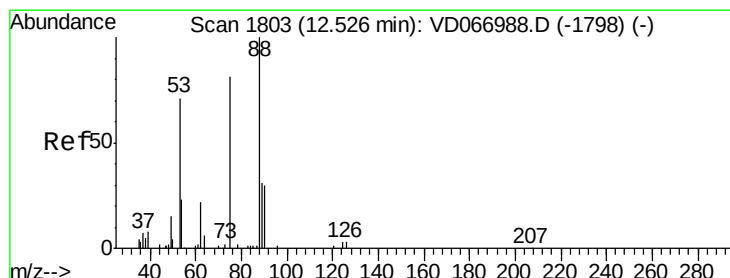
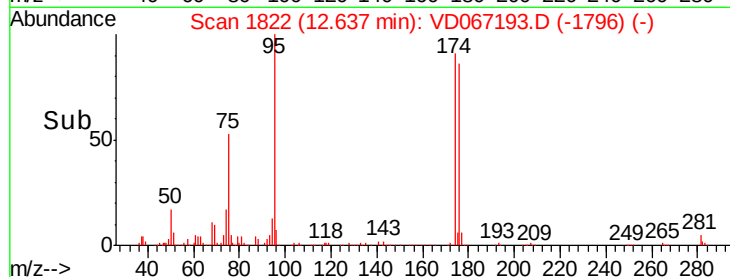
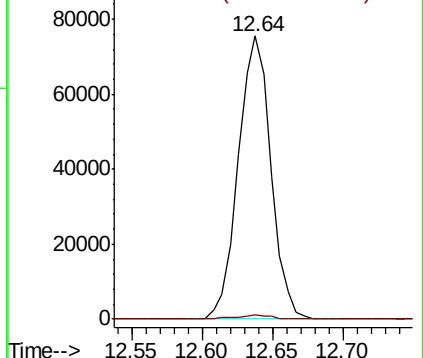
75 100

77 1.4 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: 130.579 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD067193.D

Acq: 08 Oct 2020 14:36

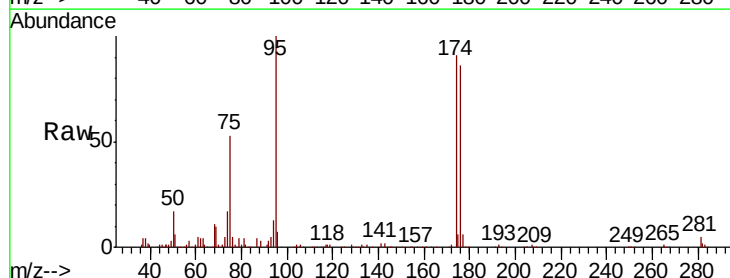
Tgt Ion: 75 Resp: 121882

Ion Ratio Lower Upper

75 100

53 0.1 73.8 110.6#

89 0.3 38.9 58.3#



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

