

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD111620\  
 Data File : VD067641.D  
 Acq On : 16 Nov 2020 15:23  
 Operator : VA/SY  
 Sample : L4687-05  
 Misc : 5.31G/5.01ml/MSVOA D/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SS-4

Quant Time: Nov 17 01:08:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110320S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 04 00:56:28 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 239152   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 387060   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 401056   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 200678   | 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   | 113025   | 54.05 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 108.10% |          |
| 35) Dibromofluoromethane    | 7.91  | 113  | 120363   | 51.61 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 103.22% |          |
| 50) Toluene-d8              | 10.34 | 98   | 451216   | 55.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 110.12% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 172639   | 61.02 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 122.04% |          |

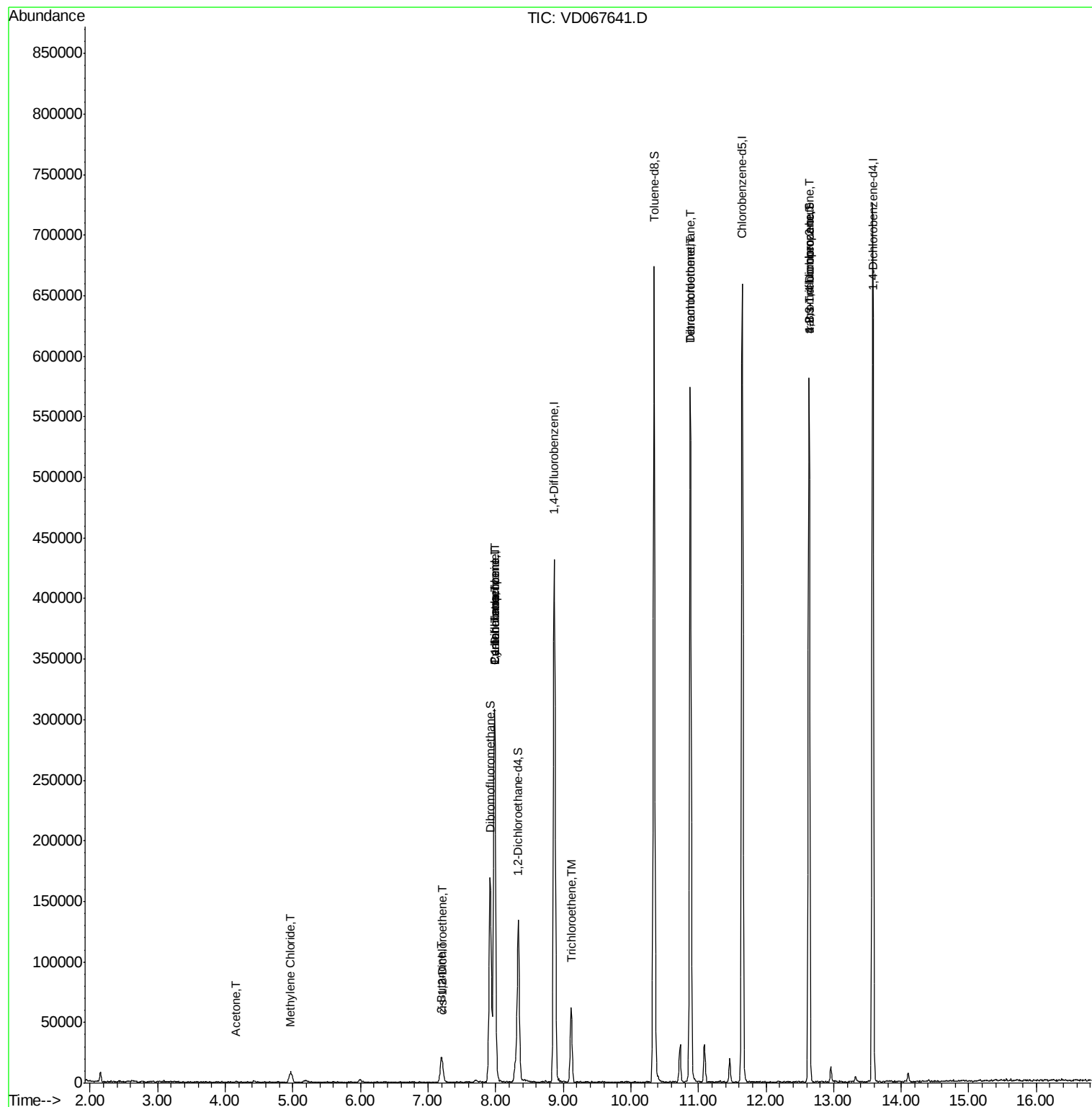
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85   | 175      | Below Cal | #      | 44     |
| 11) Tert butyl alcohol         | 5.23  | 59   | 462      | Below Cal | #      | 79     |
| 16) Acetone                    | 4.16  | 43   | 1082     | 3.458     | ug/l   | 99     |
| 20) Methylene Chloride         | 4.97  | 84   | 7699     | 3.483     | ug/l # | 90     |
| 25) 2-Butanone                 | 7.19  | 43   | 463      | 1.385     | ug/l # | 42     |
| 27) cis-1,2-Dichloroethene     | 7.21  | 96   | 4735     | 1.962     | ug/l   | 92     |
| 31) Cyclohexane                | 7.98  | 56   | 4693     | 1.547     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 16387    | 4.946     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 25215    | 5.858     | ug/l # | 15     |
| 44) Trichloroethene            | 9.12  | 130  | 23946    | 8.115     | ug/l   | 94     |
| 60) Dibromochloromethane       | 10.88 | 129  | 122520   | 50.738    | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.88 | 164  | 137281   | 46.220    | ug/l   | 98     |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 94004    | 77.651    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 94004    | 157.651   | ug/l # | 10     |

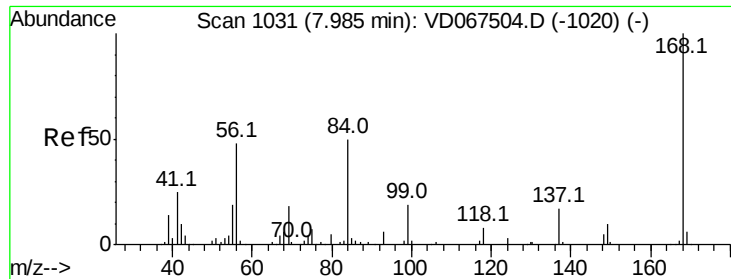
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD111620\  
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Instrument :  
MSVOA\_D  
ClientSampleId :  
SS-4

Quant Time: Nov 17 01:08:18 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D110320S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 04 00:56:28 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: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampleId :

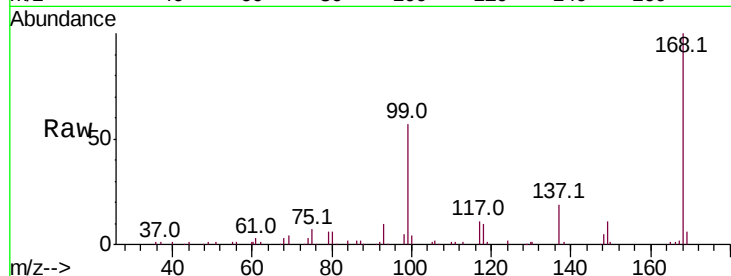
SS-4

Tot Ion:168 Resp: 239152

Ion Ratio Lower Upper

168 100

99 57.2 45.0 67.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

100000

80000

60000

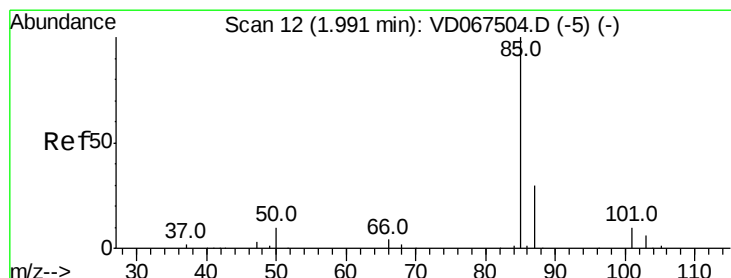
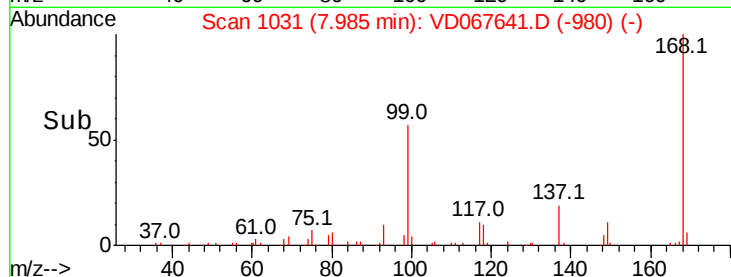
40000

20000

0

Time-->

7.90 8.00 8.10



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 11

Delta R.T. -0.01 min

Lab File: VD067641.D

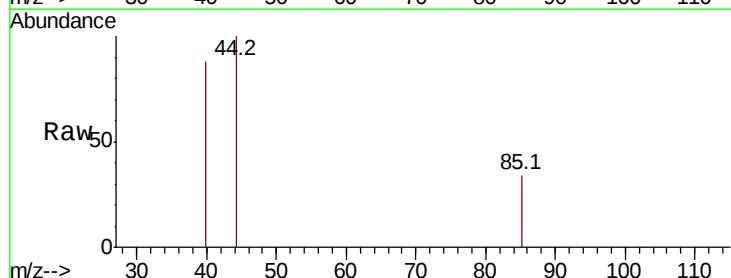
Acq: 16 Nov 2020 15:23

Tgt Ion: 85 Resp: 175

Ion Ratio Lower Upper

85 100

87 0.0 15.3 45.8#



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.99

300

250

200

150

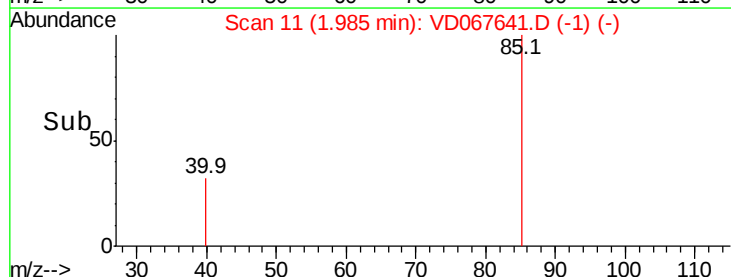
100

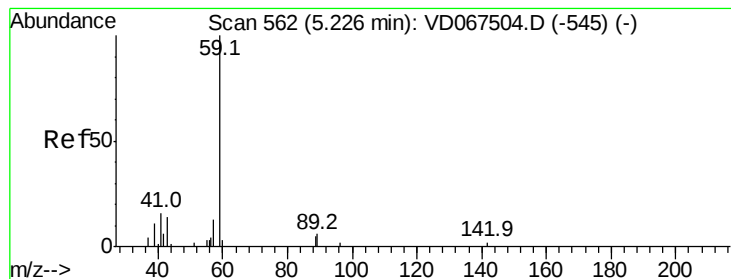
50

0

Time-->

1.96 1.98 2.00



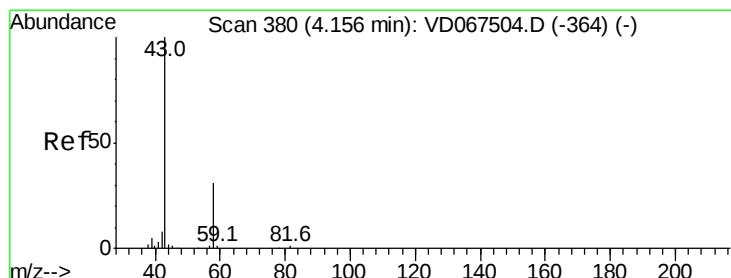
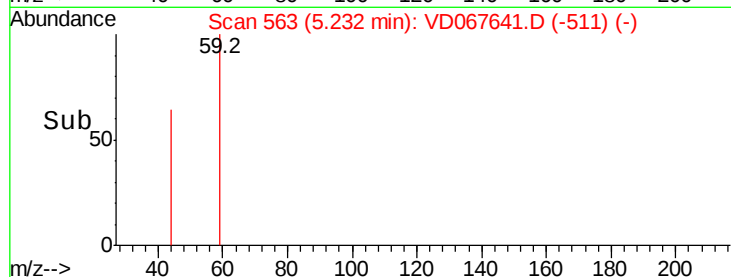
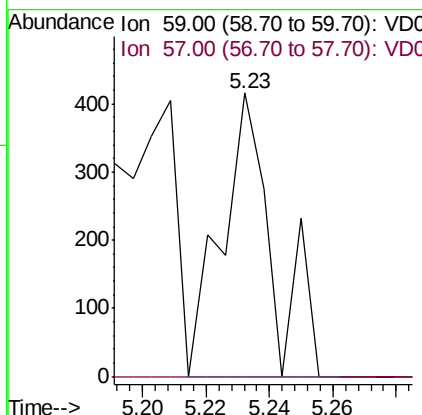
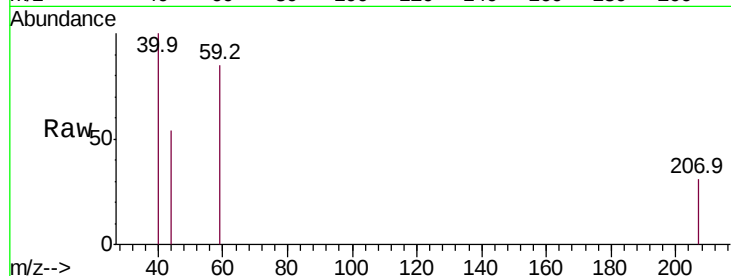


#11

Tert butyl alcohol  
 Concen: Below Cal  
 RT: 5.23 min Scan# 563  
 Delta R.T. 0.01 min  
 Lab File: VD067641.D  
 Acq: 16 Nov 2020 15:23

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SS-4

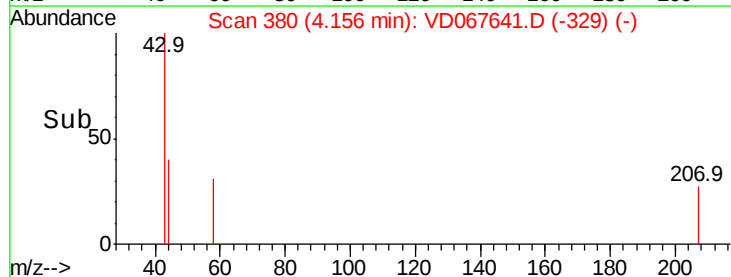
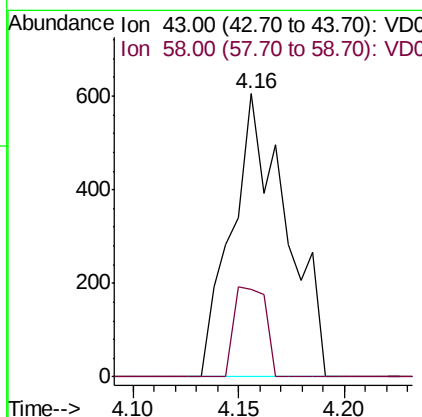
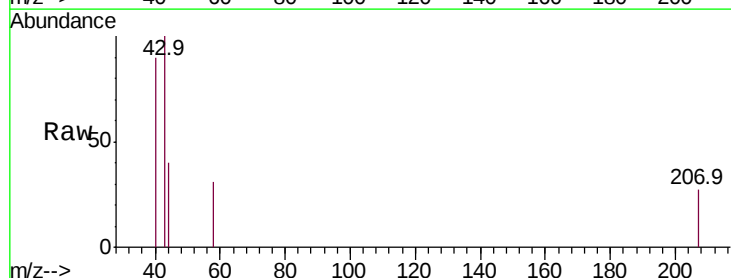
Tot Ion: 59 Resp: 462  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 5.9 8.9#

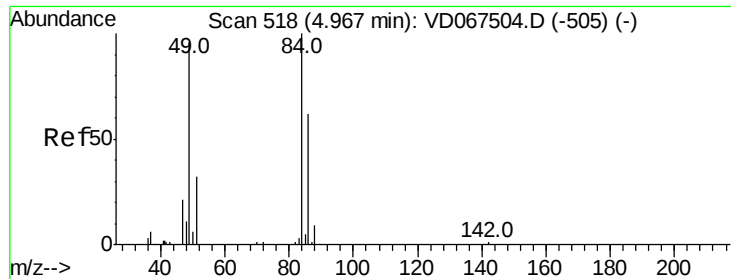


#16

Acetone  
 Concen: 3.458 ug/l  
 RT: 4.16 min Scan# 380  
 Delta R.T. 0.00 min  
 Lab File: VD067641.D  
 Acq: 16 Nov 2020 15:23

Tgt Ion: 43 Resp: 1082  
 Ion Ratio Lower Upper  
 43 100  
 58 31.1 25.2 37.8

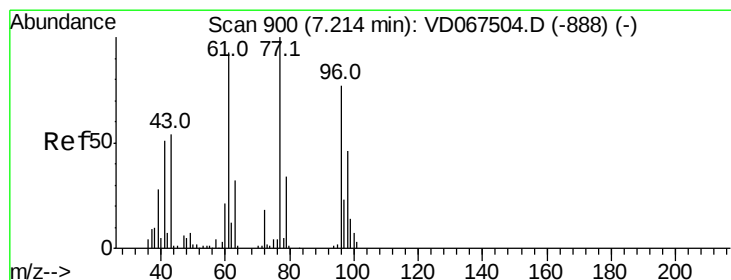
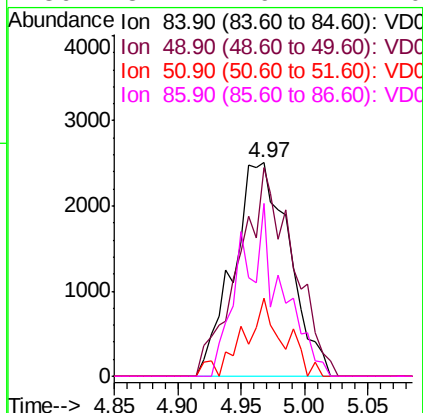
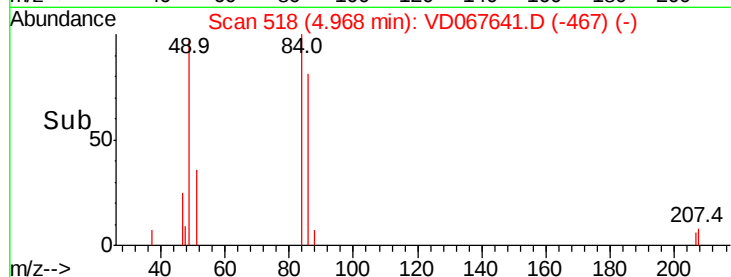
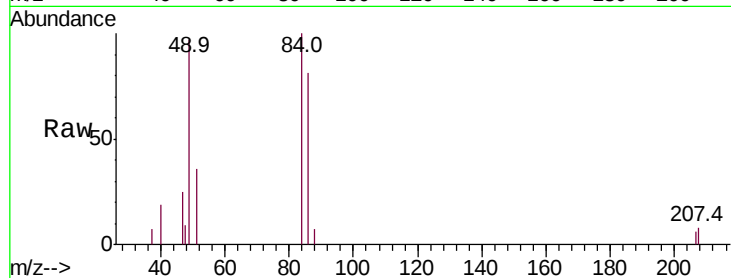




#20  
Methvlene Chloride  
Concen: 3.483 ug/l  
RT: 4.97 min Scan# 518  
Delta R.T. 0.00 min  
Lab File: VD067641.D  
Acq: 16 Nov 2020 15:23

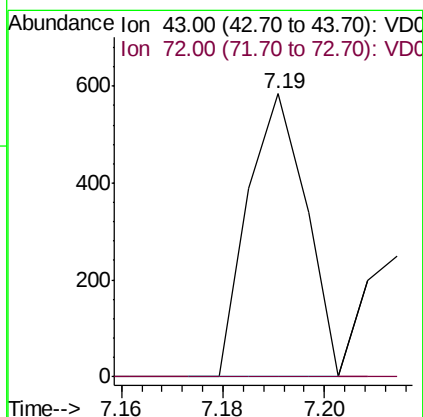
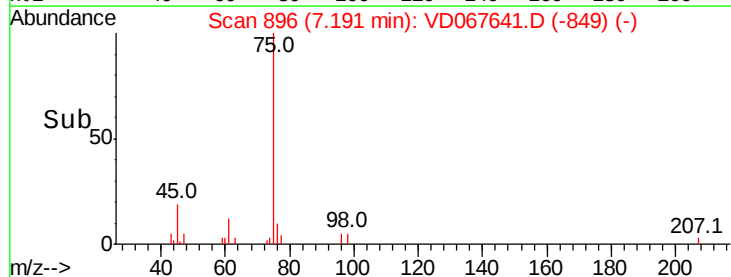
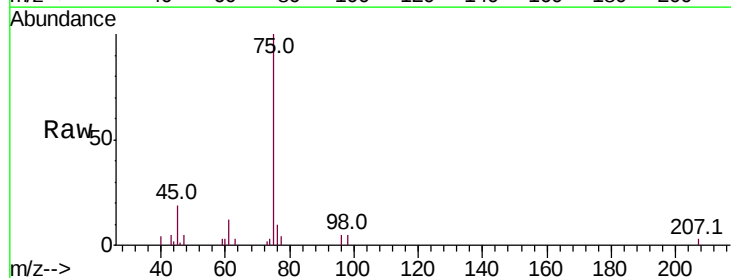
Instrument :  
MSVOA\_D  
ClientSampleId :  
SS-4

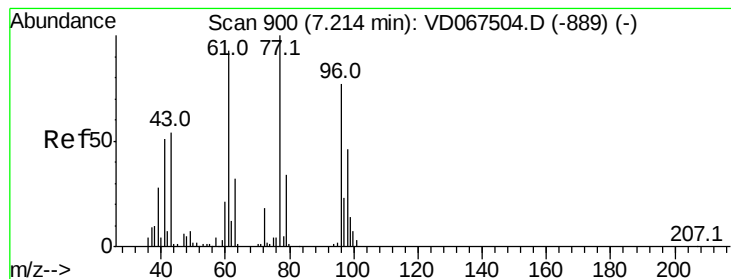
Tot Ion: 84 Resp: 7699  
Ion Ratio Lower Upper  
84 100  
49 97.4 77.0 115.4  
51 36.3 25.4 38.2  
86 81.2 49.4 74.0#



#25  
2-Butanone  
Concen: 1.385 ug/l  
RT: 7.19 min Scan# 896  
Delta R.T. -0.02 min  
Lab File: VD067641.D  
Acq: 16 Nov 2020 15:23

Tgt Ion: 43 Resp: 463  
Ion Ratio Lower Upper  
43 100  
72 0.0 26.4 39.6#





#27

cis-1,2-Dichloroethene

Concen: 1.962 ug/l

RT: 7.21 min Scan# 900

Delta R.T. 0.00 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampled :

SS-4

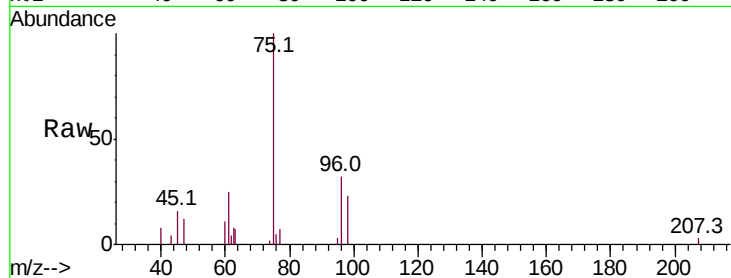
Tot Ion: 96 Resp: 4735

Ion Ratio Lower Upper

96 100

61 115.1 0.0 251.6

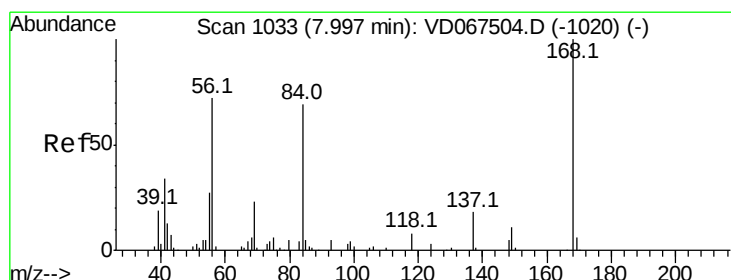
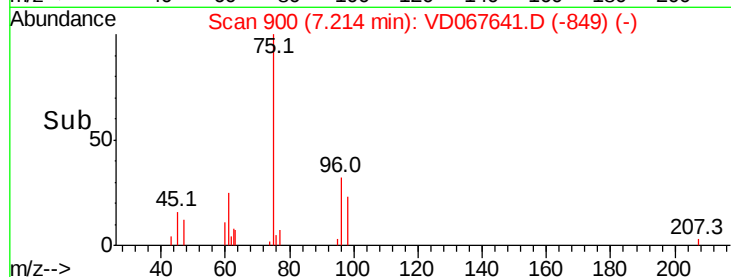
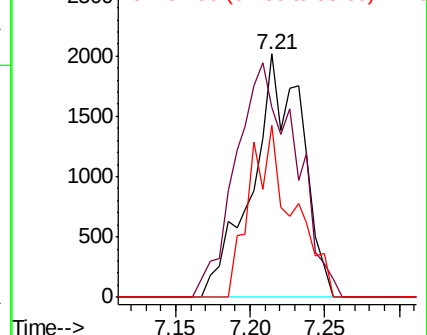
98 60.8 0.0 128.0



Abundance Ion 95.90 (95.60 to 96.60): VDC

Ion 60.90 (60.60 to 61.60): VDC

Ion 97.90 (97.60 to 98.60): VDC



#31

Cyclohexane

Concen: 1.547 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.02 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

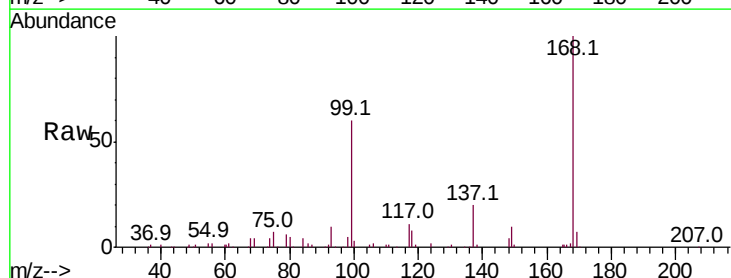
Tgt Ion: 56 Resp: 4693

Ion Ratio Lower Upper

56 100

69 176.6 25.9 38.9#

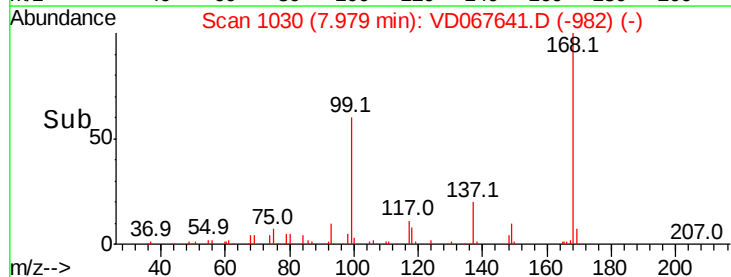
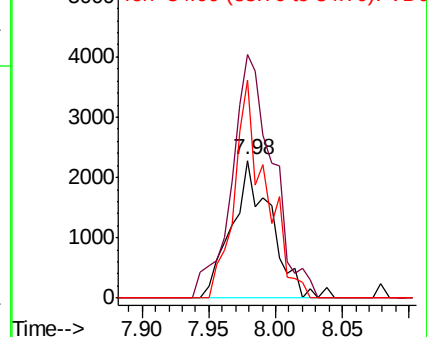
84 158.2 76.2 114.4#

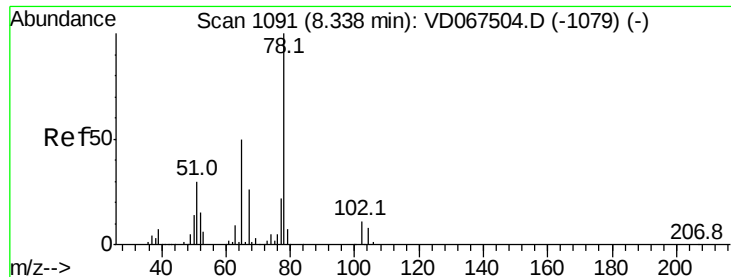


Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.00 (83.70 to 84.70): VDC





#33

1,2-Dichloroethane-d4

Concen: 54.050 ug/l

RT: 8.33 min Scan# 1090

Delta R.T. -0.01 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampleId :

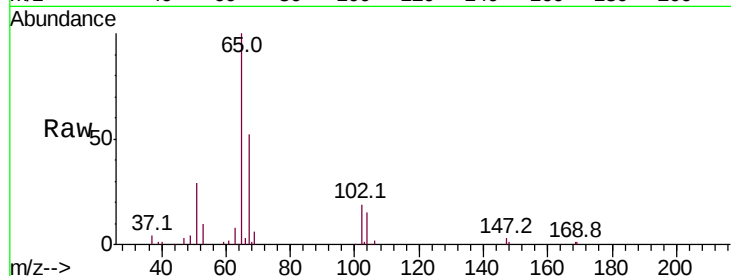
SS-4

Tot Ion: 65 Resp: 113025

Ion Ratio Lower Upper

65 100

67 49.5 0.0 99.4



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC

8.33

60000

50000

40000

30000

20000

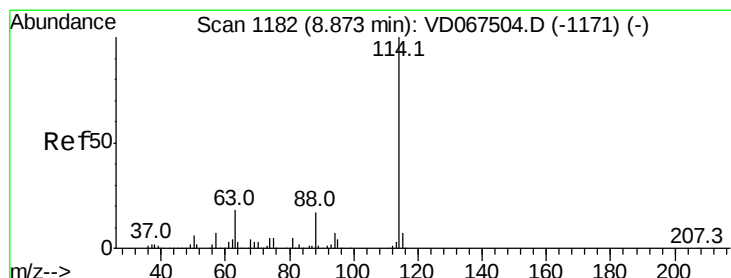
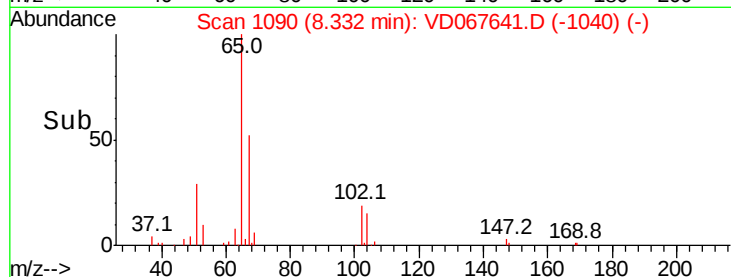
10000

0

8.30

8.40

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

Delta R.T. -0.01 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

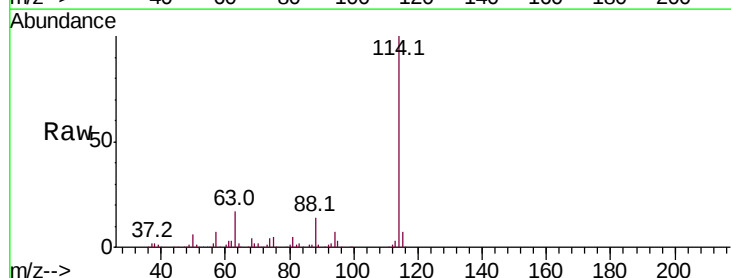
Tgt Ion: 114 Resp: 387060

Ion Ratio Lower Upper

114 100

63 16.7 0.0 35.0

88 14.3 0.0 33.0



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VDC

Ion 87.90 (87.60 to 88.60): VDC

250000

200000

150000

100000

50000

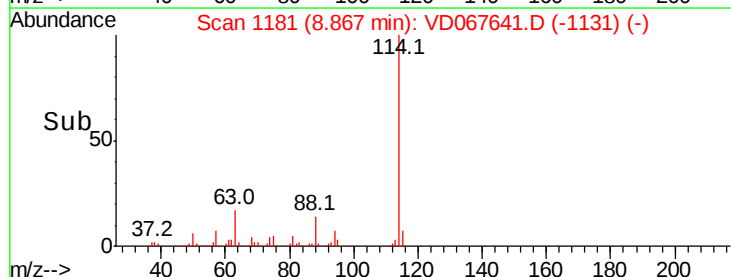
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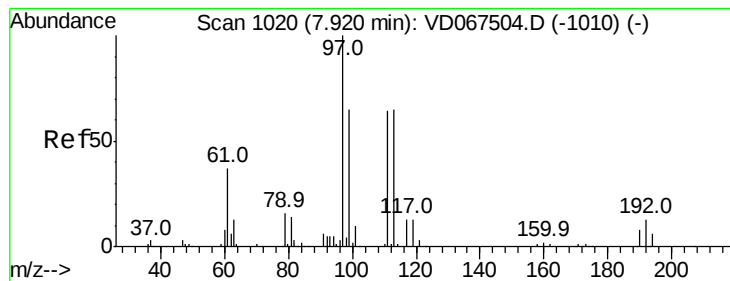
8.80

8.90

9.00

Time-->





#35

Dibromofluoromethane

Concen: 51.613 ug/l

RT: 7.91 min Scan# 1019

Delta R.T. -0.01 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampleId :

SS-4

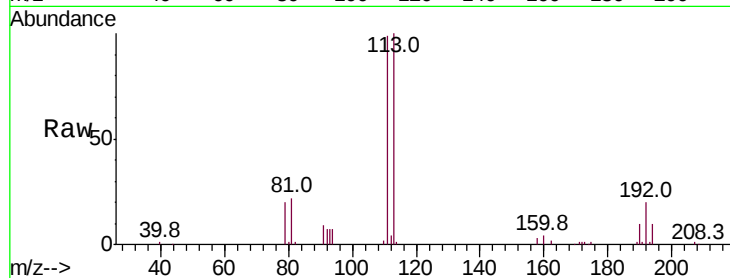
Tot Ion:113 Resp: 120363

Ion Ratio Lower Upper

113 100

111 102.1 80.0 120.0

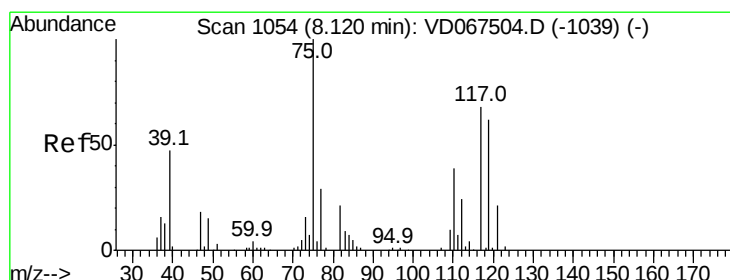
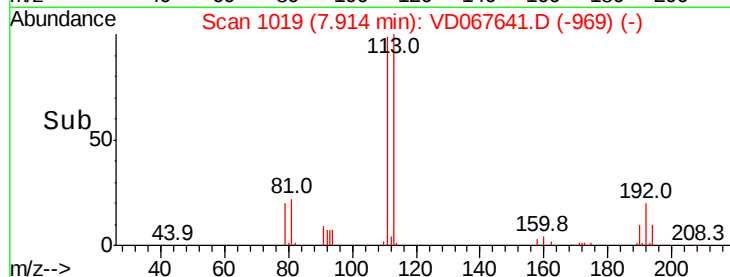
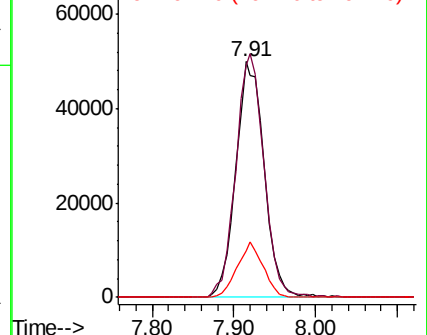
192 21.3 16.3 24.5



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: 4.946 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.14 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

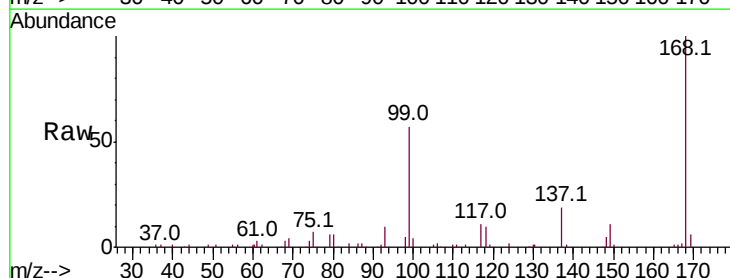
Tgt Ion: 75 Resp: 16387

Ion Ratio Lower Upper

75 100

110 9.9 19.9 59.7#

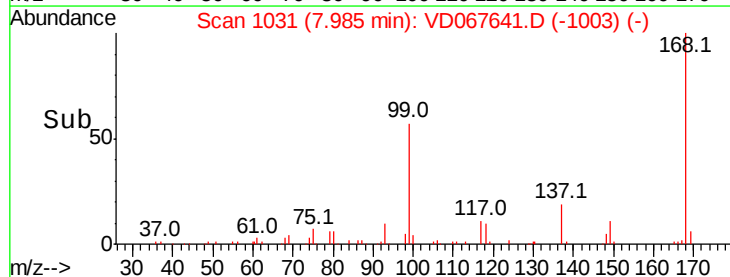
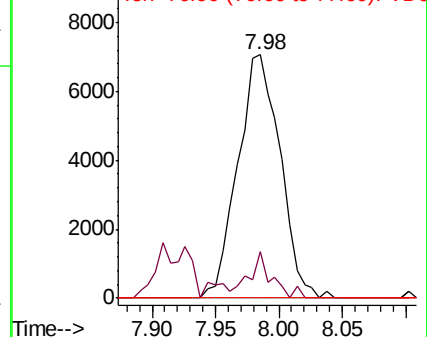
77 0.0 24.8 37.2#

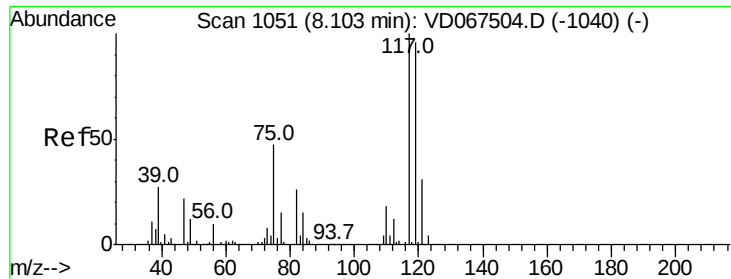


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 5.858 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.12 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampled :

SS-4

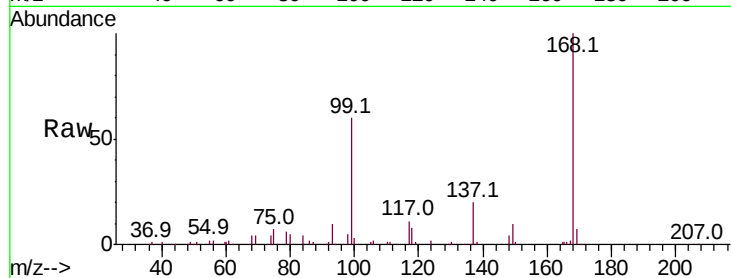
Tot Ion:117 Resp: 25215

Ion Ratio Lower Upper

117 100

119 4.4 76.9 115.3#

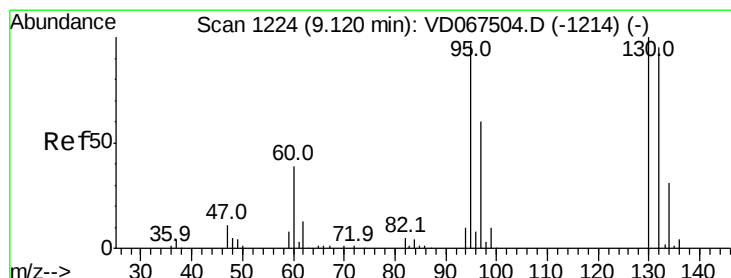
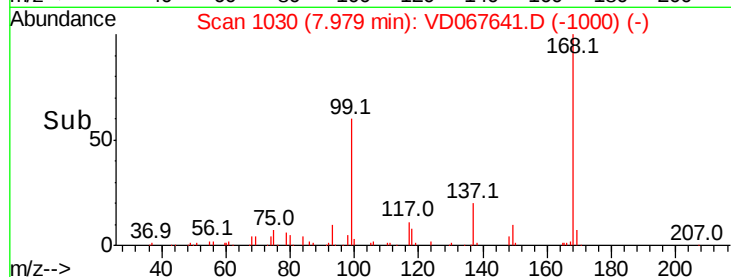
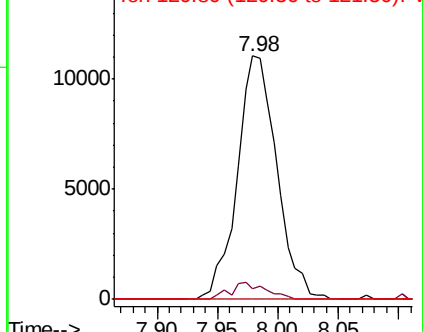
121 0.0 24.5 36.7#



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



#44

Trichloroethene

Concen: 8.115 ug/l

RT: 9.12 min Scan# 1224

Delta R.T. 0.00 min

Lab File: VD067641.D

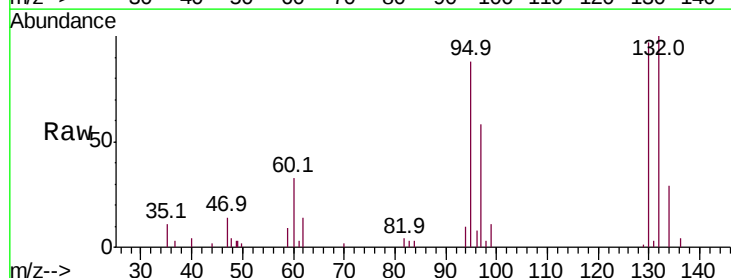
Acq: 16 Nov 2020 15:23

Tgt Ion:130 Resp: 23946

Ion Ratio Lower Upper

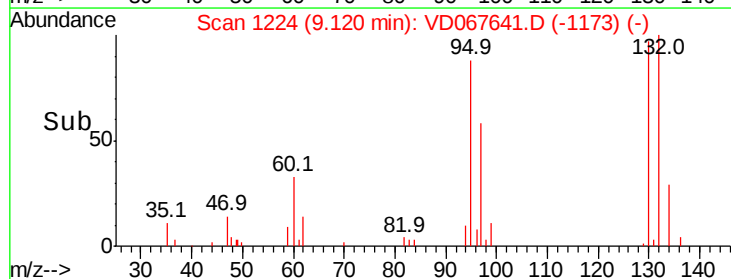
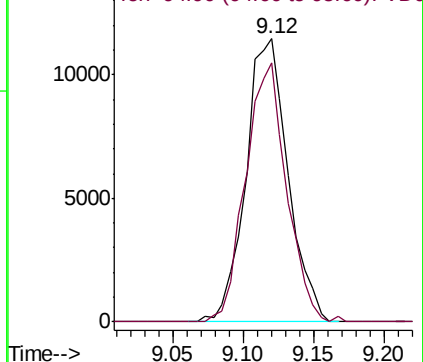
130 100

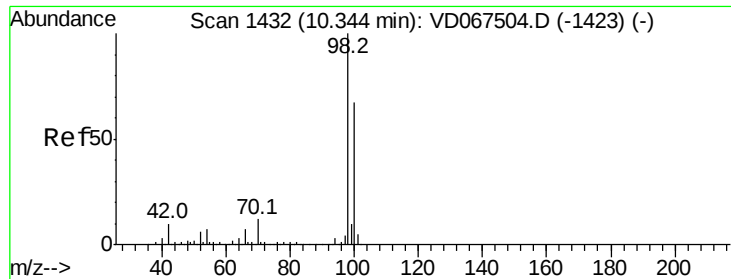
95 91.6 0.0 194.4



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): V





#50

Toluene-d8

Concen: 55.058 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.00 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampled :

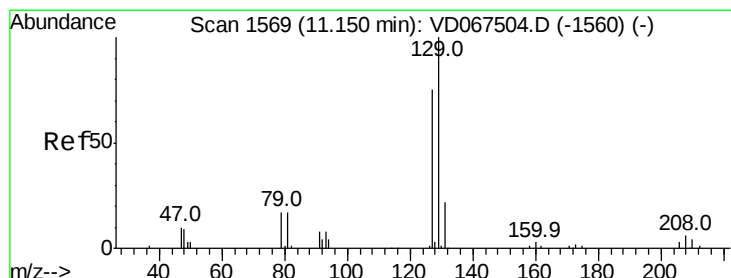
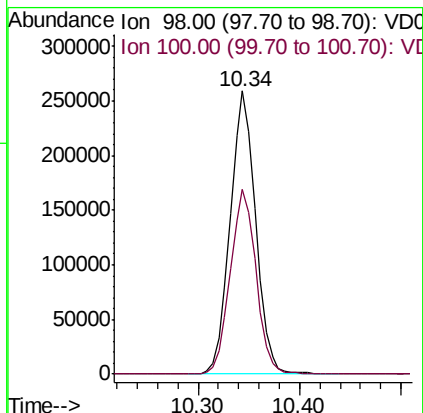
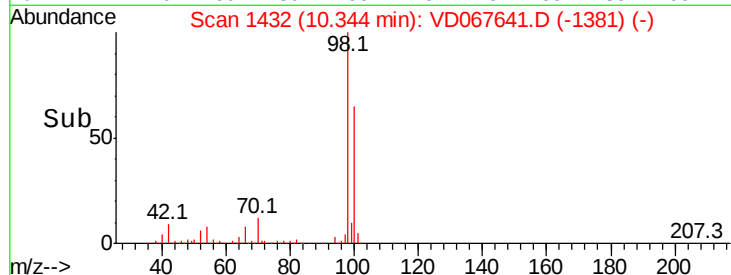
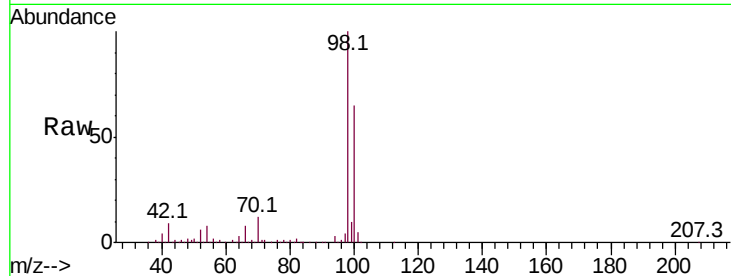
SS-4

Tot Ion: 98 Resp: 451216

Ion Ratio Lower Upper

98 100

100 66.2 53.0 79.6



#60

Dibromochloromethane

Concen: 50.738 ug/l

RT: 10.88 min Scan# 1523

Delta R.T. -0.27 min

Lab File: VD067641.D

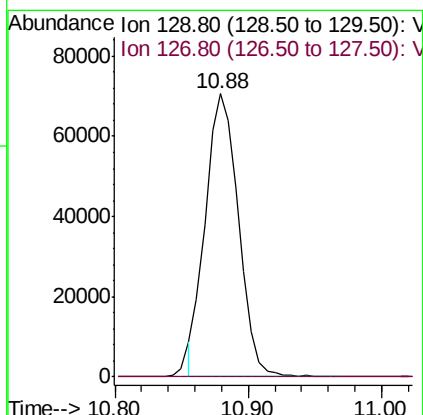
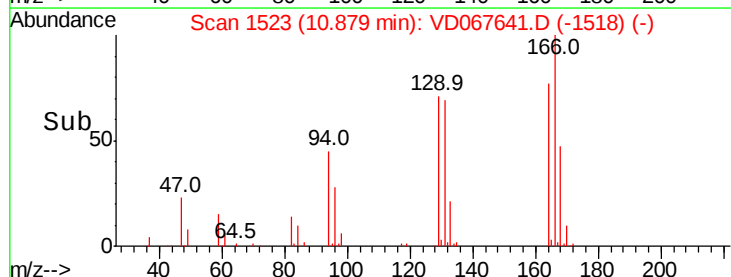
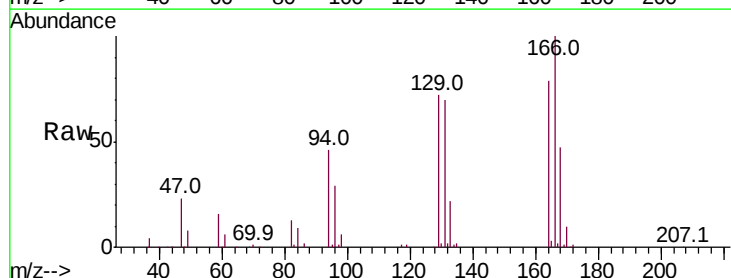
Acq: 16 Nov 2020 15:23

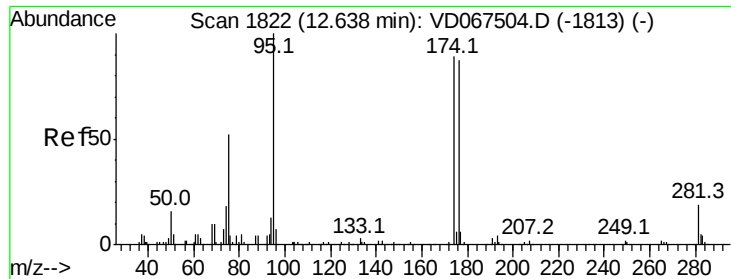
Tgt Ion: 129 Resp: 122520

Ion Ratio Lower Upper

129 100

127 0.1 38.0 114.1#

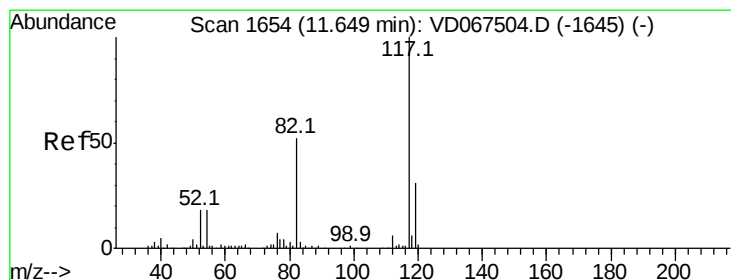
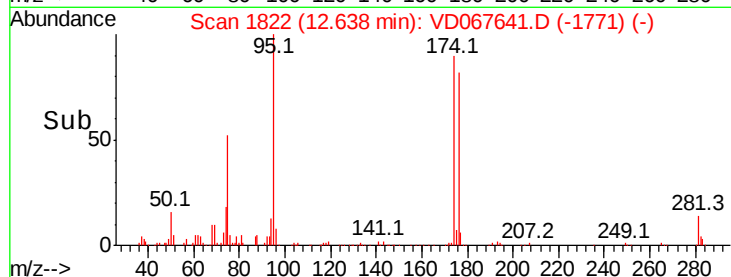
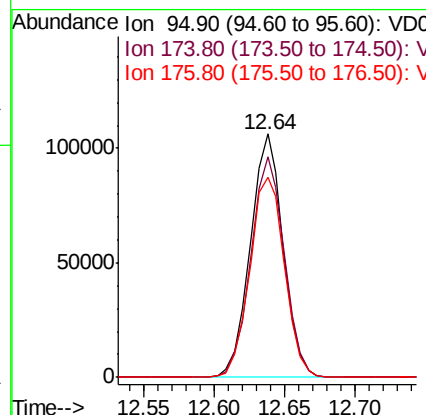
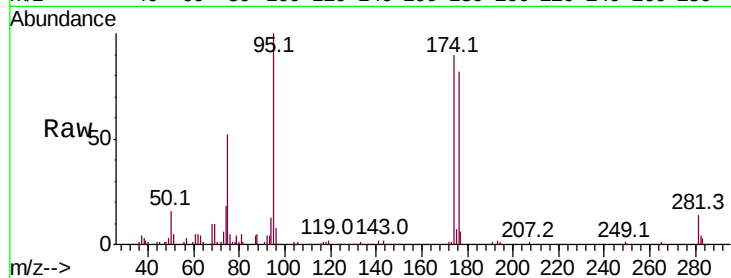




#62  
4-Bromofluorobenzene  
Concen: 61.016 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.00 min  
Lab File: VD067641.D  
Acq: 16 Nov 2020 15:23

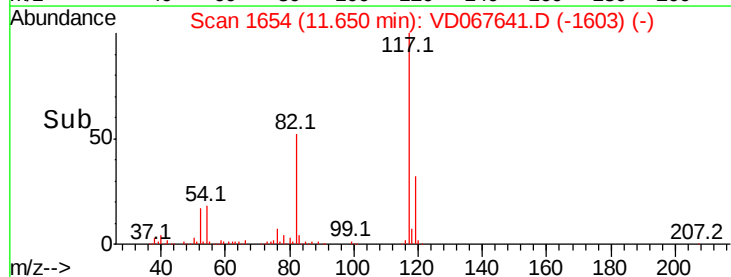
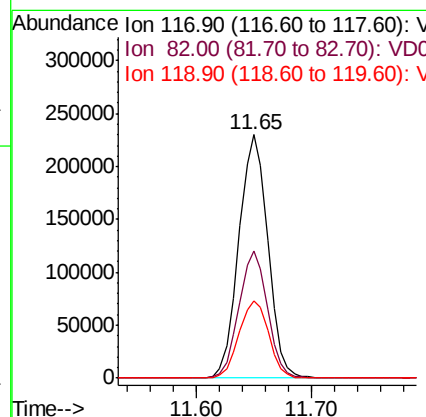
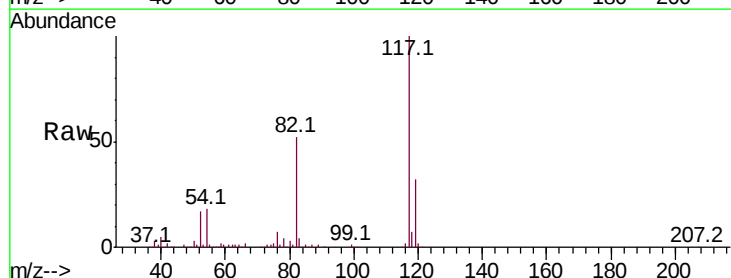
Instrument :  
MSVOA\_D  
ClientSampled :  
SS-4

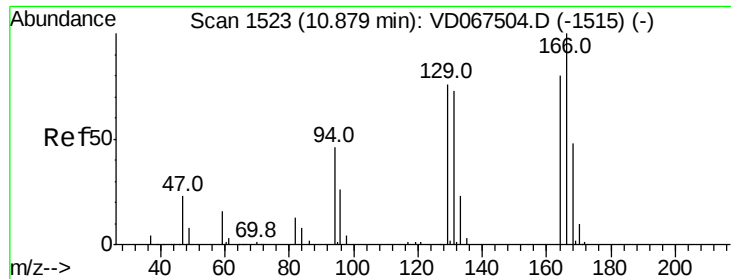
Tot Ion: 95 Resp: 172639  
Ion Ratio Lower Upper  
95 100  
174 92.7 0.0 177.8  
176 87.2 0.0 172.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD067641.D  
Acq: 16 Nov 2020 15:23

Tgt Ion: 117 Resp: 401056  
Ion Ratio Lower Upper  
117 100  
82 52.0 41.6 62.4  
119 31.8 25.1 37.7





#64

Tetrachloroethene

Concen: 46.220 ug/l

RT: 10.88 min Scan# 1523

Delta R.T. 0.00 min

Lab File: VD067641.D

Acq: 16 Nov 2020 15:23

Instrument :

MSVOA\_D

ClientSampleId :

SS-4

Tot Ion:164 Resp: 137281

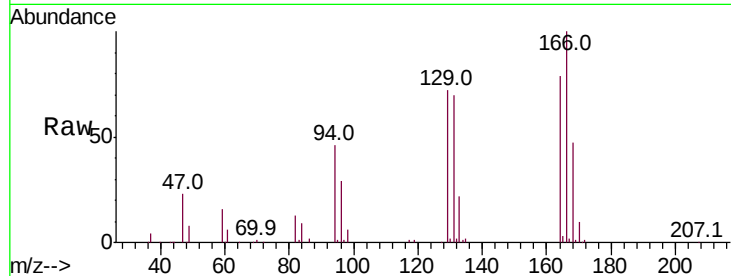
Ion Ratio Lower Upper

164 100

166 127.2 99.9 149.9

129 91.3 75.5 113.3

131 89.6 73.4 110.0

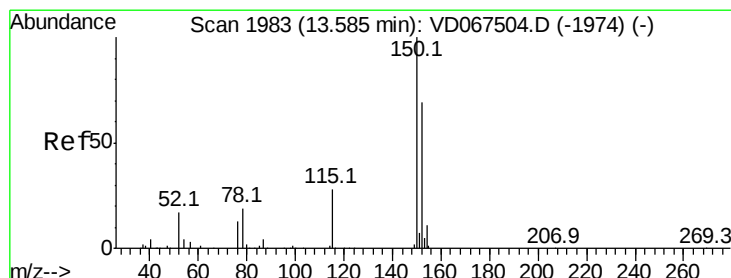
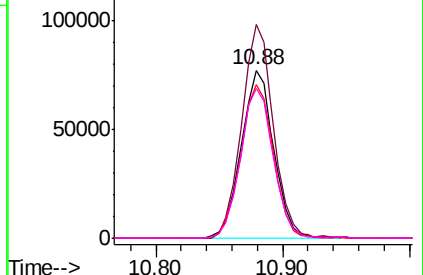
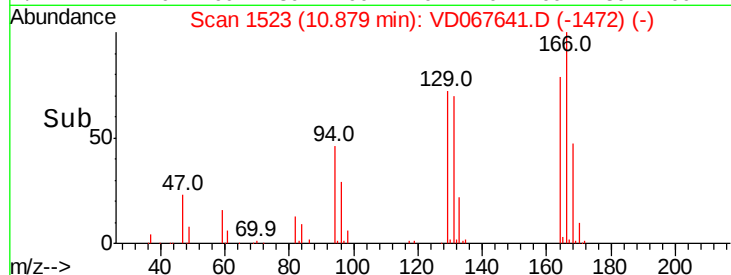


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): 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: VD067641.D

Acq: 16 Nov 2020 15:23

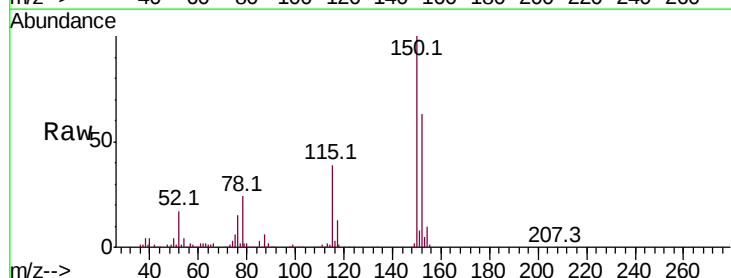
Tgt Ion:152 Resp: 200678

Ion Ratio Lower Upper

152 100

115 58.7 29.3 88.0

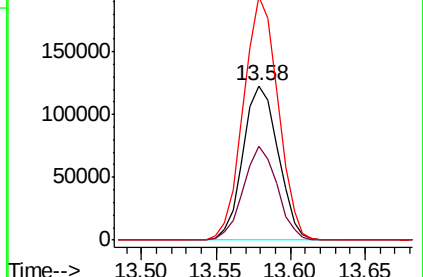
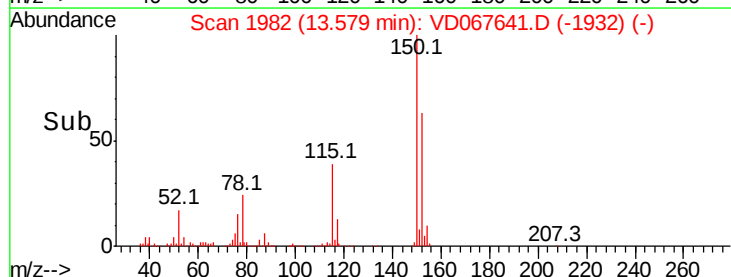
150 155.4 0.0 338.2

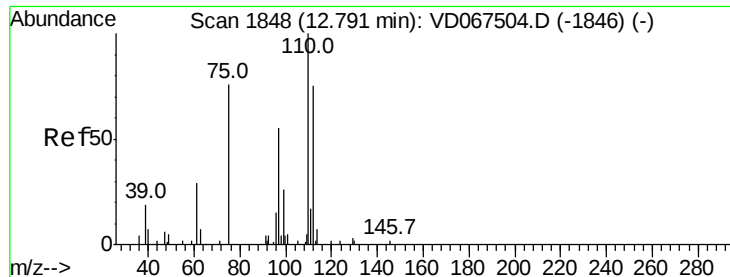


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

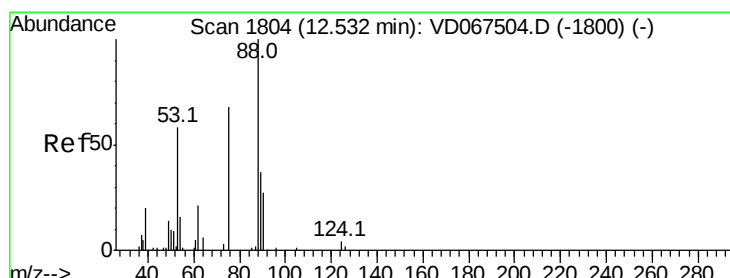
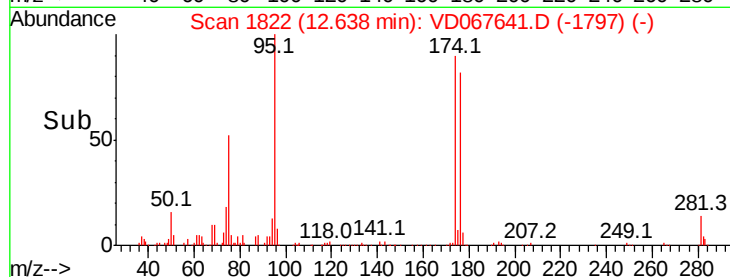
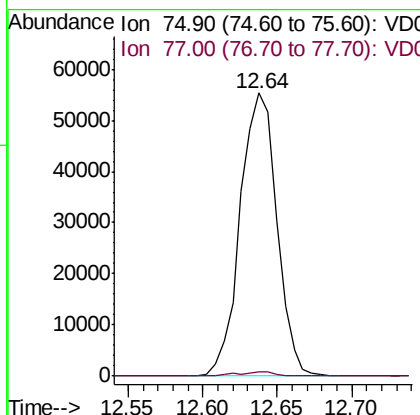
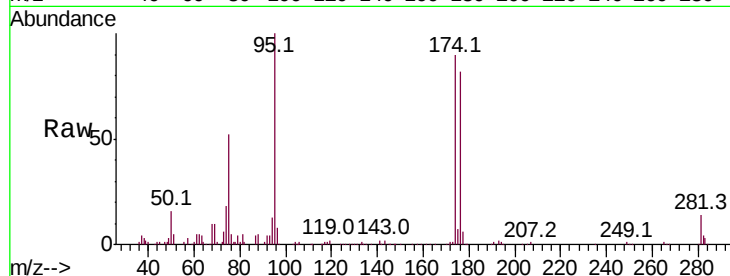




#76  
 1,2,3-Trichloropropane  
 Concen: 77.651 ug/l  
 RT: 12.64 min Scan# 1822  
 Delta R.T. -0.15 min  
 Lab File: VD067641.D  
 Acq: 16 Nov 2020 15:23

Instrument :  
 MSVOA\_D  
 ClientSampled :  
 SS-4

Tot Ion: 75 Resp: 94004  
 Ion Ratio Lower Upper  
 75 100  
 77 1.6 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 157.651 ug/l  
 RT: 12.64 min Scan# 1822  
 Delta R.T. 0.11 min  
 Lab File: VD067641.D  
 Acq: 16 Nov 2020 15:23

Tgt Ion: 75 Resp: 94004  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 75.9 113.9#  
 89 0.0 44.6 67.0#

