

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD102620\  
 Data File : VD067393.D  
 Acq On : 26 Oct 2020 15:35  
 Operator : VA/SY  
 Sample : L4510-04  
 Misc : 6.33G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VOC-4

Quant Time: Oct 27 00:52:46 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

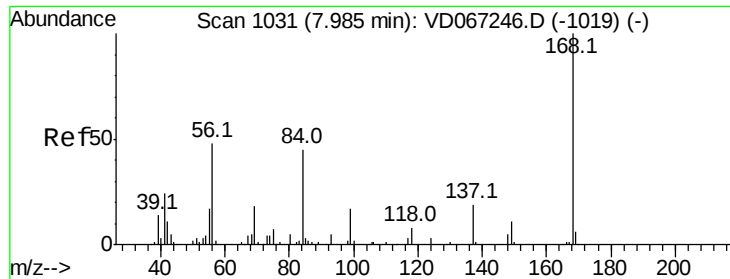
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 304627   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 500587   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 482202   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 241984   | 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   | 157907   | 51.74  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 103.48% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 157898   | 47.40  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 94.80%  |          |
| 50) Toluene-d8              | 10.34 | 98   | 584713   | 48.50  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 97.00%  |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 205238   | 48.96  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 97.92%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85   | 242      | Below Cal | #      | 1      |
| 5) Bromomethane                | 2.75  | 94   | 73       | Below Cal | #      | 3      |
| 11) Tert butyl alcohol         | 5.19  | 59   | 59       | Below Cal | #      | 81     |
| 16) Acetone                    | 4.16  | 43   | 2857     | 6.684     | ug/l # | 82     |
| 20) Methylene Chloride         | 4.96  | 84   | 1599     | Below Cal | #      | 88     |
| 31) Cyclohexane                | 7.98  | 56   | 6408     | 1.823     | ug/l # | 46     |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 21483    | 5.063     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 31483    | 5.806     | ug/l # | 21     |
| 51) 4-Methyl-2-Pentanone       | 10.34 | 43   | 2161     | 1.749     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 109320   | 65.181    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75   | 109320   | 147.811   | ug/l # | 10     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. 0.00 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

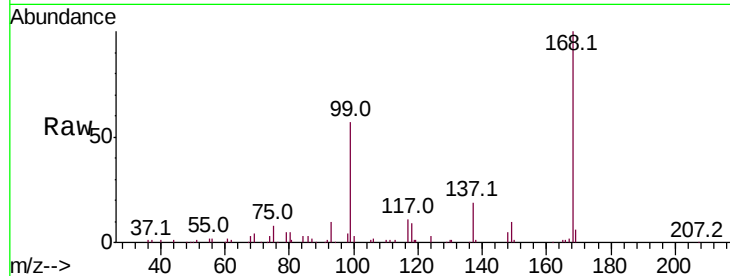
Instrument :  
MSVOA\_D  
ClientSampleId :  
VOC-4

Tot Ion:168 Resp: 304627

Ion Ratio Lower Upper

168 100

99 56.6 45.9 68.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

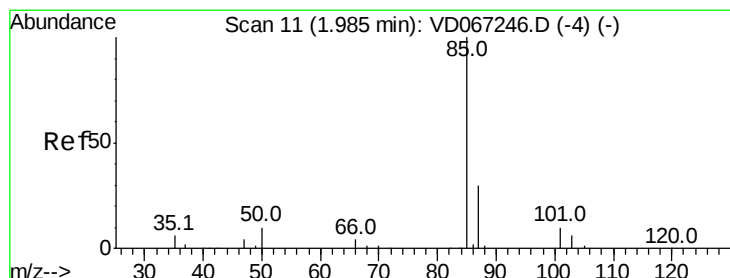
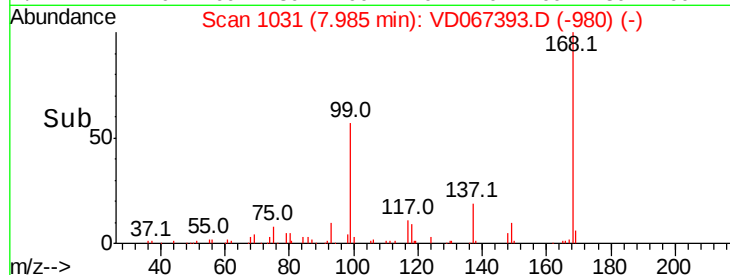
150000

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 12

Delta R.T. 0.01 min

Lab File: VD067393.D

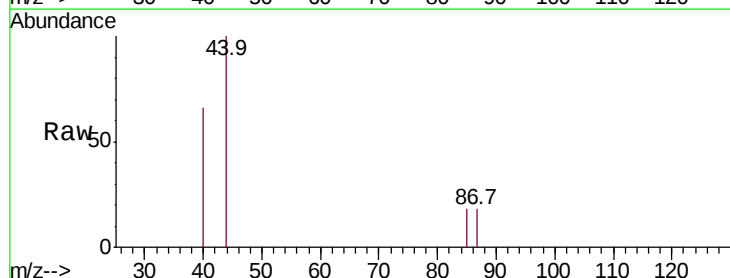
Acq: 26 Oct 2020 15:35

Tgt Ion: 85 Resp: 242

Ion Ratio Lower Upper

85 100

87 102.2 15.2 45.6#



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.99

300

250

200

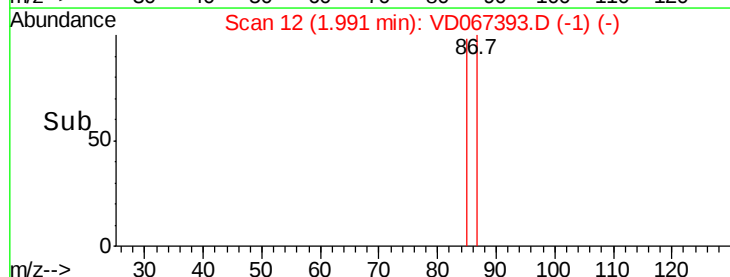
150

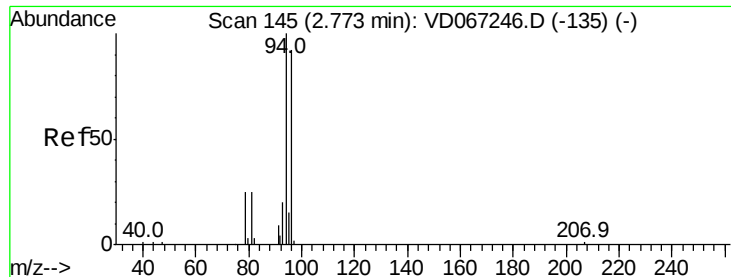
100

50

0

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 2.75 min Scan# 141

Delta R.T. -0.02 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Instrument :

MSVOA\_D

ClientSampleId :

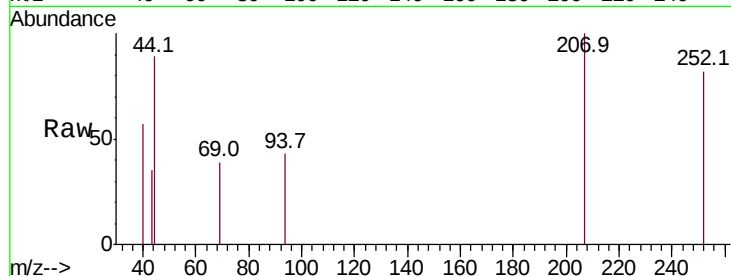
VOC-4

Tot Ion: 94 Resp: 73

Ion Ratio Lower Upper

94 100

96 0.0 73.8 110.6#

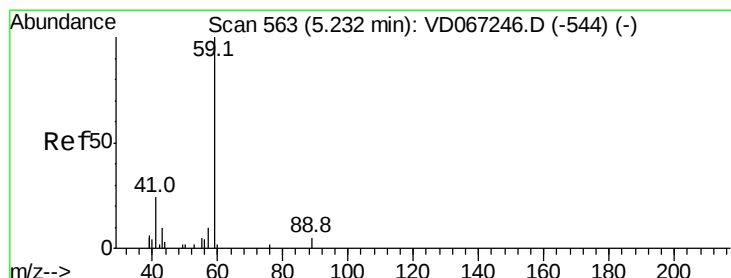
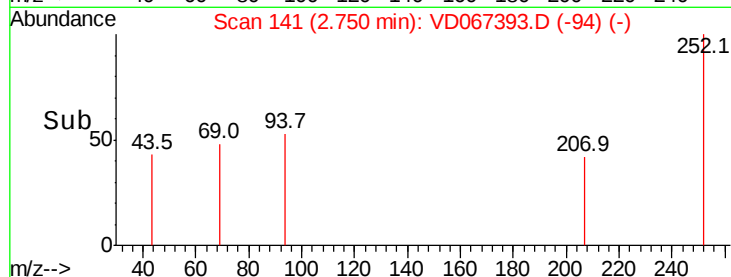


Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC

2.75

2.73 2.74 2.75 2.76 2.77



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.19 min Scan# 556

Delta R.T. -0.04 min

Lab File: VD067393.D

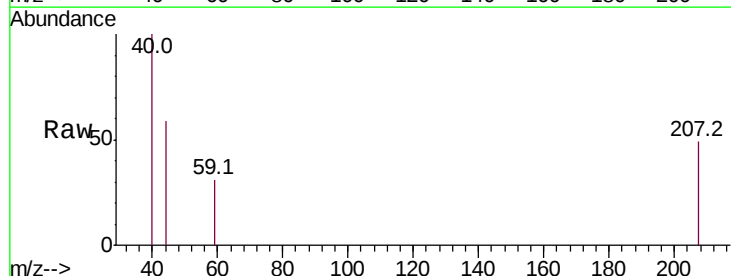
Acq: 26 Oct 2020 15:35

Tgt Ion: 59 Resp: 59

Ion Ratio Lower Upper

59 100

57 0.0 5.1 7.7#

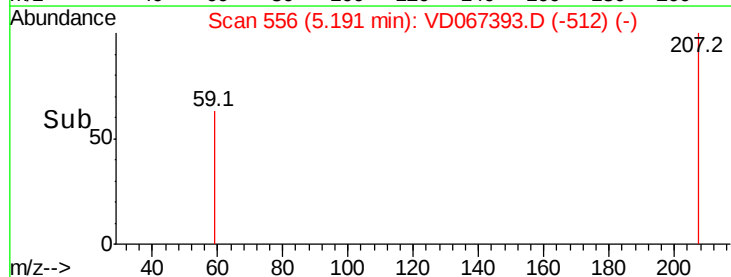


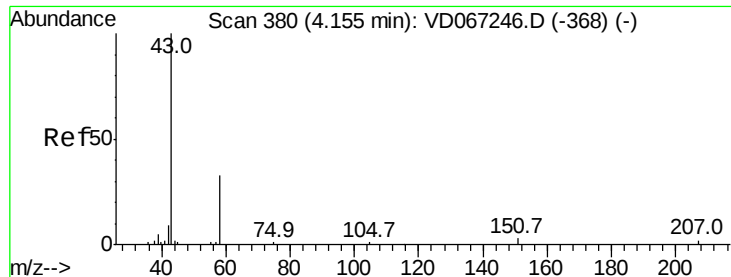
Abundance Ion 59.00 (58.70 to 59.70): VDC

Ion 57.00 (56.70 to 57.70): VDC

5.19

5.17 5.18 5.19 5.20 5.21





#16

Acetone

Concen: 6.684 ug/l

RT: 4.16 min Scan# 381

Delta R.T. 0.01 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Instrument :

MSVOA\_D

ClientSampleId :

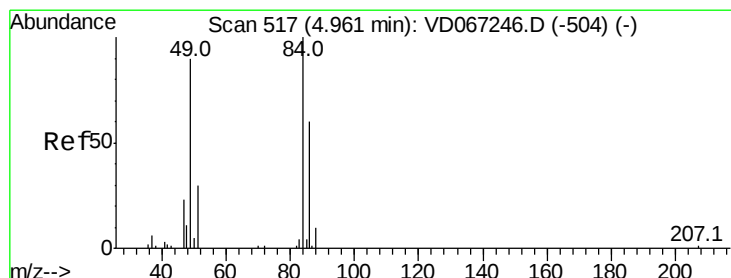
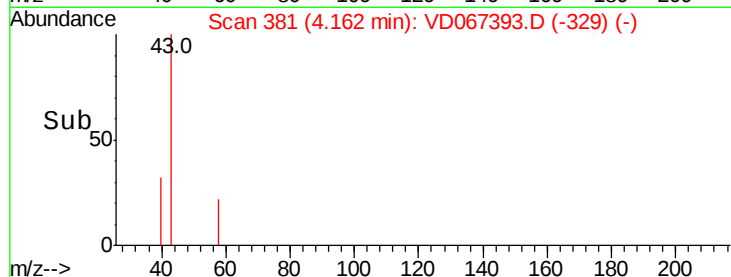
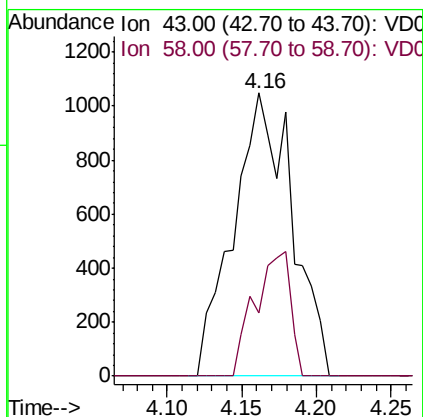
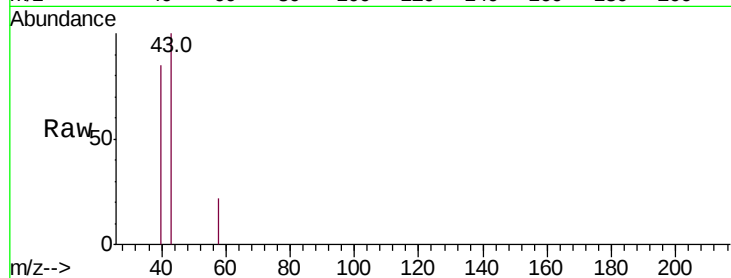
VOC-4

Tot Ion: 43 Resp: 2857

Ion Ratio Lower Upper

43 100

58 22.3 26.1 39.1#



#20

Methylene Chloride

Concen: Below Cal

RT: 4.96 min Scan# 517

Delta R.T. 0.00 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Tgt Ion: 84 Resp: 1599

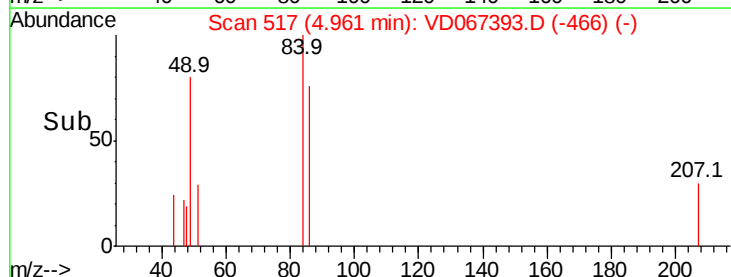
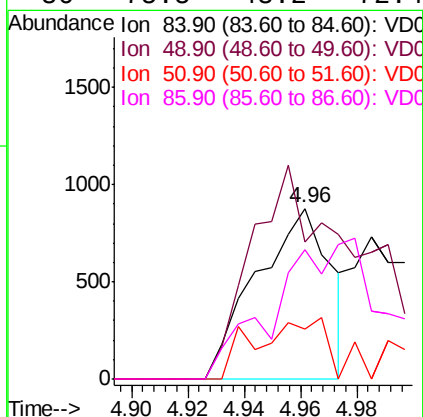
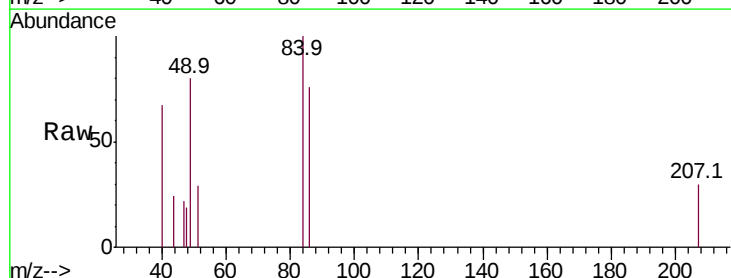
Ion Ratio Lower Upper

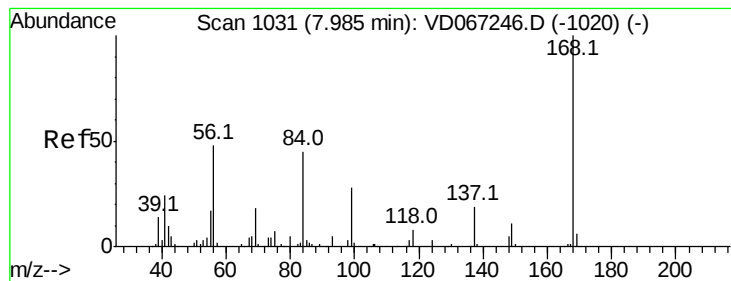
84 100

49 80.3 72.2 108.2

51 29.2 23.8 35.8

86 75.5 48.2 72.4#





#31

Cyclohexane

Concen: 1.823 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.01 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Instrument :

MSVOA\_D

ClientSampled :

VOC-4

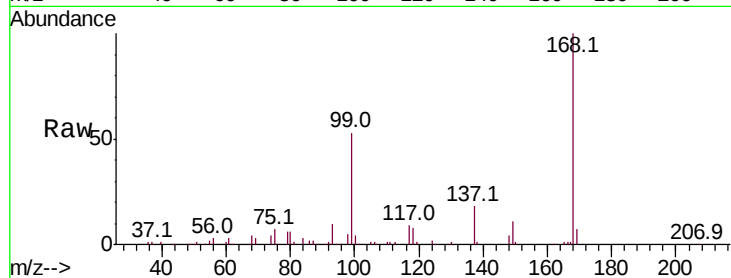
Tot Ion: 56 Resp: 6408

Ion Ratio Lower Upper

56 100

69 134.3 29.8 44.6#

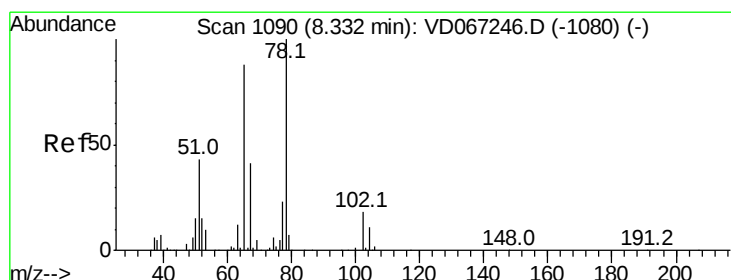
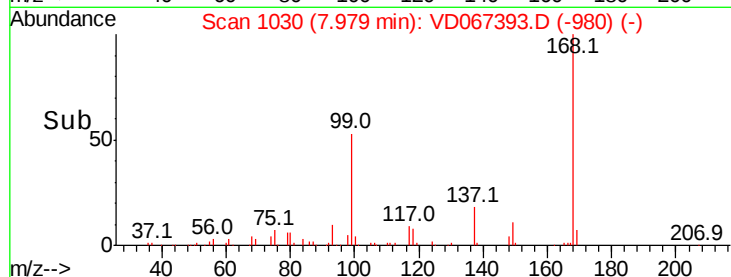
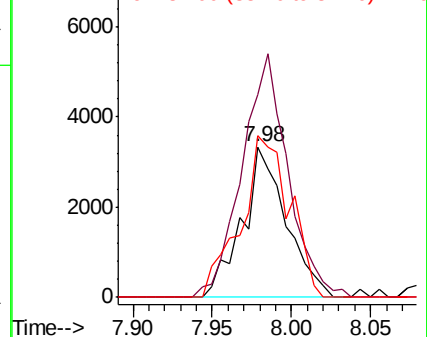
84 106.9 76.6 114.8



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: 51.740 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.01 min

Lab File: VD067393.D

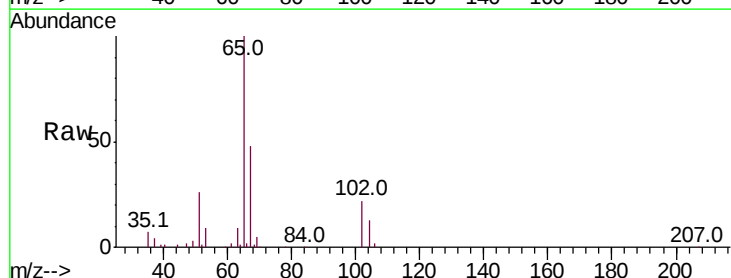
Acq: 26 Oct 2020 15:35

Tgt Ion: 65 Resp: 157907

Ion Ratio Lower Upper

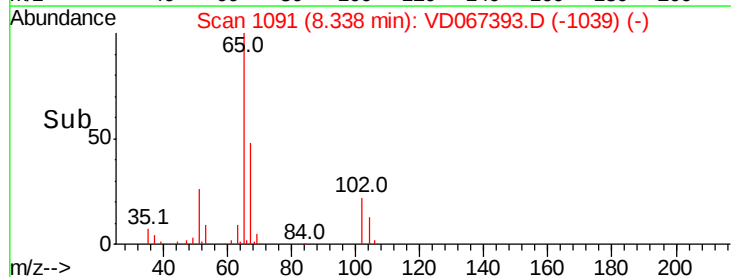
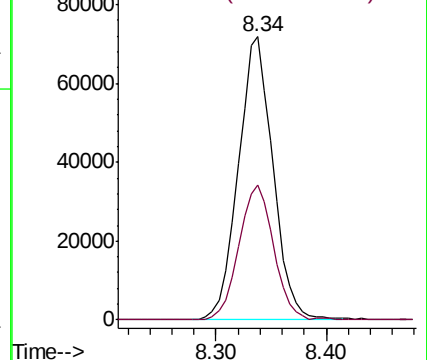
65 100

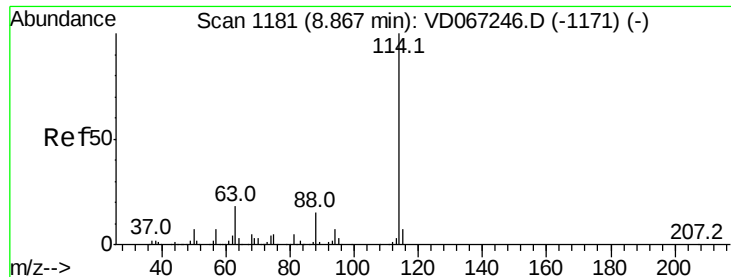
67 47.8 0.0 103.8



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# 1182

Delta R.T. 0.01 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Instrument :

MSVOA\_D

ClientSampleId :

VOC-4

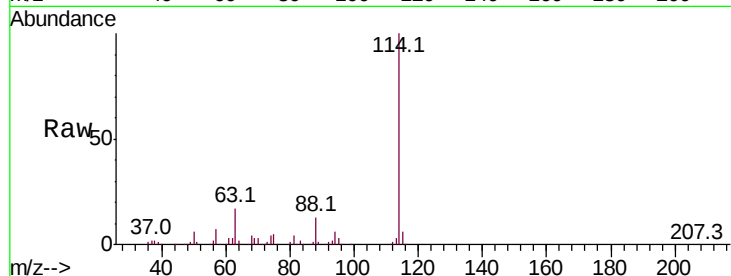
Tot Ion:114 Resp: 500587

Ion Ratio Lower Upper

114 100

63 16.6 0.0 35.0

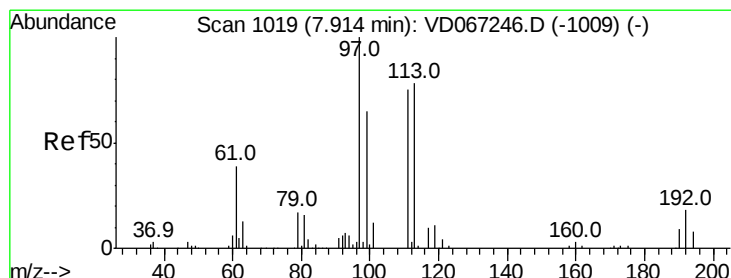
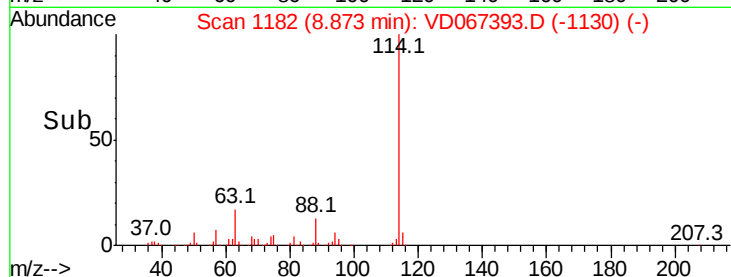
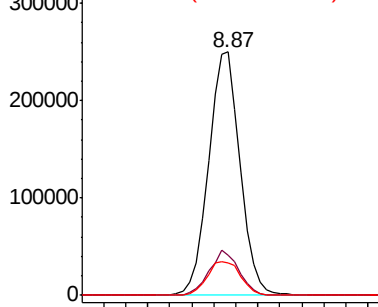
88 13.5 0.0 30.6



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



#35

Dibromofluoromethane

Concen: 47.397 ug/l

RT: 7.92 min Scan# 1020

Delta R.T. 0.01 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

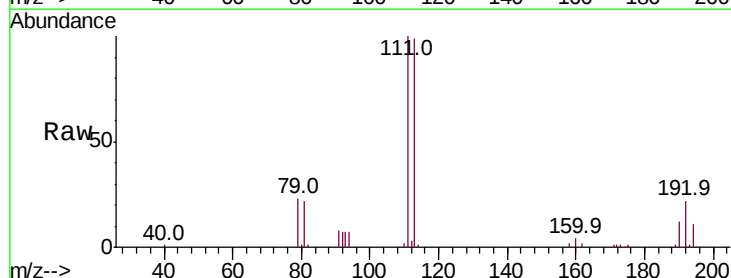
Tgt Ion:113 Resp: 157898

Ion Ratio Lower Upper

113 100

111 105.4 81.6 122.4

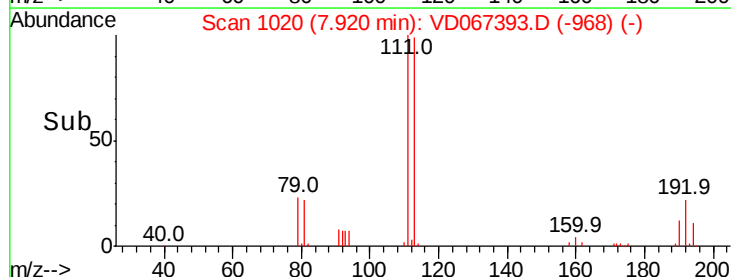
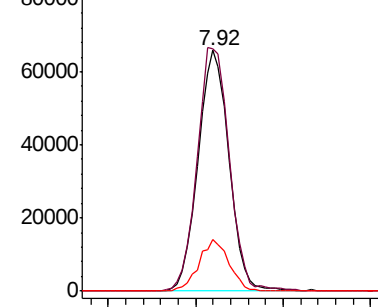
192 20.9 17.0 25.4

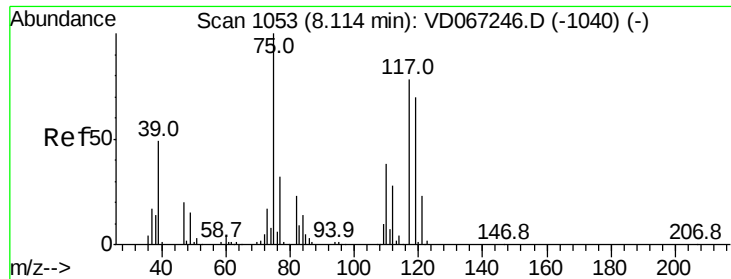


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.063 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.13 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Instrument :

MSVOA\_D

ClientSampled :

VOC-4

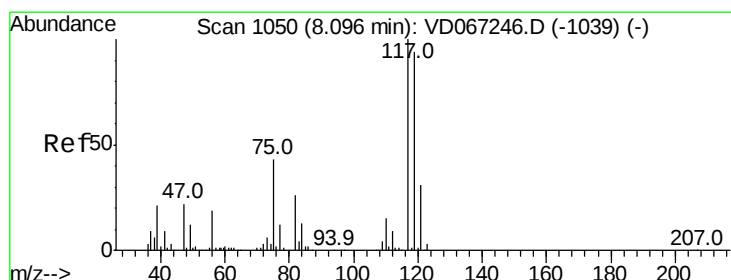
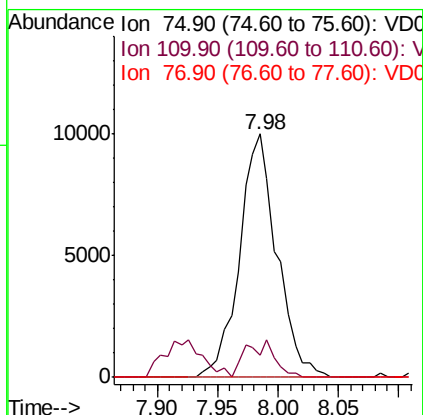
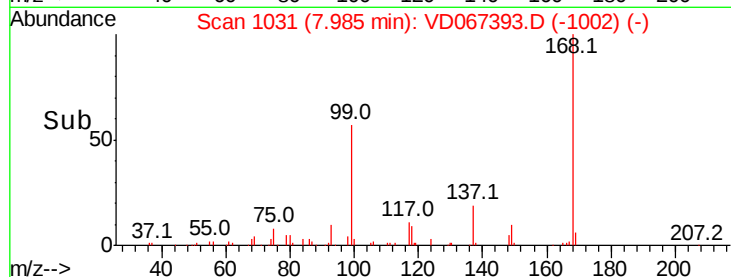
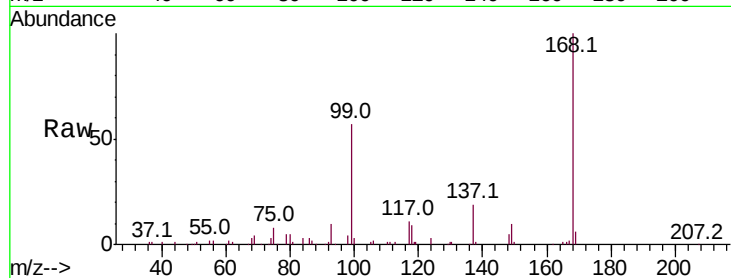
Tot Ion: 75 Resp: 21483

Ion Ratio Lower Upper

75 100

110 11.8 19.6 58.7#

77 0.0 24.6 37.0#



#38

Carbon Tetrachloride

Concen: 5.806 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.11 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

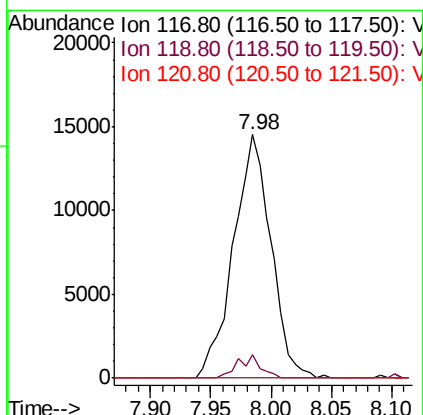
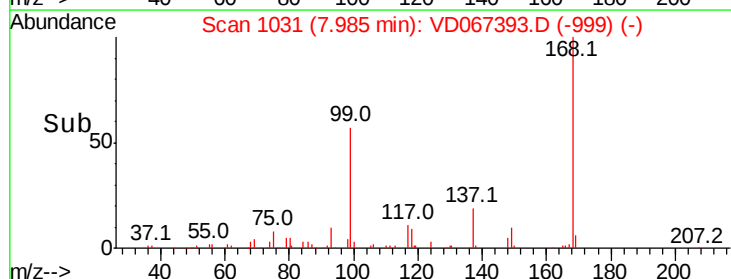
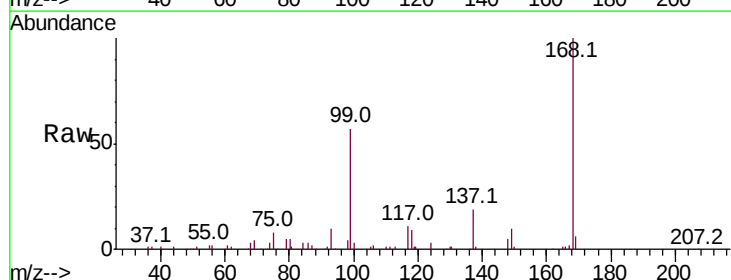
Tgt Ion: 117 Resp: 31483

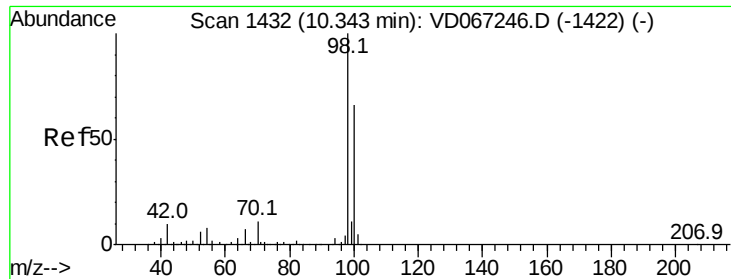
Ion Ratio Lower Upper

117 100

119 9.8 75.0 112.4#

121 0.0 24.9 37.3#

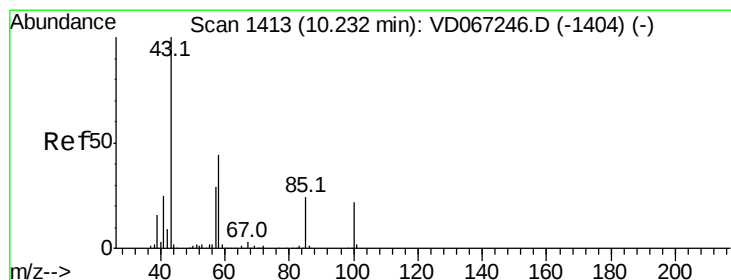
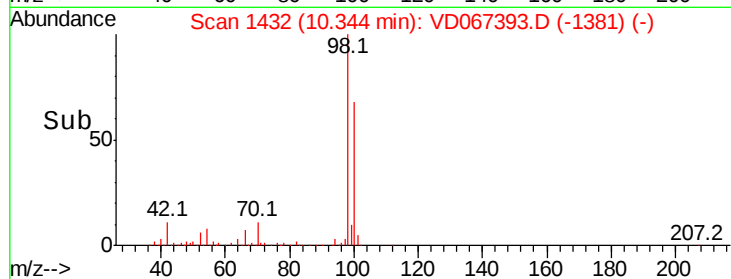
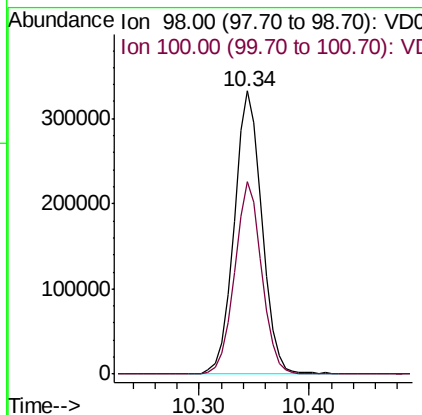
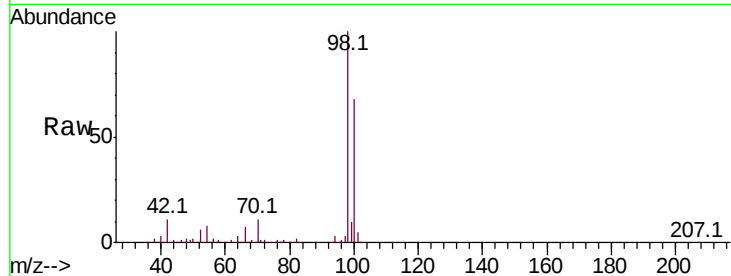




#50  
Toluene-d8  
Concen: 48.499 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.00 min  
Lab File: VD067393.D  
Acq: 26 Oct 2020 15:35

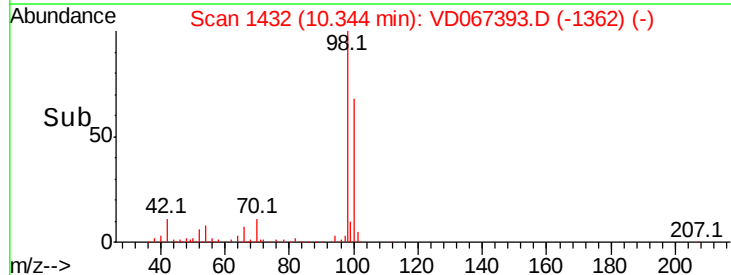
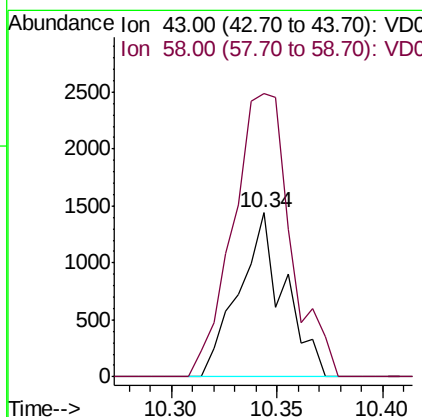
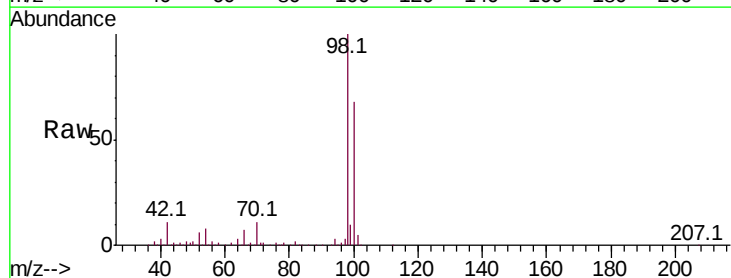
Instrument :  
MSVOA\_D  
ClientSampleId :  
VOC-4

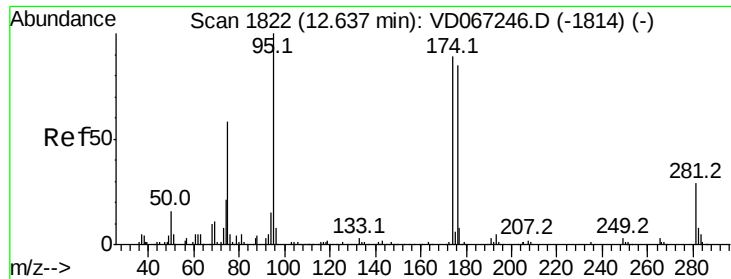
Tot Ion: 98 Resp: 584713  
Ion Ratio Lower Upper  
98 100  
100 66.3 53.1 79.7



#51  
4-Methyl-2-Pentanone  
Concen: 1.749 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.11 min  
Lab File: VD067393.D  
Acq: 26 Oct 2020 15:35

Tgt Ion: 43 Resp: 2161  
Ion Ratio Lower Upper  
43 100  
58 218.6 35.7 53.5#

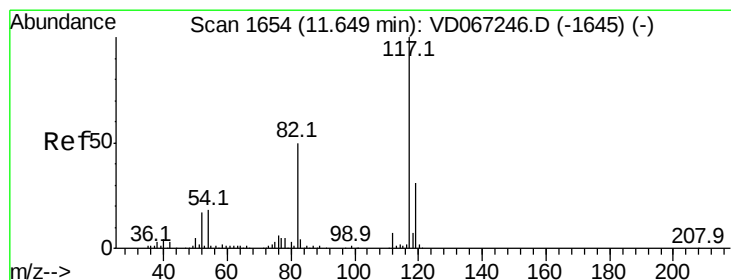
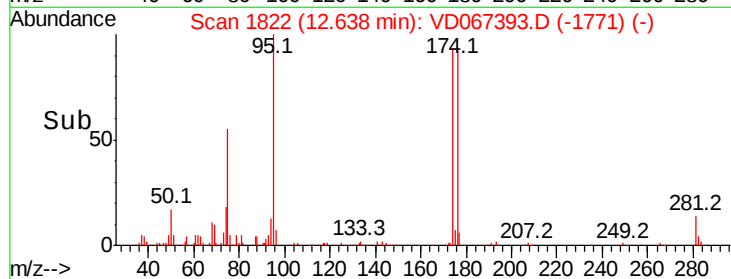
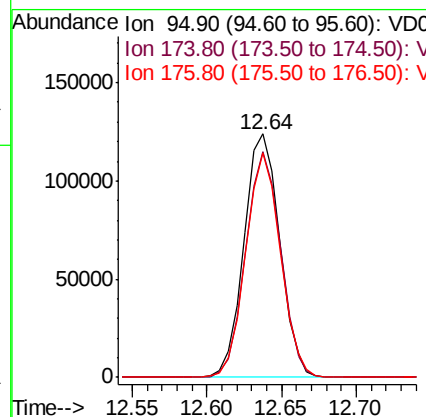
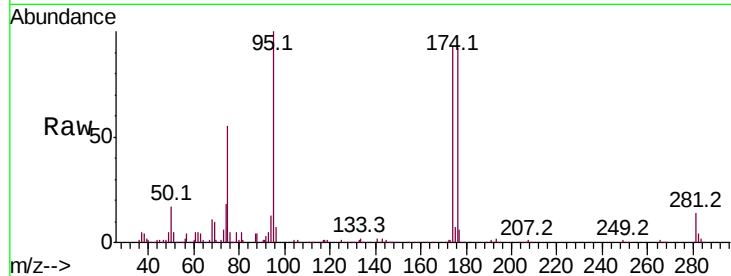




#62  
4-Bromofluorobenzene  
Concen: 48.958 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.00 min  
Lab File: VD067393.D  
Acq: 26 Oct 2020 15:35

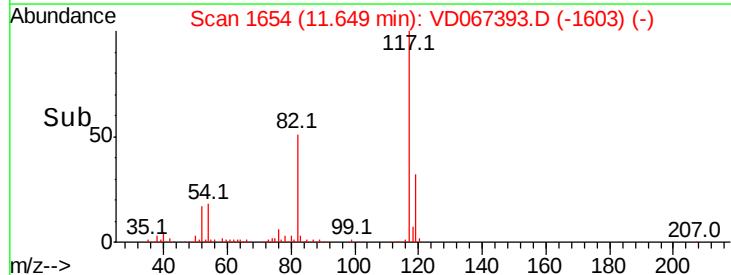
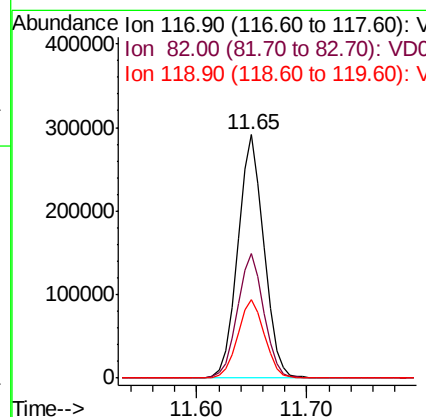
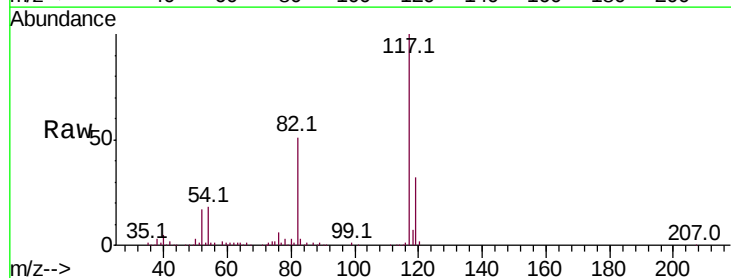
Instrument :  
MSVOA\_D  
ClientSampleId :  
VOC-4

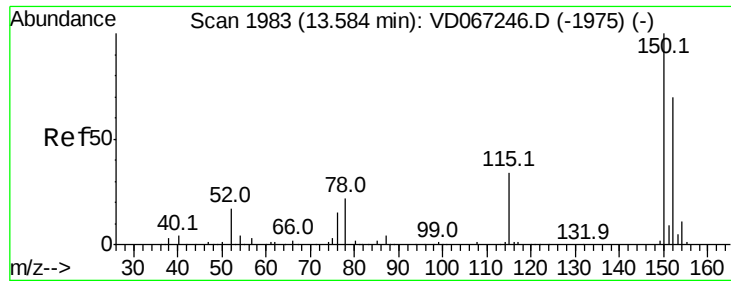
Tot Ion: 95 Resp: 205238  
Ion Ratio Lower Upper  
95 100  
174 90.8 0.0 175.2  
176 89.5 0.0 168.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD067393.D  
Acq: 26 Oct 2020 15:35

Tgt Ion: 117 Resp: 482202  
Ion Ratio Lower Upper  
117 100  
82 51.3 39.9 59.9  
119 32.4 24.9 37.3



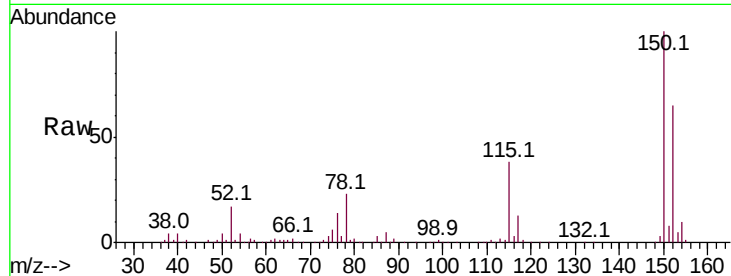


#72

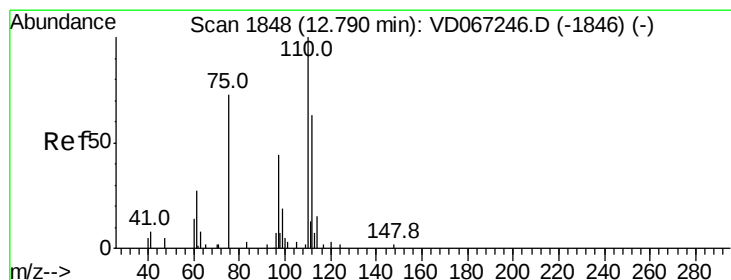
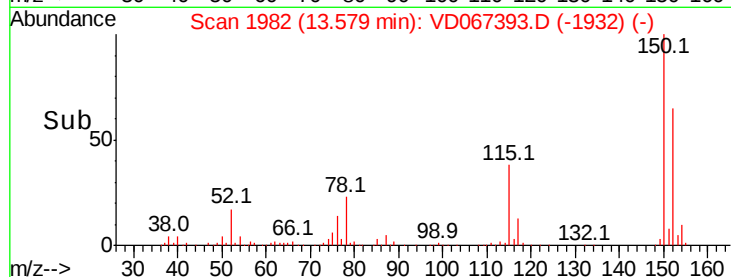
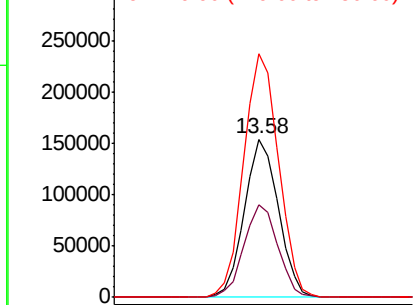
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1982  
Delta R.T. -0.01 min  
Lab File: VD067393.D  
Acq: 26 Oct 2020 15:35

Instrument :  
MSVOA\_D  
ClientSampleId :  
VOC-4

Tot Ion:152 Resp: 241984  
Ion Ratio Lower Upper  
152 100  
115 58.2 29.3 87.9  
150 158.2 0.0 339.0



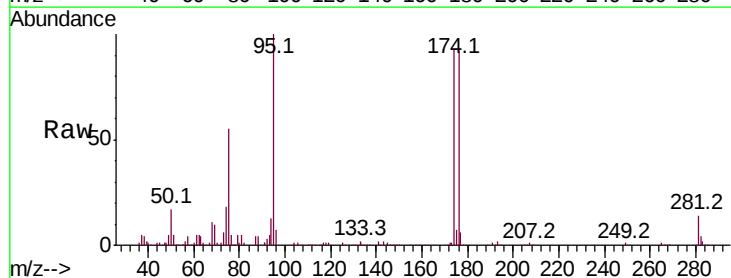
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



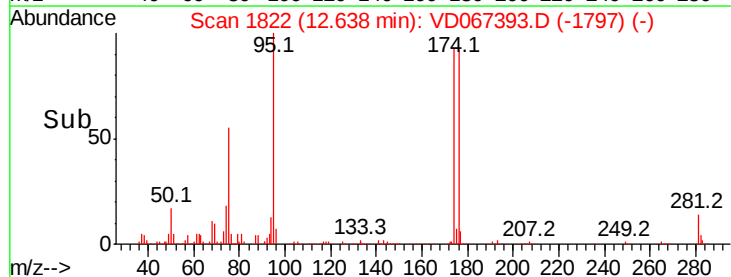
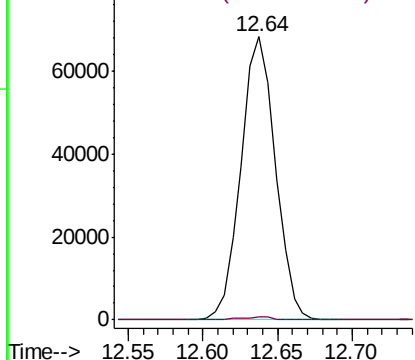
#76

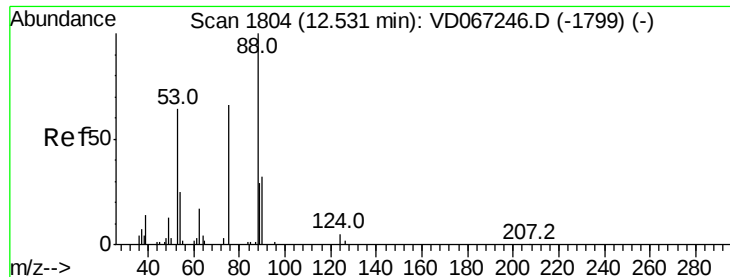
1,2,3-Trichloropropane  
Concen: 65.181 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. -0.15 min  
Lab File: VD067393.D  
Acq: 26 Oct 2020 15:35

Tgt Ion: 75 Resp: 109320  
Ion Ratio Lower Upper  
75 100  
77 1.0 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: 147.811 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD067393.D

Acq: 26 Oct 2020 15:35

Instrument :

MSVOA\_D

ClientSampleId :

VOC-4

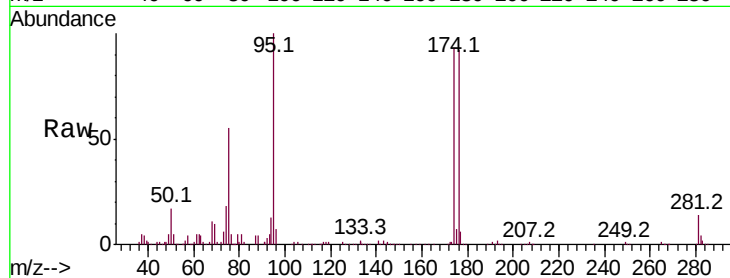
Tot Ion: 75 Resp: 109320

Ion Ratio Lower Upper

75 100

53 0.1 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

