

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD100120\  
 Data File : VD067024.D  
 Acq On : 02 Oct 2020 07:00  
 Operator : VA/SY  
 Sample : L4213-07  
 Misc : 5.06G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 B-16(9-11)

Quant Time: Oct 02 07:25:33 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  | 380252   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.86  | 114  | 633541   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 613842   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 312003   | 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   | 212757   | 58.09 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 116.18% |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 213948   | 51.58 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 103.16% |          |
| 50) Toluene-d8              | 10.34 | 98   | 765198   | 50.63 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 101.26% |          |
| 62) 4-Bromofluorobenzene    | 12.63 | 95   | 288125   | 56.16 | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 112.32% |          |

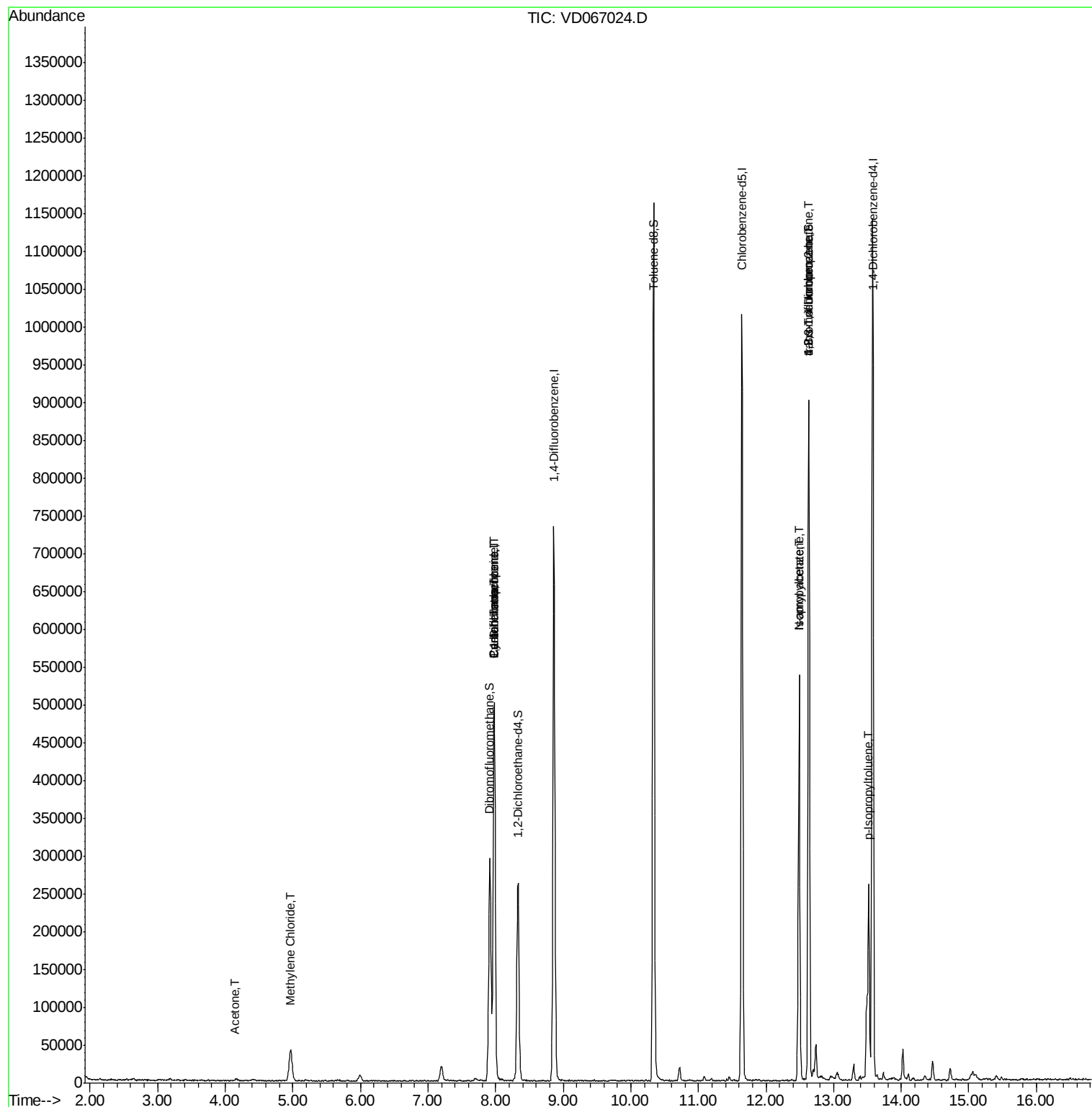
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85   | 289      | Below Cal | #      | 40     |
| 5) Bromomethane                | 2.78  | 94   | 120      | Below Cal |        | 96     |
| 11) Tert butyl alcohol         | 5.20  | 59   | 360      | Below Cal | #      | 72     |
| 16) Acetone                    | 4.14  | 43   | 1931     | 3.454     | ug/l # | 81     |
| 20) Methylene Chloride         | 4.96  | 84   | 32521    | 1.079     | ug/l # | 92     |
| 26) 2,2-Dichloropropane        | 7.19  | 77   | 1572     | Below Cal | #      | 53     |
| 31) Cyclohexane                | 7.98  | 56   | 7490     | 1.362     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 29470    | 4.990     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 37884    | 5.929     | ug/l # | 17     |
| 73) Isopropylbenzene           | 12.48 | 105  | 26536    | 1.253     | ug/l # | 73     |
| 74) N-amyl acetate             | 12.49 | 43   | 9393     | 2.466     | ug/l # | 12     |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 148560   | 54.665    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.63 | 75   | 148560   | 136.286   | ug/l # | 12     |
| 86) p-Isopropyltoluene         | 13.52 | 119  | 146261   | 7.432     | ug/l   | 92     |

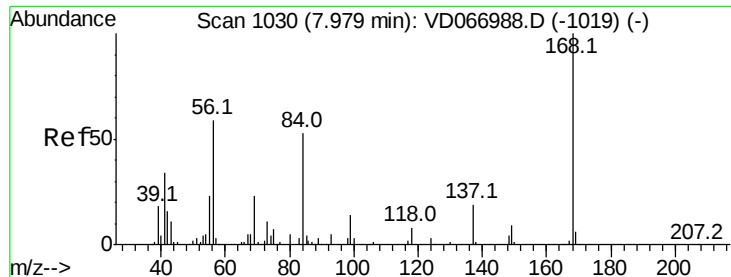
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD100120\  
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Instrument :  
MSVOA\_D  
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B-16(9-11)

Quant Time: Oct 02 07:25:33 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: VD067024.D

Acq: 02 Oct 2020 07:00

Instrument :

MSVOA\_D

ClientSampleId :

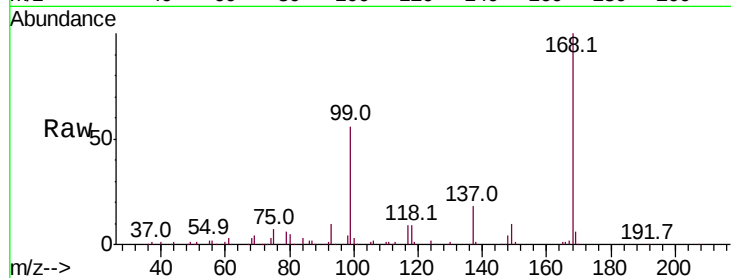
B-16(9-11)

Tot Ion:168 Resp: 380252

Ion Ratio Lower Upper

168 100

99 55.7 44.1 66.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

200000

150000

100000

50000

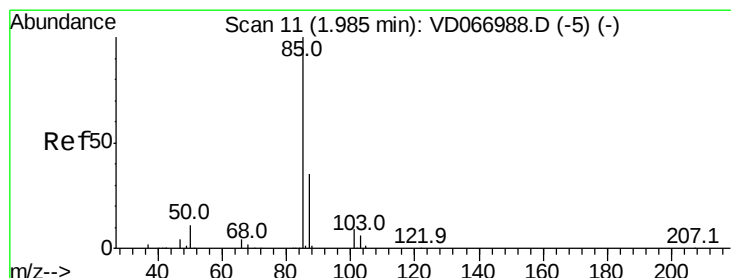
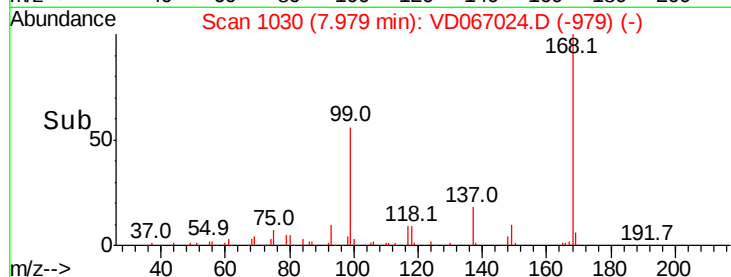
0

7.90

8.00

8.10

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 11

Delta R.T. 0.00 min

Lab File: VD067024.D

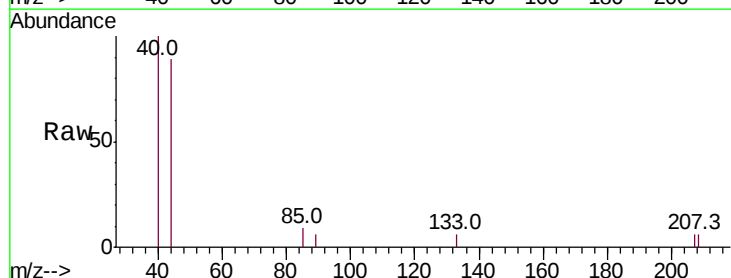
Acq: 02 Oct 2020 07:00

Tgt Ion: 85 Resp: 289

Ion Ratio Lower Upper

85 100

87 0.0 17.3 52.0#



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

300

250

200

150

100

50

0

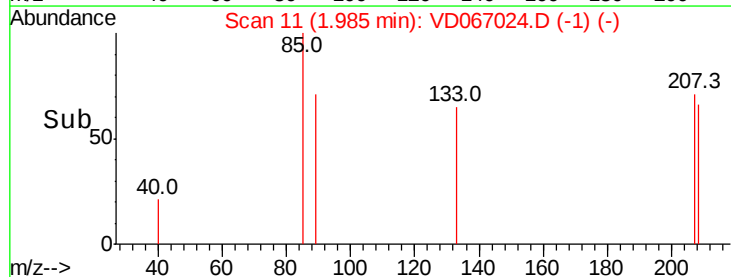
1.96

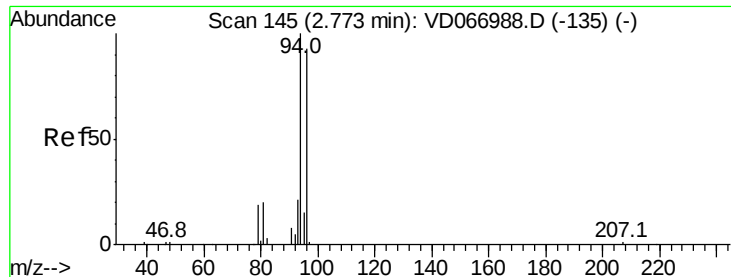
1.98

2.00

2.02

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 2.78 min Scan# 146

Delta R.T. 0.01 min

Lab File: VD067024.D

Acq: 02 Oct 2020 07:00

Instrument :

MSVOA\_D

ClientSampleId :

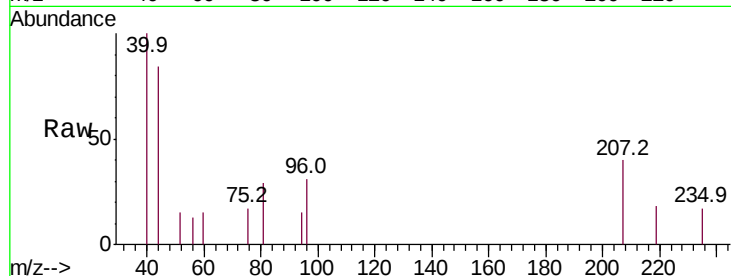
B-16(9-11)

Tot Ion: 94 Resp: 120

Ion Ratio Lower Upper

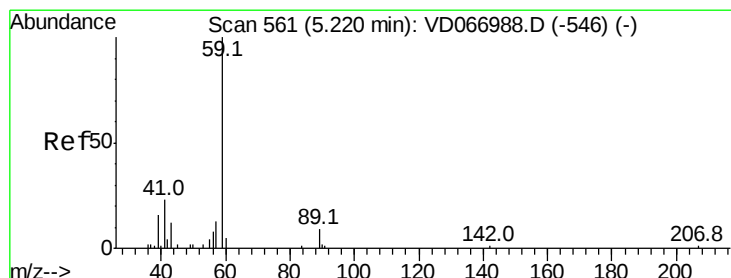
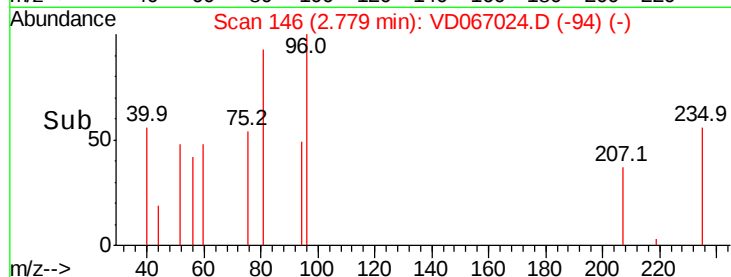
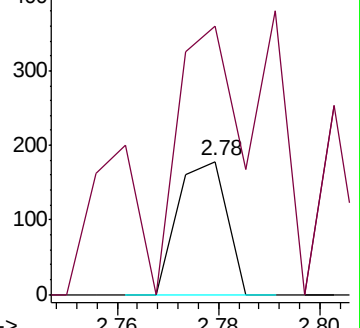
94 100

96 89.9 74.6 112.0



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.20 min Scan# 558

Delta R.T. -0.02 min

Lab File: VD067024.D

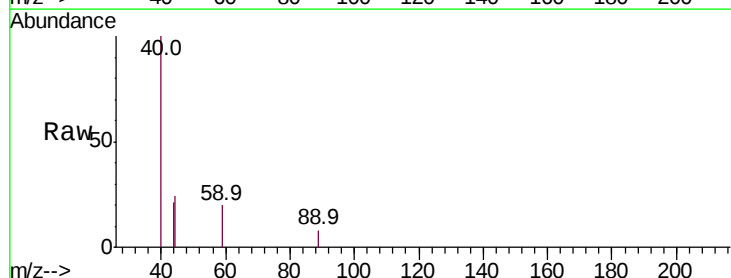
Acq: 02 Oct 2020 07:00

Tgt Ion: 59 Resp: 360

Ion Ratio Lower Upper

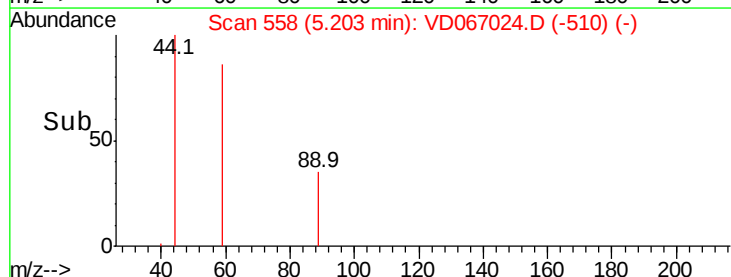
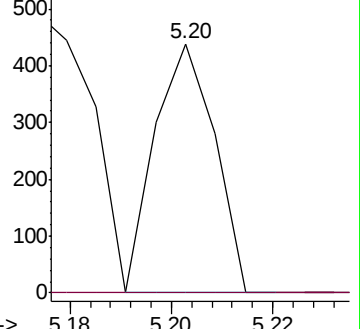
59 100

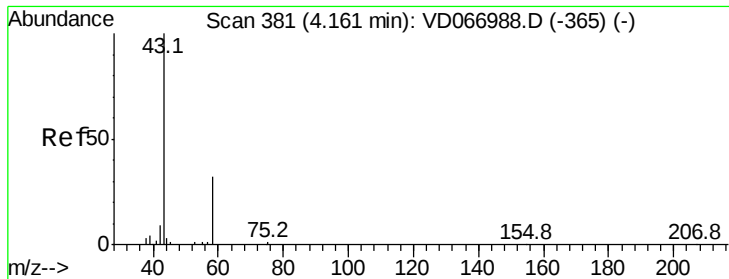
57 0.0 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VDC

Ion 57.00 (56.70 to 57.70): VDC





#16

Acetone

Concen: 3.454 ug/l

RT: 4.14 min Scan# 378

Delta R.T. -0.02 min

Lab File: VD067024.D

Acq: 02 Oct 2020 07:00

Instrument :

MSVOA\_D

ClientSampleId :

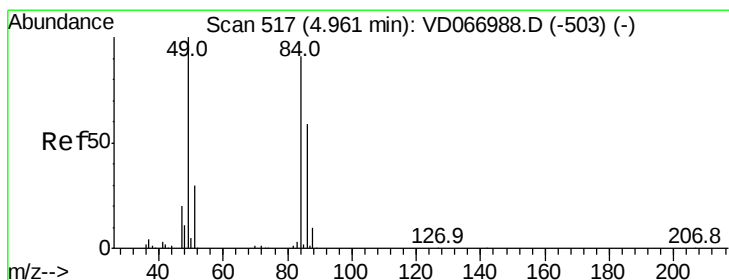
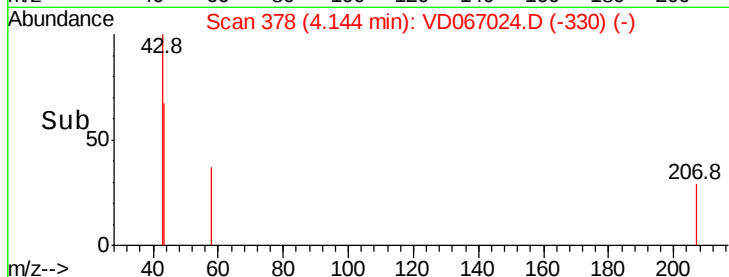
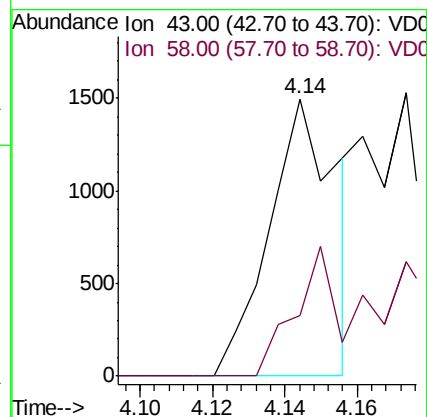
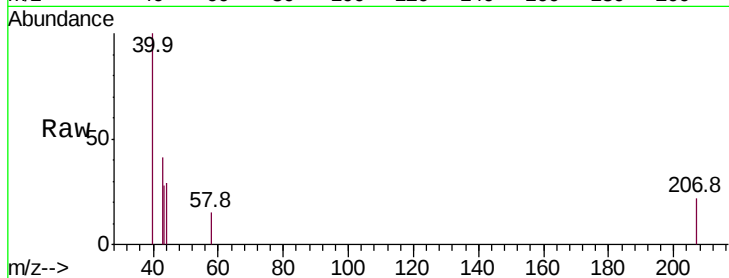
B-16(9-11)

Tot Ion: 43 Resp: 1931

Ion Ratio Lower Upper

43 100

58 22.0 25.9 38.9#



#20

Methylene Chloride

Concen: 1.079 ug/l

RT: 4.96 min Scan# 517

Delta R.T. 0.00 min

Lab File: VD067024.D

Acq: 02 Oct 2020 07:00

Tgt Ion: 84 Resp: 32521

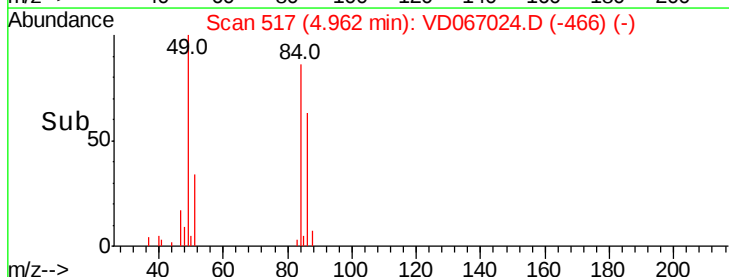
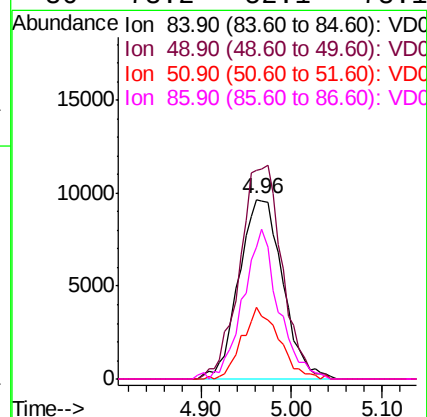
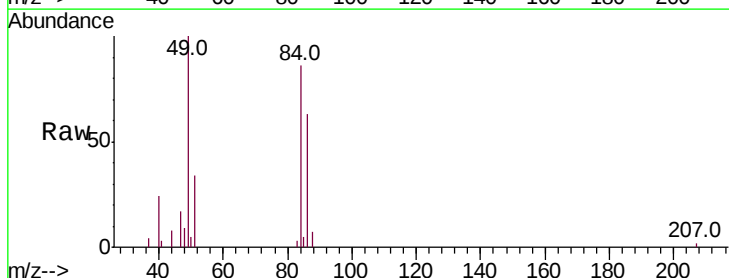
Ion Ratio Lower Upper

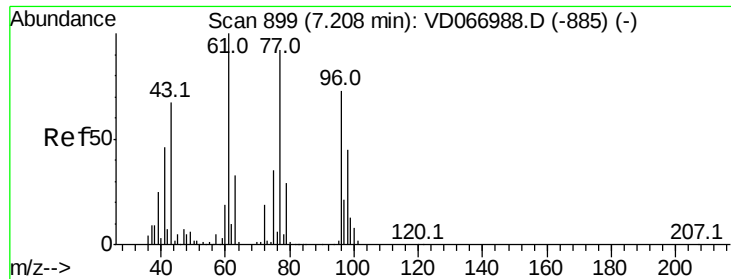
84 100

49 116.0 88.2 132.2

51 40.0 26.6 39.8#

86 73.2 52.1 78.1

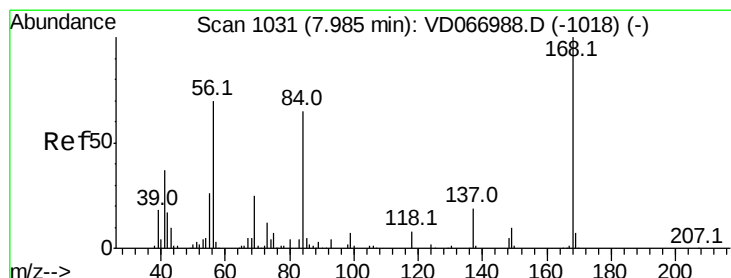
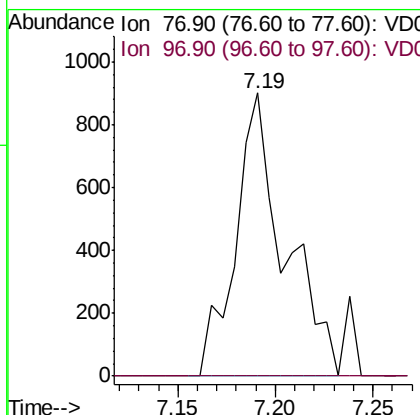
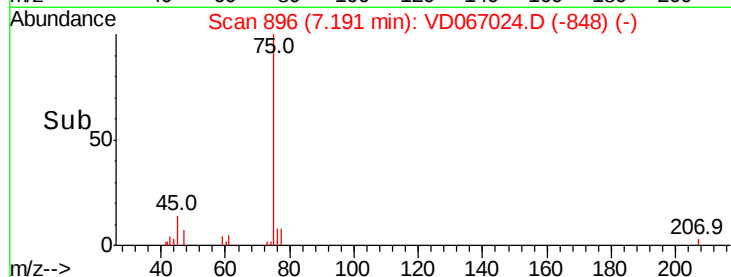
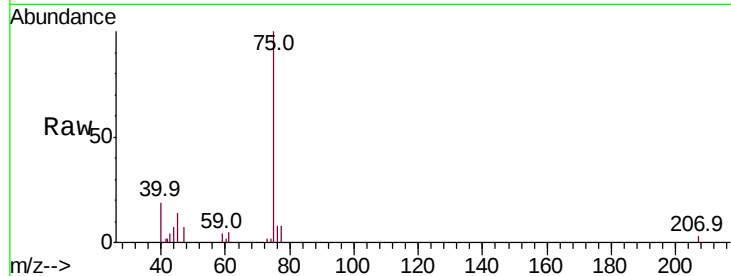




#26  
2,2-Dichloropropane  
Concen: Below Cal  
RT: 7.19 min Scan# 896  
Delta R.T. -0.02 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

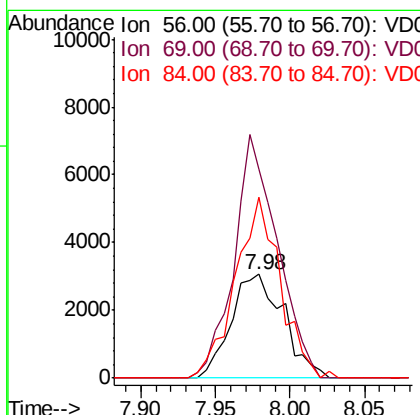
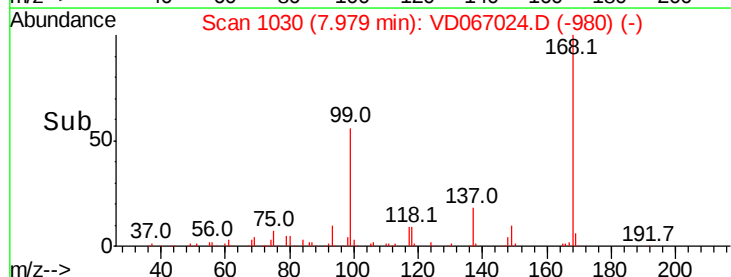
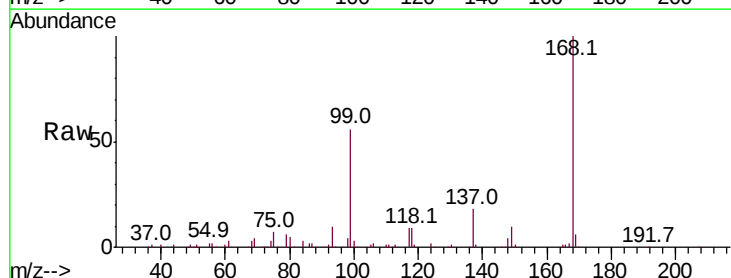
Instrument :  
MSVOA\_D  
ClientSampled :  
B-16(9-11)

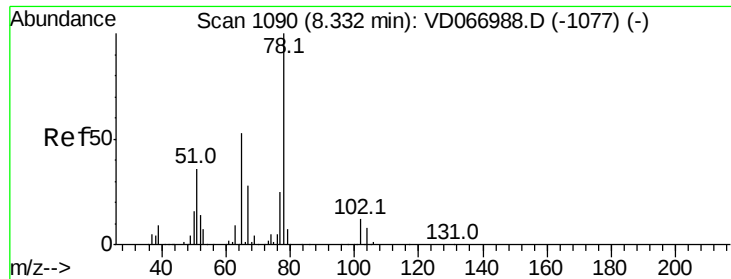
Tot Ion: 77 Resp: 1572  
Ion Ratio Lower Upper  
77 100  
97 0.0 11.4 34.2#



#31  
Cyclohexane  
Concen: 1.362 ug/l  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.01 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

Tgt Ion: 56 Resp: 7490  
Ion Ratio Lower Upper  
56 100  
69 201.3 29.0 43.6#  
84 174.5 74.2 111.2#

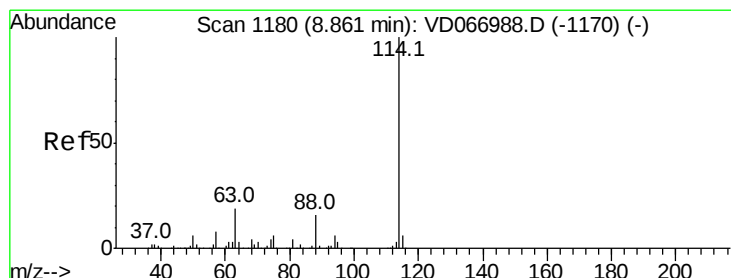
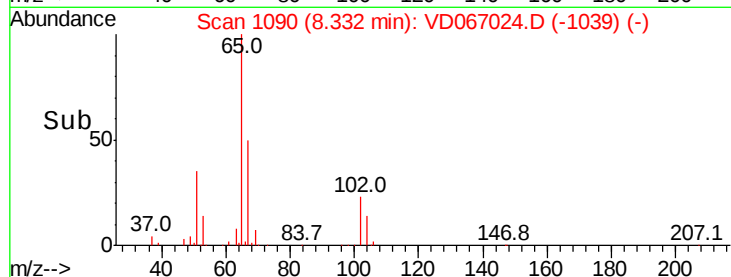
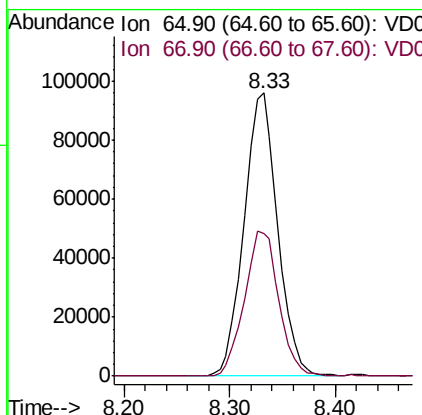
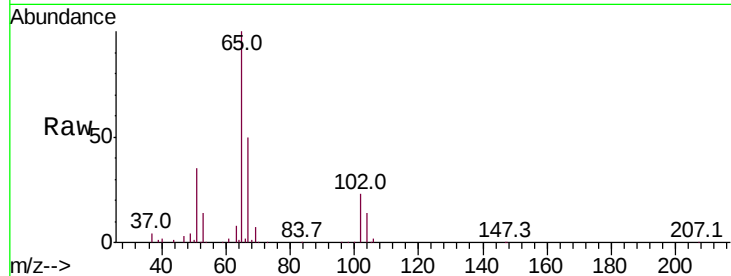




#33  
 1,2-Dichloroethane-d4  
 Concen: 58.090 ug/l  
 RT: 8.33 min Scan# 1090  
 Delta R.T. 0.00 min  
 Lab File: VD067024.D  
 Acq: 02 Oct 2020 07:00

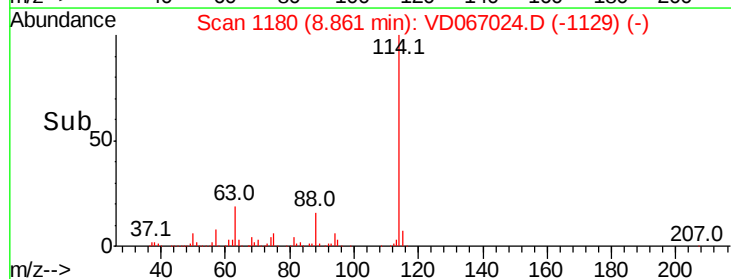
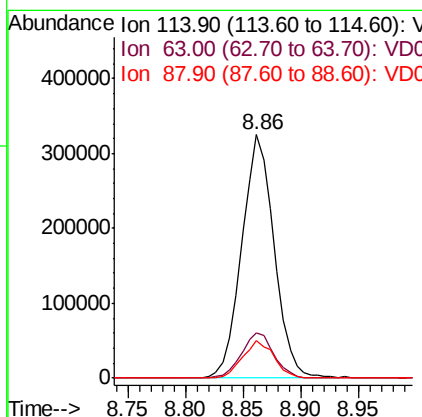
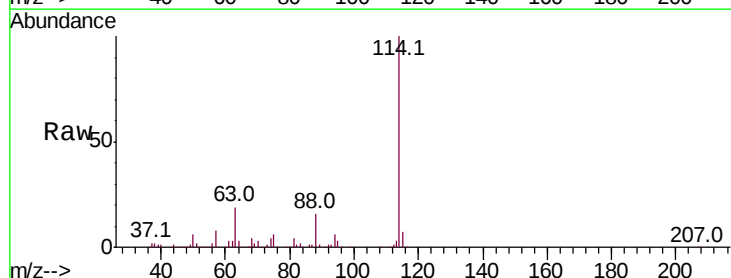
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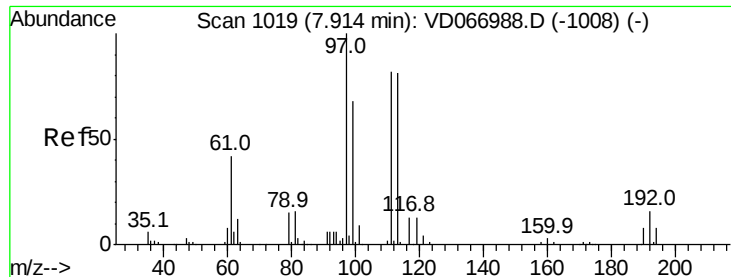
Tot Ion: 65 Resp: 212757  
 Ion Ratio Lower Upper  
 65 100  
 67 52.0 0.0 106.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.86 min Scan# 1180  
 Delta R.T. 0.00 min  
 Lab File: VD067024.D  
 Acq: 02 Oct 2020 07:00

Tgt Ion: 114 Resp: 633541  
 Ion Ratio Lower Upper  
 114 100  
 63 18.6 0.0 38.4  
 88 15.7 0.0 31.2

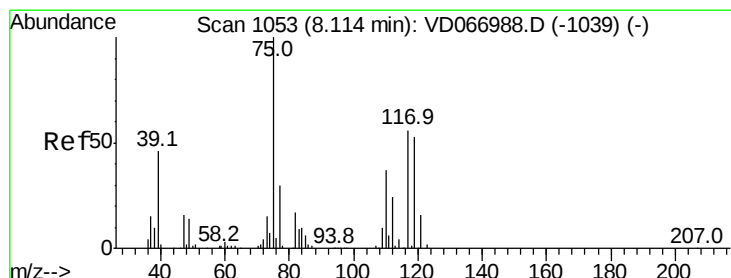
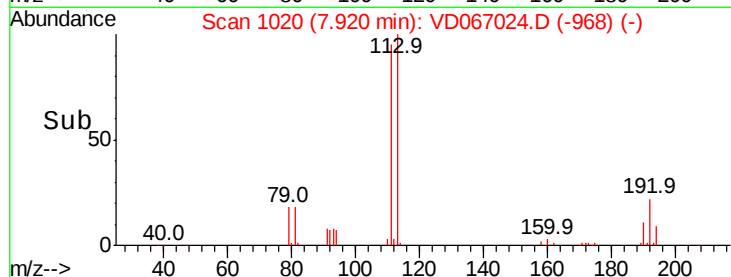
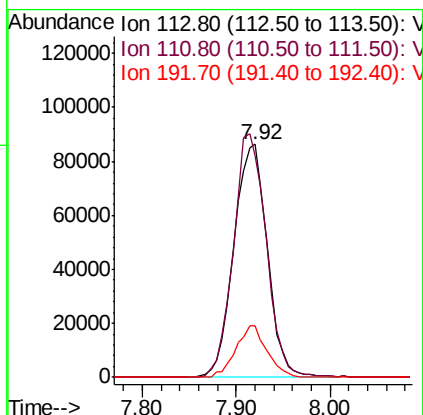
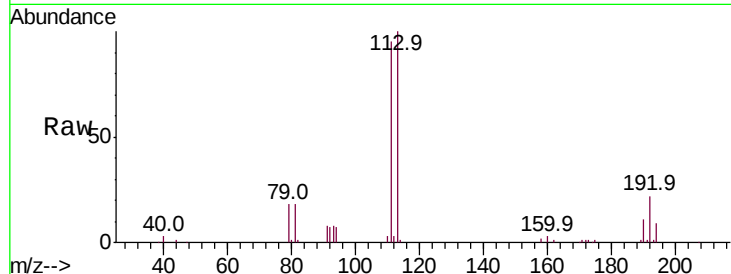




#35  
 Dibromofluoromethane  
 Concen: 51.583 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. 0.01 min  
 Lab File: VD067024.D  
 Acq: 02 Oct 2020 07:00

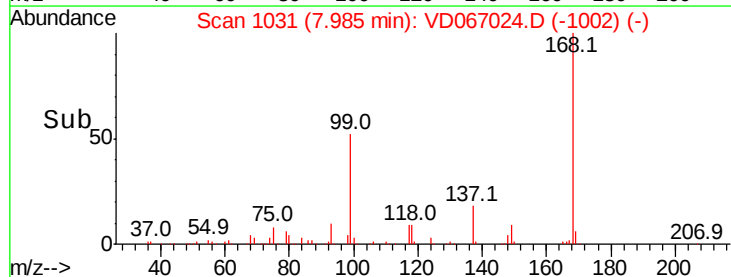
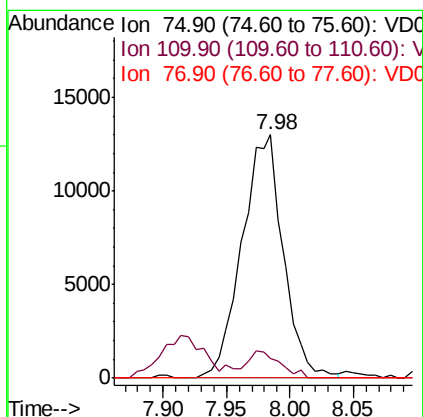
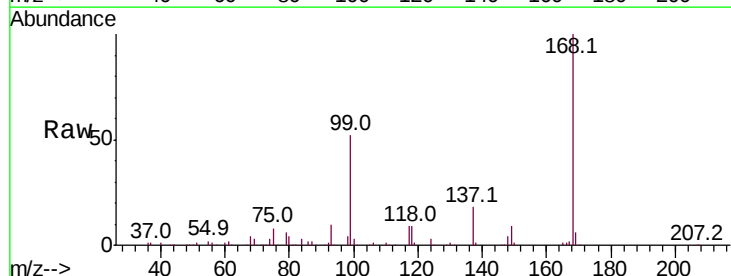
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 B-16(9-11)

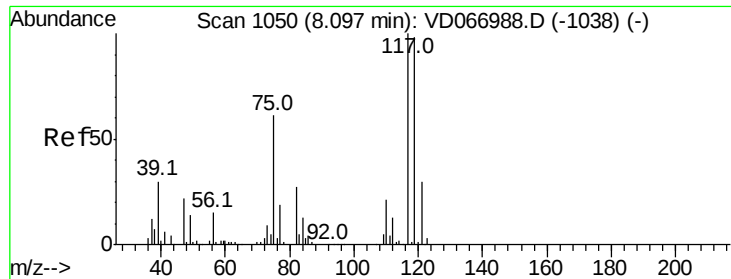
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.4 | 83.0  | 124.4 |
| 192     | 20.6  | 15.5  | 23.3  |



#36  
 1,1-Dichloropropene  
 Concen: 4.990 ug/l  
 RT: 7.98 min Scan# 1031  
 Delta R.T. -0.13 min  
 Lab File: VD067024.D  
 Acq: 02 Oct 2020 07:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.8   | 18.4  | 55.0# |
| 77      | 0.0   | 24.8  | 37.2# |





#38

Carbon Tetrachloride

Concen: 5.929 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.12 min

Lab File: VD067024.D

Acq: 02 Oct 2020 07:00

Instrument :

MSVOA\_D

ClientSampleId :

B-16(9-11)

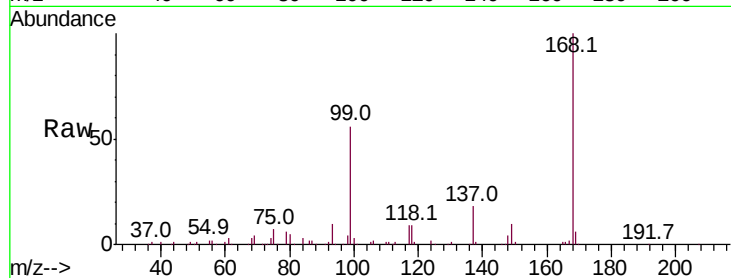
Tot Ion:117 Resp: 37884

Ion Ratio Lower Upper

117 100

119 7.4 78.7 118.1#

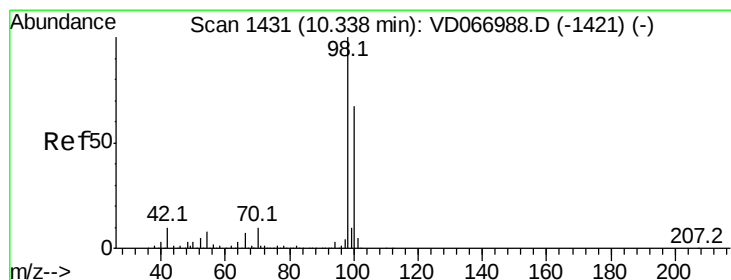
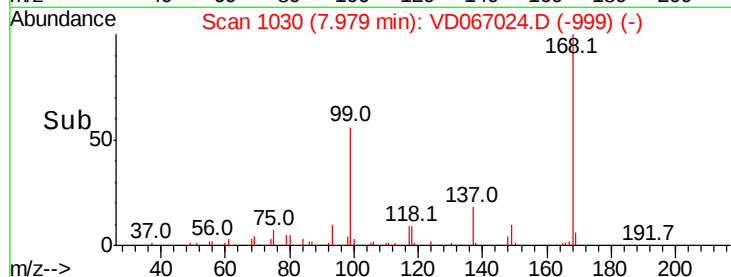
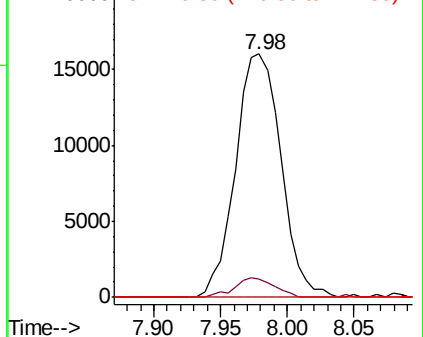
121 0.0 24.2 36.2#



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: 50.630 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. 0.00 min

Lab File: VD067024.D

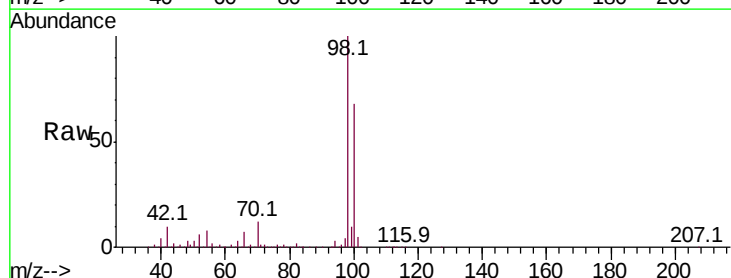
Acq: 02 Oct 2020 07:00

Tgt Ion: 98 Resp: 765198

Ion Ratio Lower Upper

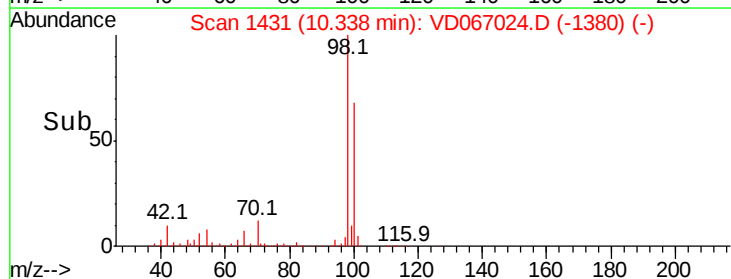
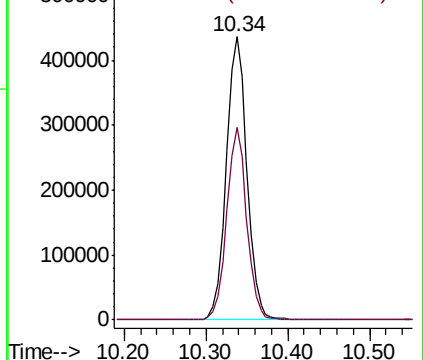
98 100

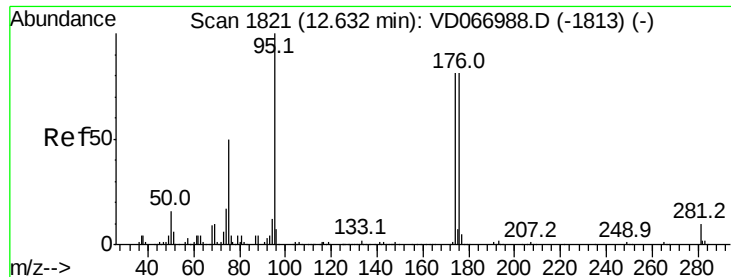
100 66.1 52.8 79.2



Abundance Ion 98.00 (97.70 to 98.70): V

Ion 100.00 (99.70 to 100.70): V

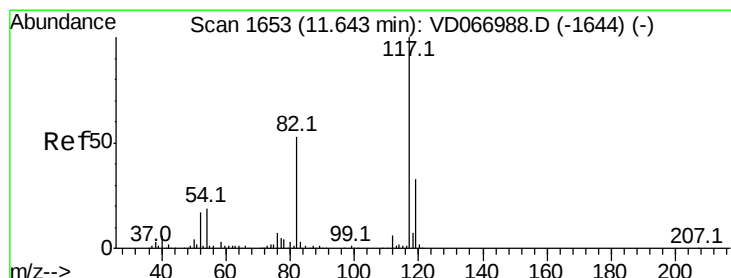
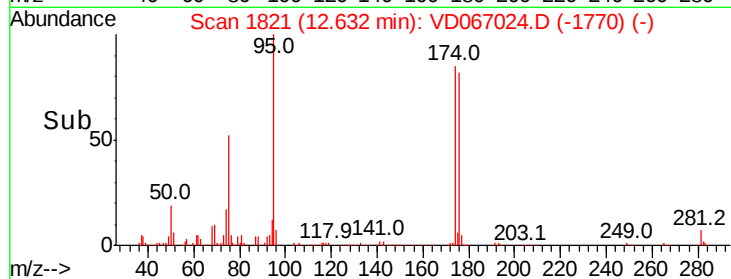
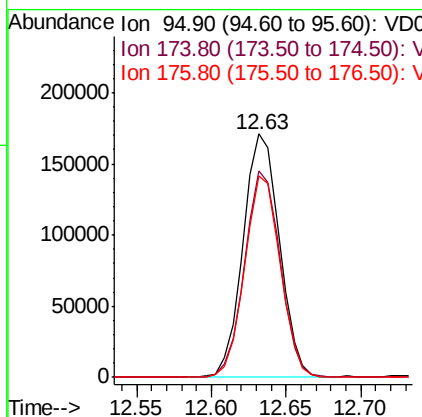
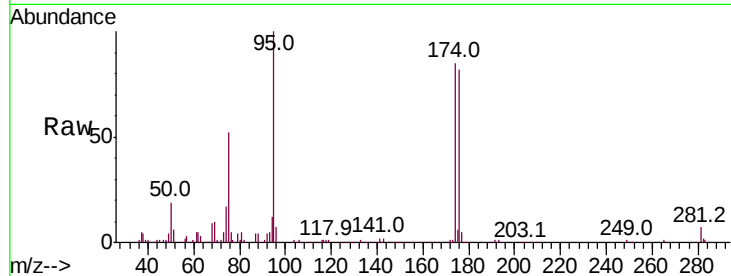




#62  
4-Bromofluorobenzene  
Concen: 56.157 ug/l  
RT: 12.63 min Scan# 1821  
Delta R.T. 0.00 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

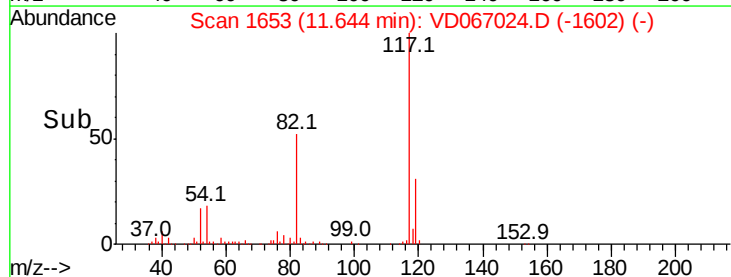
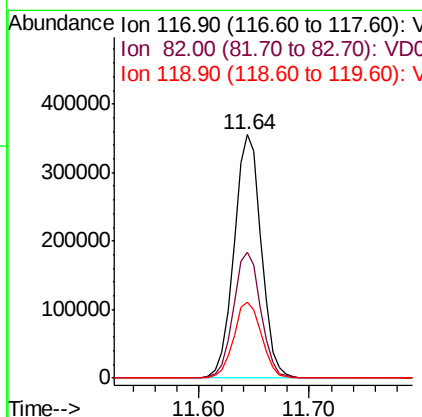
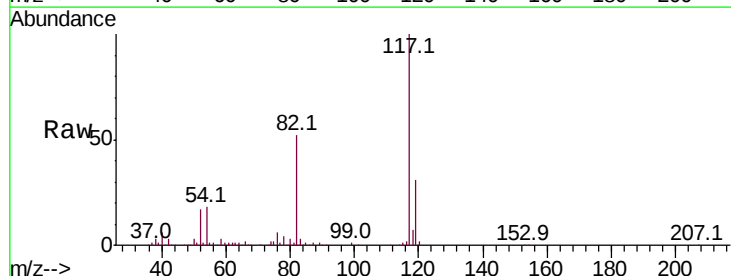
Instrument :  
MSVOA\_D  
ClientSampleId :  
B-16(9-11)

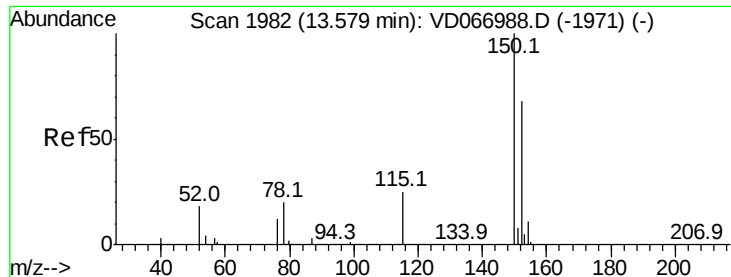
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 82.9  | 0.0   | 167.6 |
| 176     | 81.1  | 0.0   | 162.4 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1653  
Delta R.T. 0.00 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 51.6  | 42.6  | 63.8  |
| 119     | 31.4  | 26.3  | 39.5  |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. 0.00 min

Lab File: VD067024.D

Acq: 02 Oct 2020 07:00

Instrument :

MSVOA\_D

ClientSampleId :

B-16(9-11)

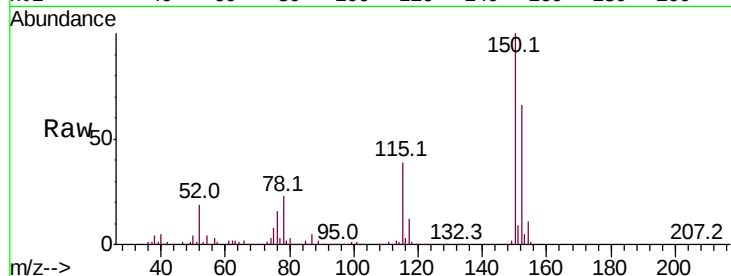
Tot Ion:152 Resp: 312003

Ion Ratio Lower Upper

152 100

115 59.3 29.6 88.8

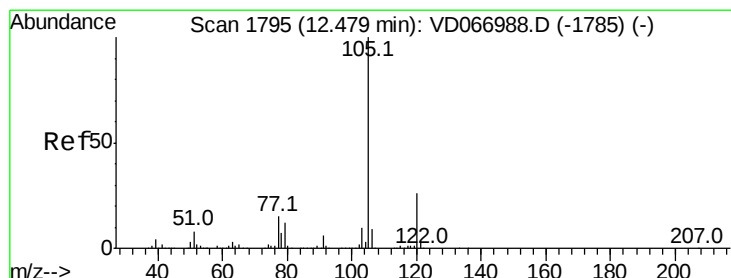
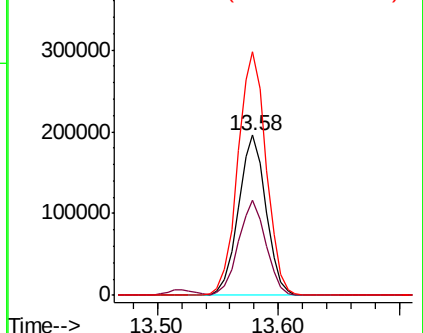
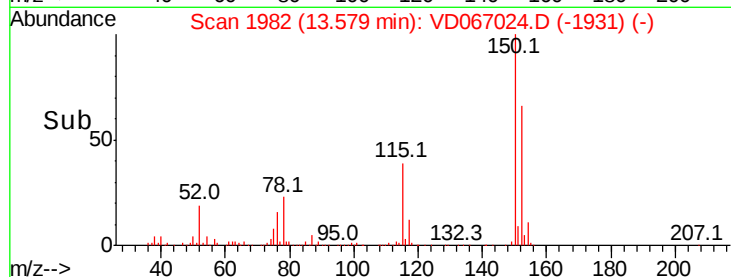
150 155.9 0.0 344.8



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



#73

Isopropylbenzene

Concen: 1.253 ug/l

RT: 12.48 min Scan# 1796

Delta R.T. 0.01 min

Lab File: VD067024.D

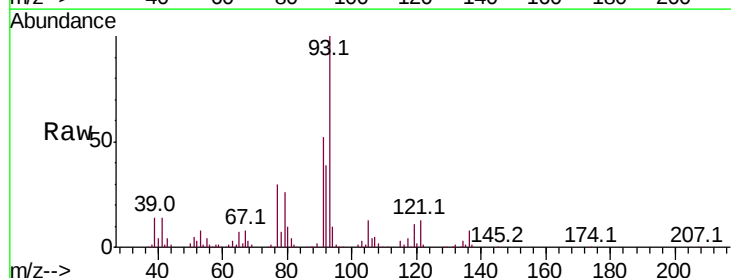
Acq: 02 Oct 2020 07:00

Tgt Ion:105 Resp: 26536

Ion Ratio Lower Upper

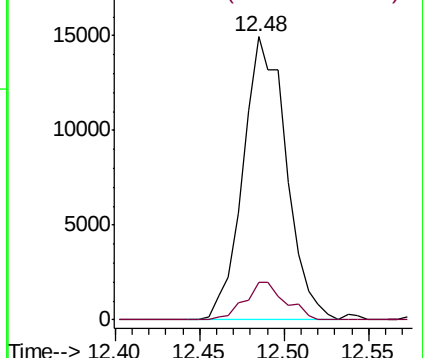
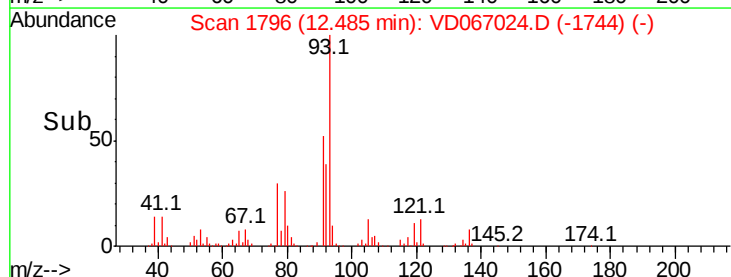
105 100

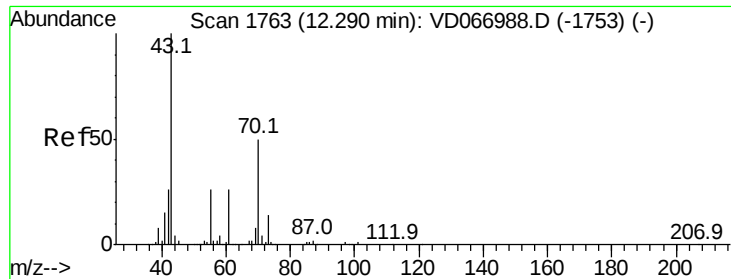
120 12.5 13.3 39.9#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

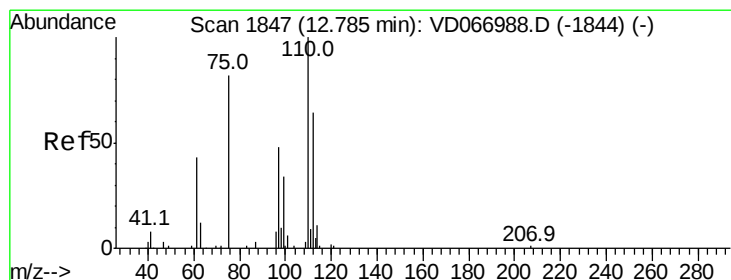
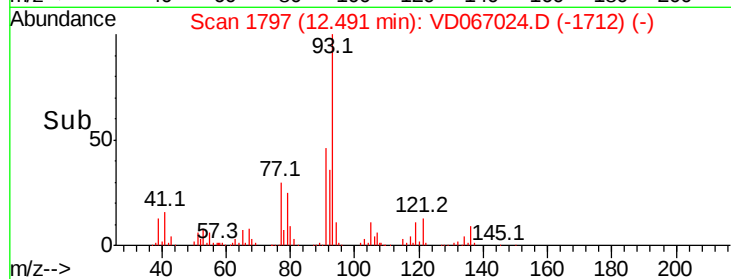
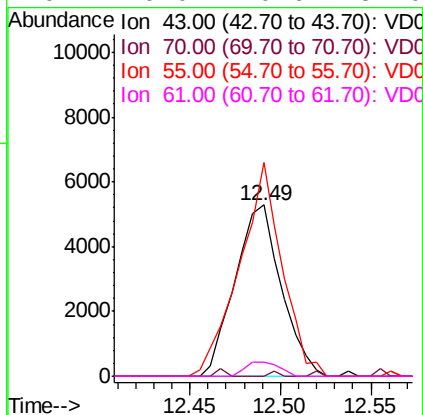
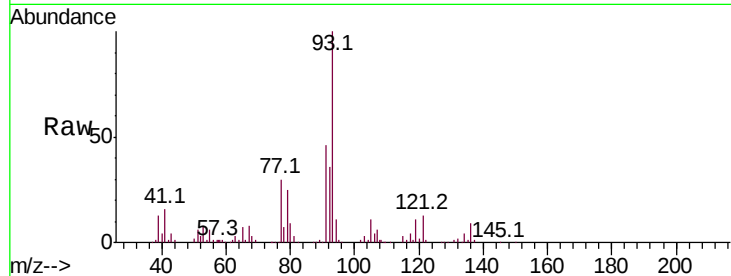




#74  
N-amvl acetate  
Concen: 2.466 ug/l  
RT: 12.49 min Scan# 1797  
Delta R.T. 0.20 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

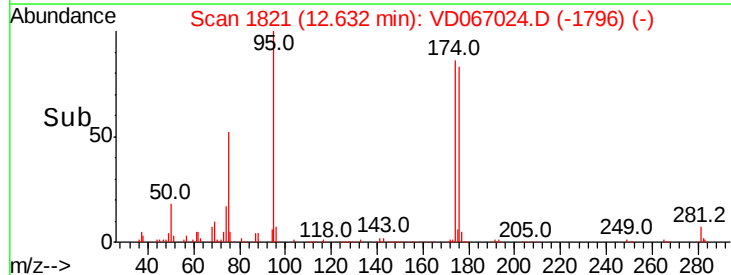
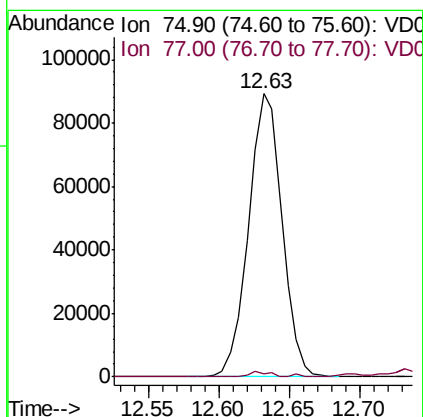
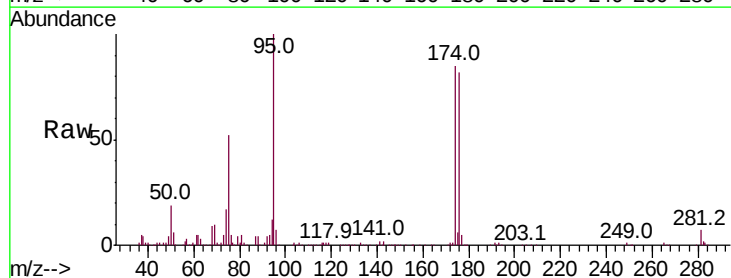
Instrument :  
MSVOA\_D  
ClientSampleId :  
B-16(9-11)

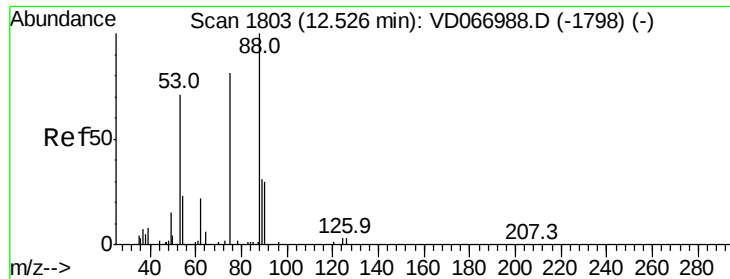
Tot Ion: 43 Resp: 9393  
Ion Ratio Lower Upper  
43 100  
70 0.6 38.2 57.2#  
55 114.6 22.4 33.6#  
61 6.0 20.6 31.0#



#76  
1,2,3-Trichloropropane  
Concen: 54.665 ug/l  
RT: 12.63 min Scan# 1821  
Delta R.T. -0.15 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

Tgt Ion: 75 Resp: 148560  
Ion Ratio Lower Upper  
75 100  
77 1.5 0.0 0.0#

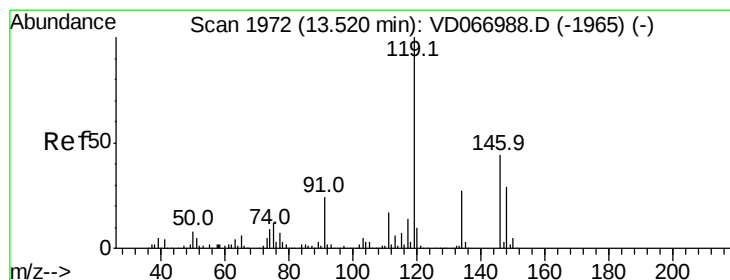
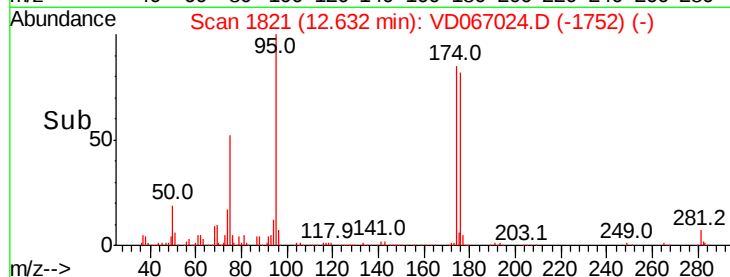
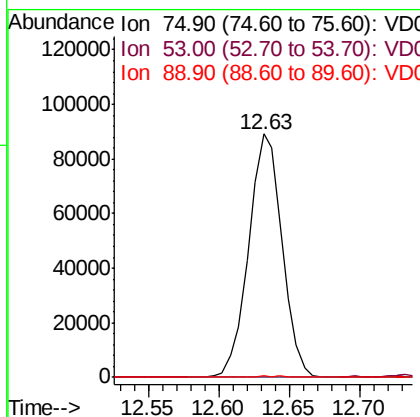
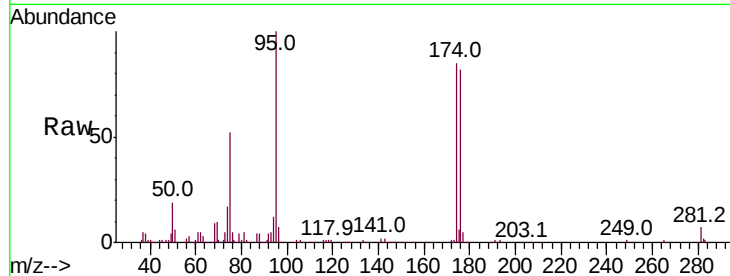




#81  
trans-1,4-Dichloro-2-butene  
Concen: 136.286 ug/l  
RT: 12.63 min Scan# 1821  
Delta R.T. 0.11 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

Instrument :  
MSVOA\_D  
ClientSampleId :  
B-16(9-11)

Tot Ion: 75 Resp: 148560  
Ion Ratio Lower Upper  
75 100  
53 0.0 73.8 110.6#  
89 0.2 38.9 58.3#



#86  
p-Isopropyltoluene  
Concen: 7.432 ug/l  
RT: 13.52 min Scan# 1972  
Delta R.T. 0.00 min  
Lab File: VD067024.D  
Acq: 02 Oct 2020 07:00

Tgt Ion: 119 Resp: 146261  
Ion Ratio Lower Upper  
119 100  
134 27.3 13.1 39.1  
91 30.3 11.7 35.1

