

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD091120\  
 Data File : VD066658.D  
 Acq On : 11 Sep 2020 19:42  
 Operator : VA/SY  
 Sample : L3981-09  
 Misc : 11.74/5.00ml/MSVOA D/SOIL  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 B19-7-9

Quant Time: Sep 14 05:28:26 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D090320S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 04 01:57:04 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 363721   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.86  | 114  | 669166   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 620053   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 261515   | 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   | 232780   | 52.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.80% |          |
| 35) Dibromofluoromethane    | 7.91  | 113  | 231502   | 51.28 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.56% |          |
| 50) Toluene-d8              | 10.34 | 98   | 824558   | 51.10 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.20% |          |
| 62) 4-Bromofluorobenzene    | 12.63 | 95   | 290690   | 54.33 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.66% |          |

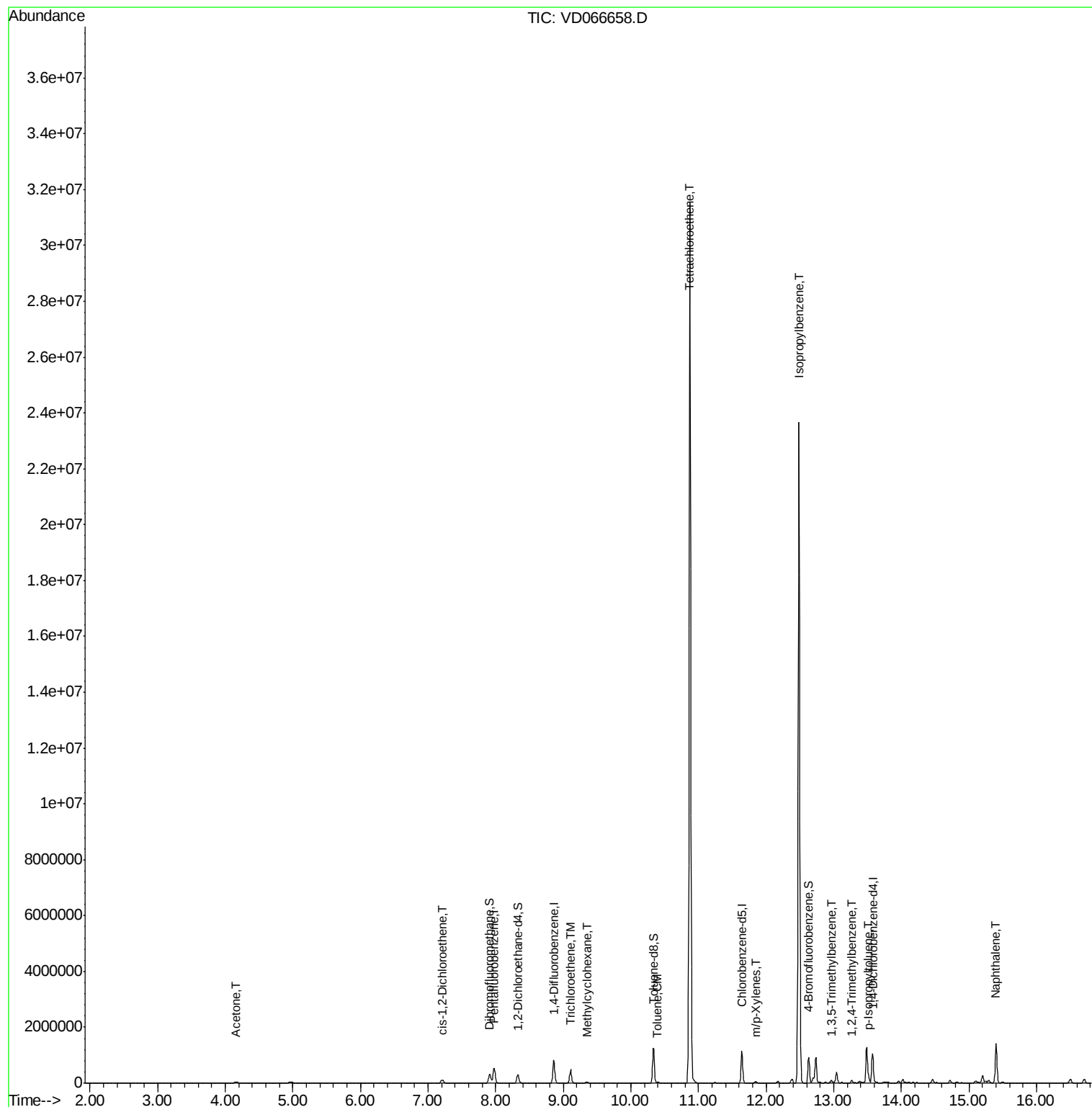
| Target Compounds           | R.T.  | QIon | Response | Conc     | Units  | Qvalue |
|----------------------------|-------|------|----------|----------|--------|--------|
| 16) Acetone                | 4.16  | 43   | 84462    | 104.311  | ug/l   | 93     |
| 27) cis-1,2-Dichloroethene | 7.21  | 96   | 60596    | 12.949   | ug/l   | 90     |
| 39) Methylcyclohexane      | 9.35  | 83   | 15759    | 2.027    | ug/l   | 89     |
| 44) Trichloroethene        | 9.11  | 130  | 170427   | 34.065   | ug/l   | 88     |
| 52) Toluene                | 10.40 | 92   | 13067    | 1.082    | ug/l   | 96     |
| 64) Tetrachloroethene      | 10.87 | 164  | 6369314  | 1525.643 | ug/l   | 96     |
| 68) m/p-Xylenes            | 11.84 | 106  | 14226    | 1.630    | ug/l   | 92     |
| 73) Isopropylbenzene       | 12.48 | 105  | 1009990  | 52.163   | ug/l # | 62     |
| 80) 1,3,5-Trimethylbenzene | 12.96 | 105  | 27270    | 1.673    | ug/l   | 94     |
| 84) 1,2,4-Trimethylbenzene | 13.27 | 105  | 43155    | 2.660    | ug/l   | 99     |
| 86) p-Isopropyltoluene     | 13.52 | 119  | 153690   | 8.906    | ug/l # | 74     |
| 95) Naphthalene            | 15.40 | 128  | 1214522  | 154.607  | ug/l   | 99     |

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

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QLast Update : Fri Sep 04 01:57:04 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: VD066658.D

Acq: 11 Sep 2020 19:42

Instrument :

MSVOA\_D

ClientSampleId :

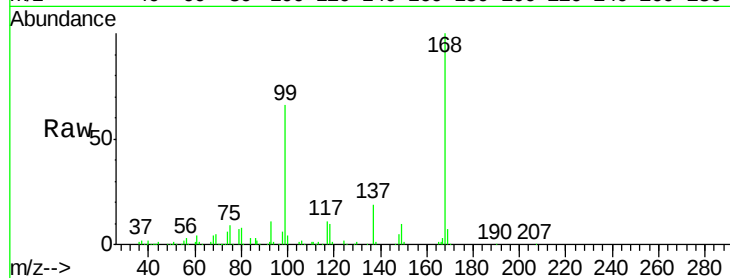
B19-7-9

Tot Ion:168 Resp: 363721

Ion Ratio Lower Upper

168 100

99 66.2 50.5 75.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

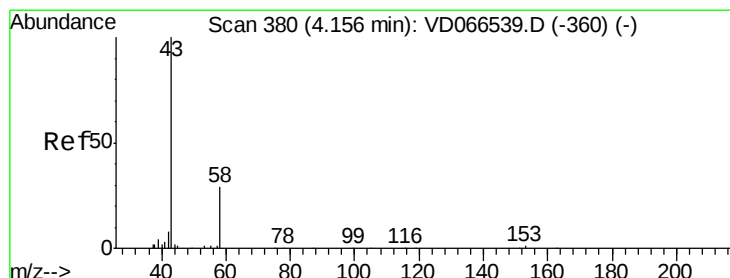
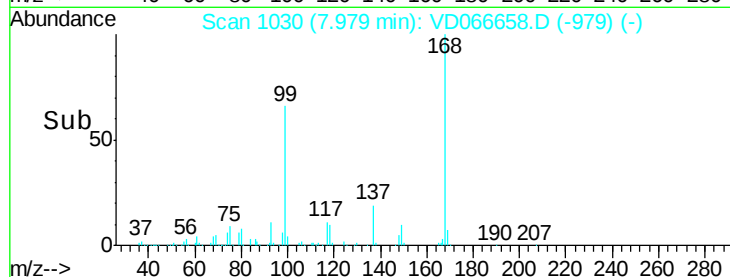
150000

100000

50000

0

Time-->



#16

Acetone

Concen: 104.311 ug/l

RT: 4.16 min Scan# 380

Delta R.T. -0.00 min

Lab File: VD066658.D

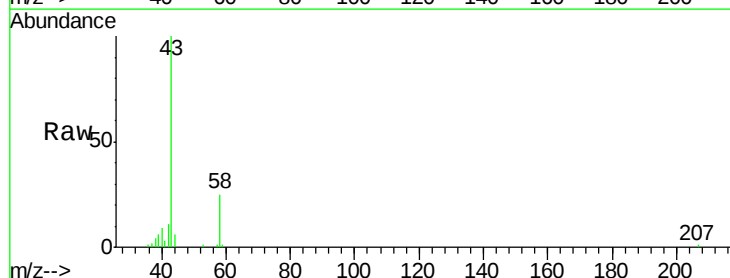
Acq: 11 Sep 2020 19:42

Tgt Ion: 43 Resp: 84462

Ion Ratio Lower Upper

43 100

58 25.0 22.9 34.3



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

4.16

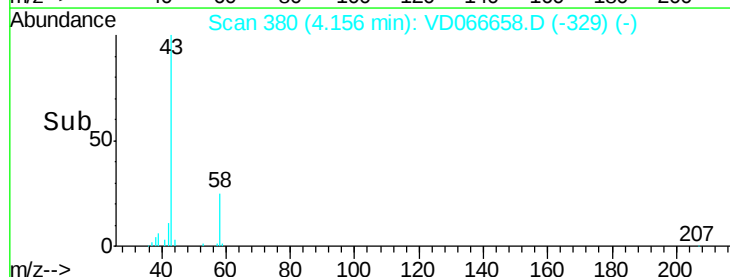
30000

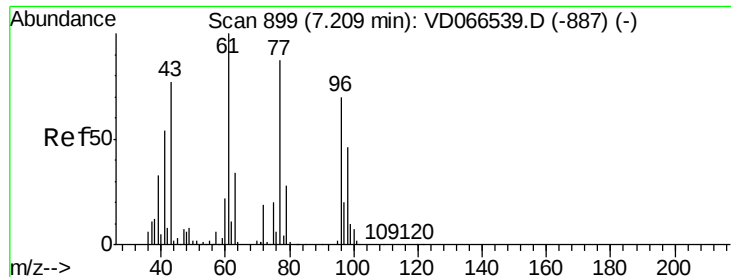
20000

10000

0

Time-->



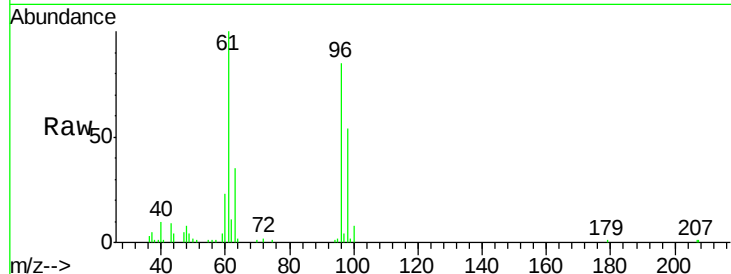


#27

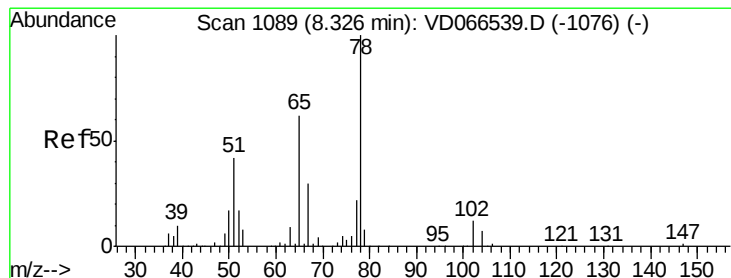
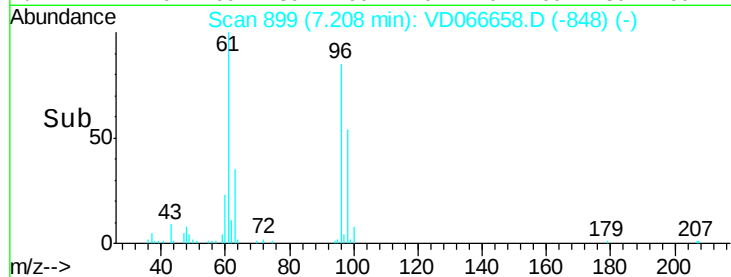
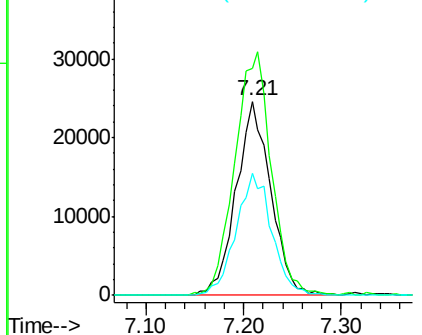
cis-1,2-Dichloroethene  
 Concen: 12.949 ug/l  
 RT: 7.21 min Scan# 899  
 Delta R.T. -0.00 min  
 Lab File: VD066658.D  
 Acq: 11 Sep 2020 19:42

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 B19-7-9

| Tot Ion | 96    | Resp  | 60596 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 96      | 100   |       |       |
| 61      | 132.8 | 0.0   | 301.0 |
| 98      | 64.5  | 0.0   | 129.8 |



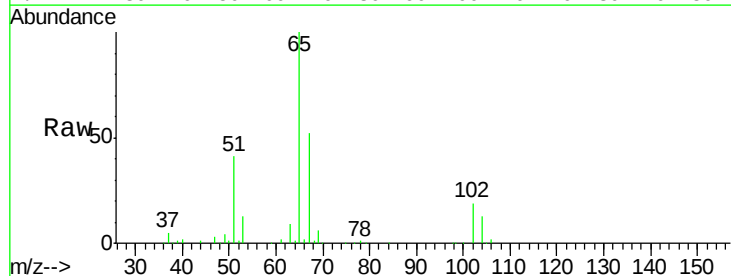
Abundance Ion 95.90 (95.60 to 96.60): VDC  
 Ion 60.90 (60.60 to 61.60): VDC  
 Ion 97.90 (97.60 to 98.60): VDC



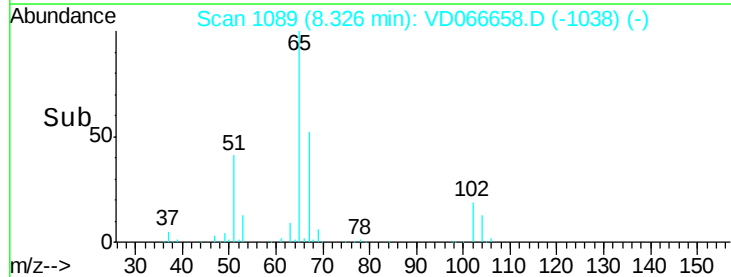
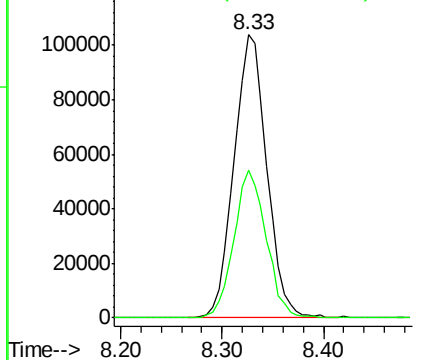
#33

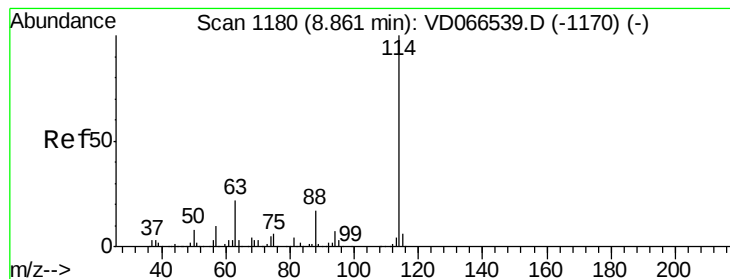
1,2-Dichloroethane-d4  
 Concen: 52.896 ug/l  
 RT: 8.33 min Scan# 1089  
 Delta R.T. -0.00 min  
 Lab File: VD066658.D  
 Acq: 11 Sep 2020 19:42

| Tgt Ion | 65    | Resp  | 232780 |
|---------|-------|-------|--------|
| Ion     | Ratio | Lower | Upper  |
| 65      | 100   |       |        |
| 67      | 51.4  | 0.0   | 102.8  |



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: 8.86 min Scan# 1180

Delta R.T. -0.00 min

Lab File: VD066658.D

Acq: 11 Sep 2020 19:42

Instrument :

MSVOA\_D

ClientSampleId :

B19-7-9

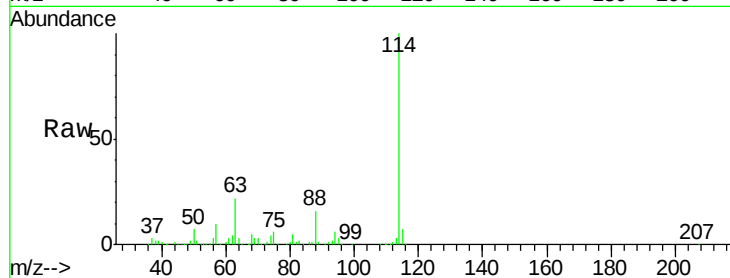
Tot Ion:114 Resp: 669166

Ion Ratio Lower Upper

114 100

63 22.0 0.0 43.2

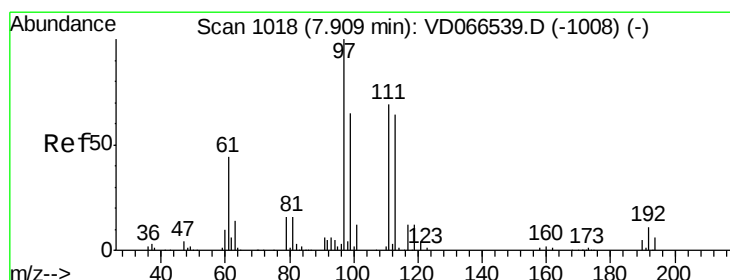
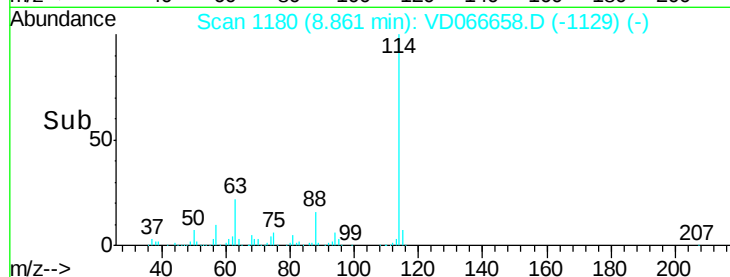
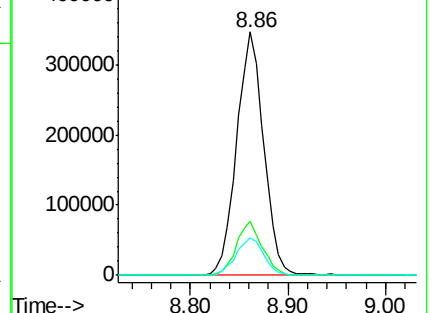
88 15.7 0.0 33.2



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 51.282 ug/l

RT: 7.91 min Scan# 1018

Delta R.T. -0.00 min

Lab File: VD066658.D

Acq: 11 Sep 2020 19:42

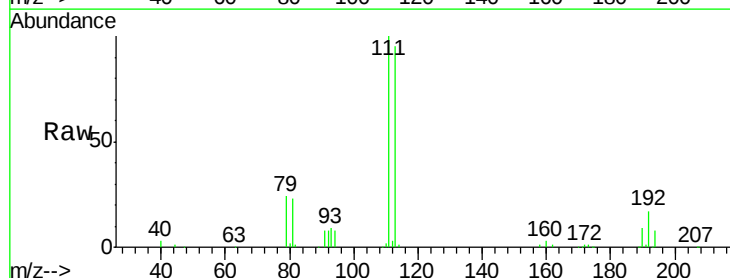
Tgt Ion:113 Resp: 231502

Ion Ratio Lower Upper

113 100

111 103.4 83.2 124.8

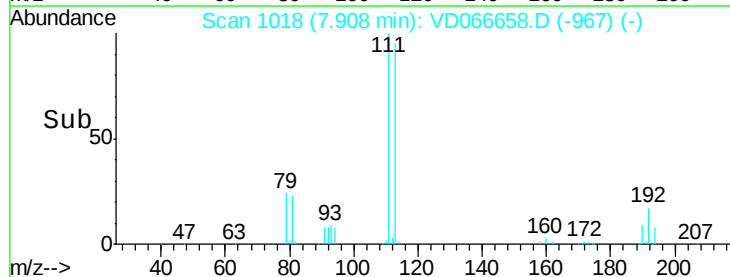
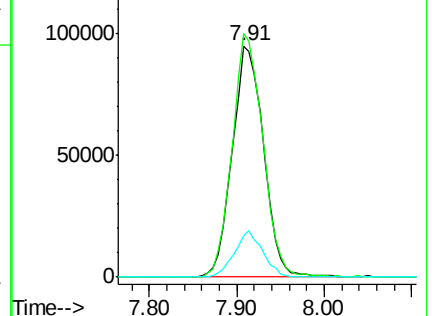
192 18.1 13.7 20.5

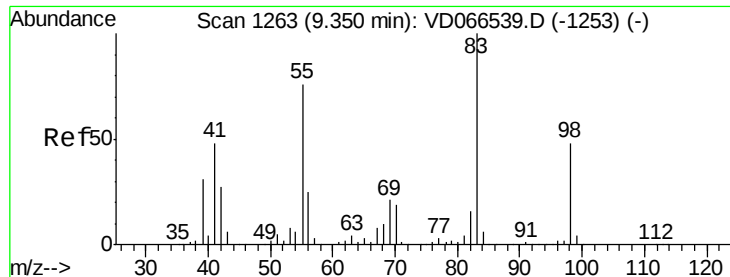


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

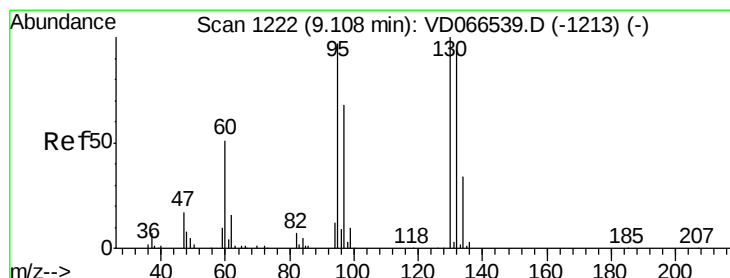
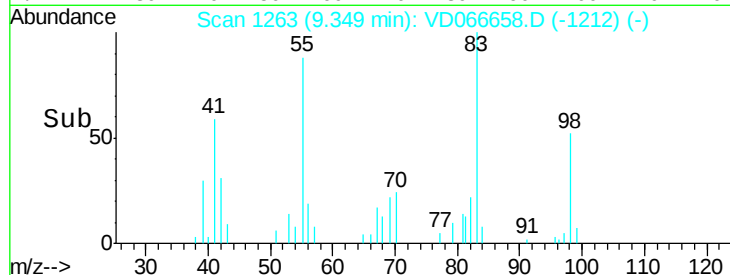
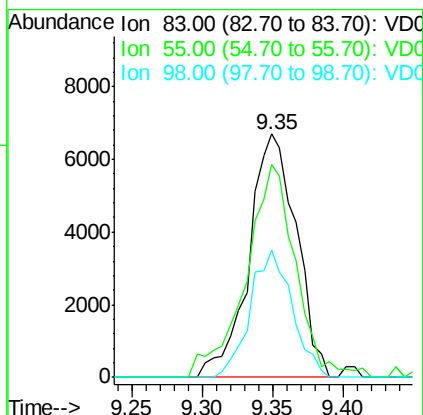
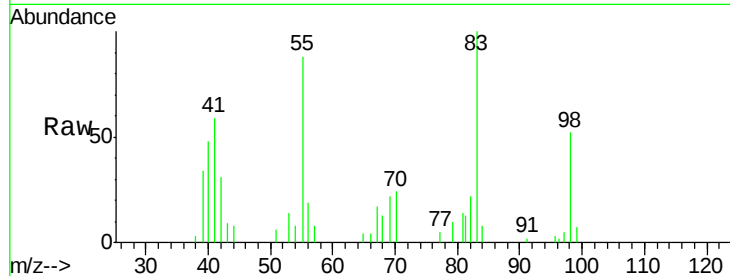




#39  
Methvlcvclohexane  
Concen: 2.027 ug/l  
RT: 9.35 min Scan# 1263  
Delta R.T. -0.00 min  
Lab File: VD066658.D  
Acq: 11 Sep 2020 19:42

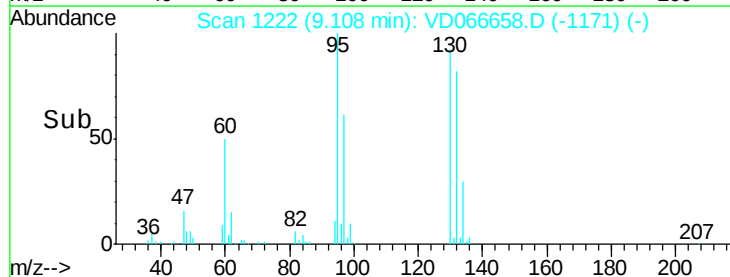
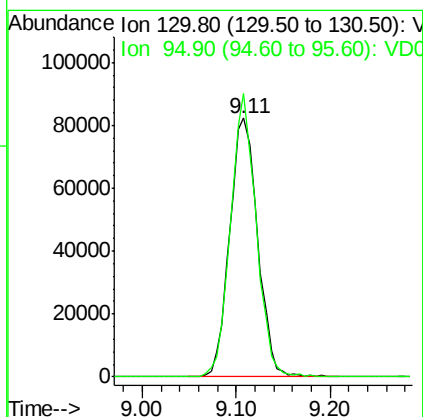
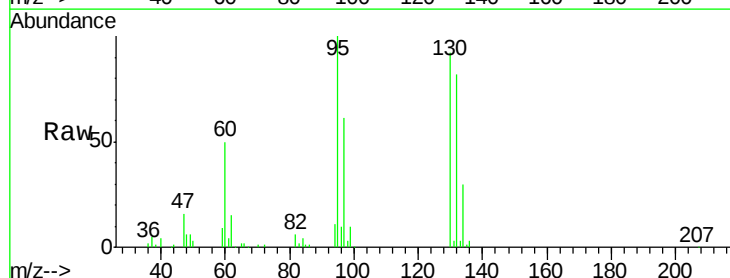
Instrument :  
MSVOA\_D  
ClientSampleId :  
B19-7-9

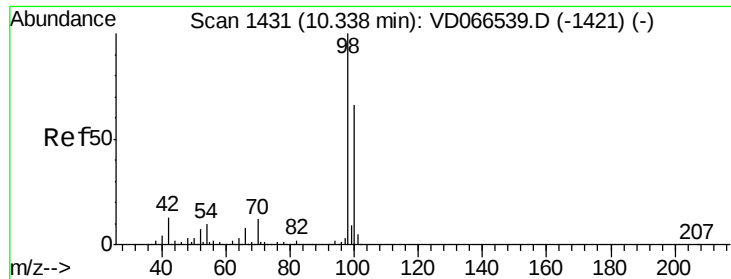
Tot Ion: 83 Resp: 15759  
Ion Ratio Lower Upper  
83 100  
55 87.7 60.8 91.2  
98 52.1 38.6 58.0



#44  
Trichloroethene  
Concen: 34.065 ug/l  
RT: 9.11 min Scan# 1222  
Delta R.T. -0.00 min  
Lab File: VD066658.D  
Acq: 11 Sep 2020 19:42

Tgt Ion:130 Resp: 170427  
Ion Ratio Lower Upper  
130 100  
95 109.3 0.0 194.4





#50

Toluene-d8

Concen: 51.105 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. -0.00 min

Lab File: VD066658.D

Acq: 11 Sep 2020 19:42

Instrument :

MSVOA\_D

ClientSampleId :

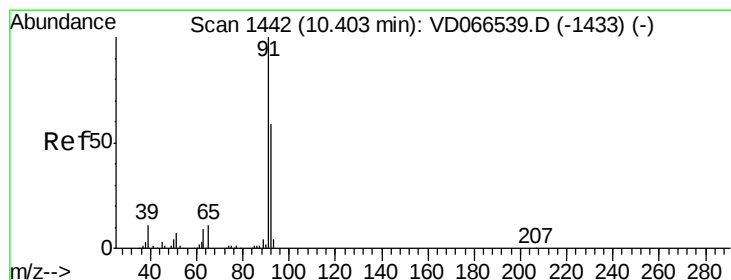
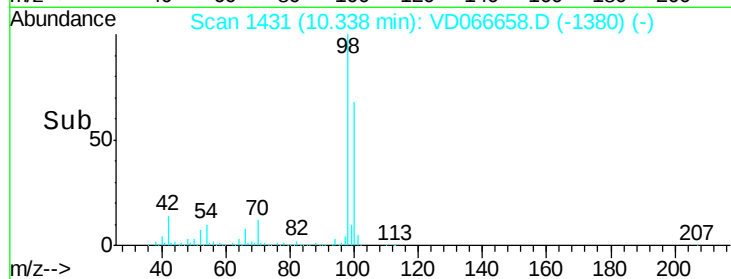
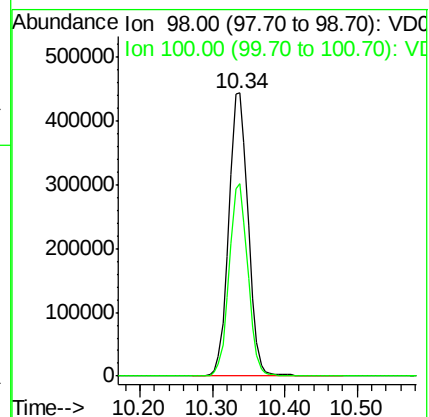
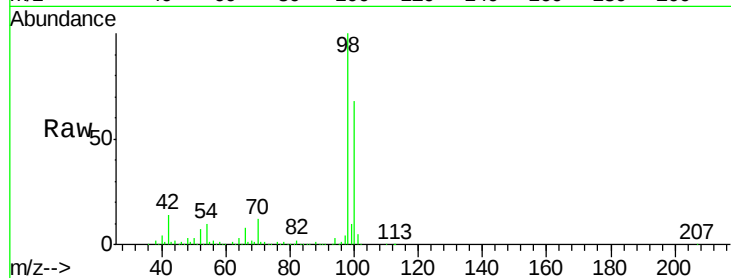
B19-7-9

Tot Ion: 98 Resp: 824558

Ion Ratio Lower Upper

98 100

100 65.7 52.9 79.3



#52

Toluene

Concen: 1.082 ug/l

RT: 10.40 min Scan# 1441

Delta R.T. -0.01 min

Lab File: VD066658.D

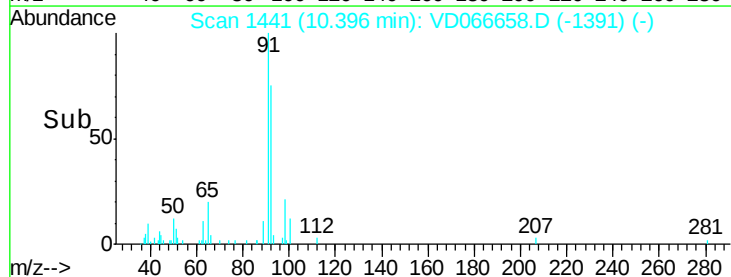
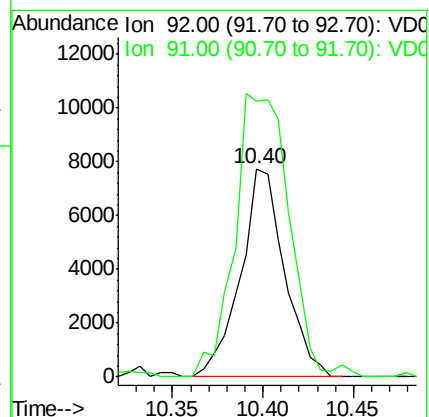
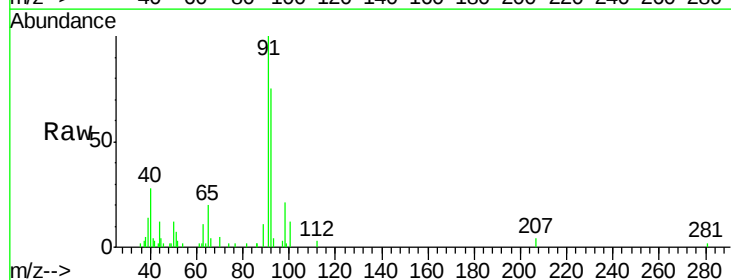
Acq: 11 Sep 2020 19:42

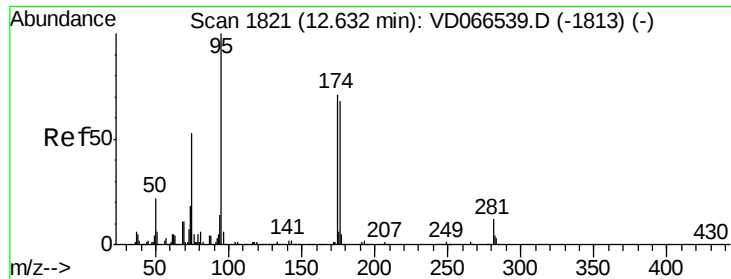
Tgt Ion: 92 Resp: 13067

Ion Ratio Lower Upper

92 100

91 166.0 137.4 206.2

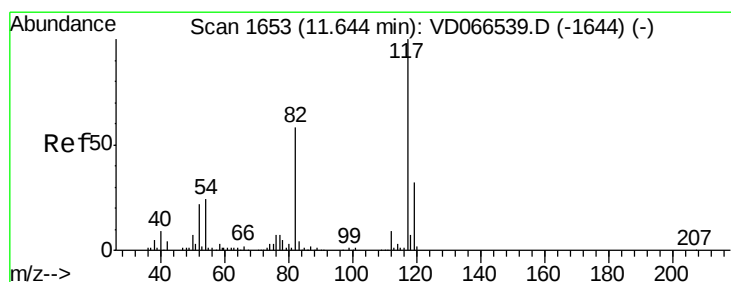
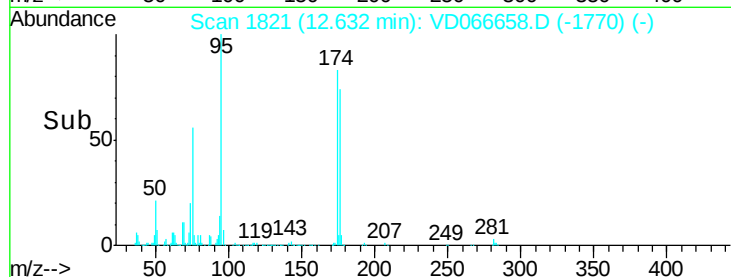
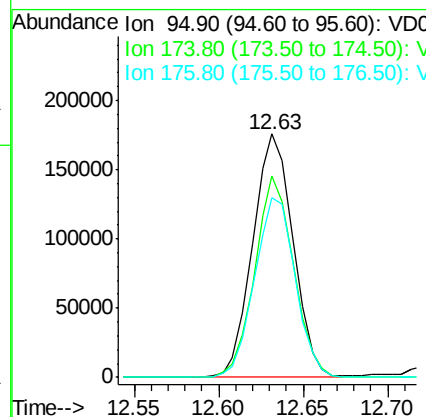
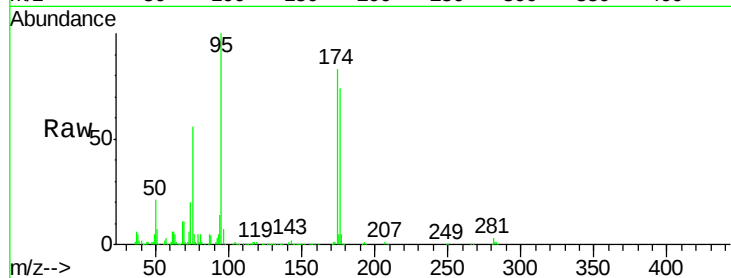




#62  
4-Bromofluorobenzene  
Concen: 54.334 ug/l  
RT: 12.63 min Scan# 1821  
Delta R.T. -0.00 min  
Lab File: VD066658.D  
Acq: 11 Sep 2020 19:42

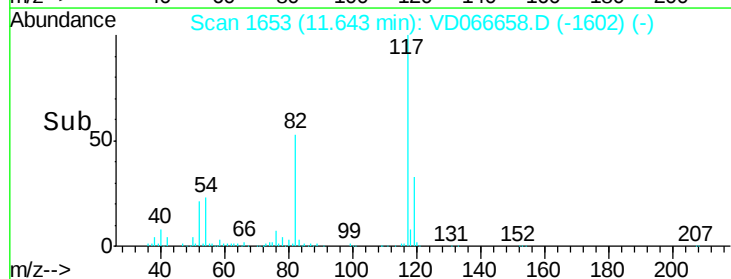
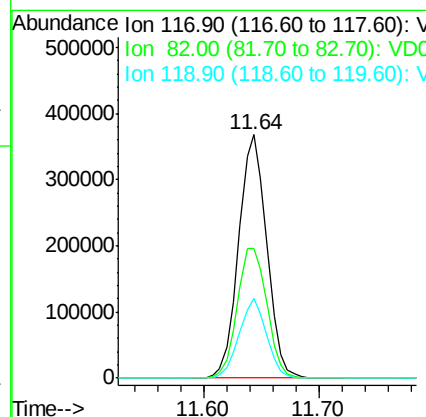
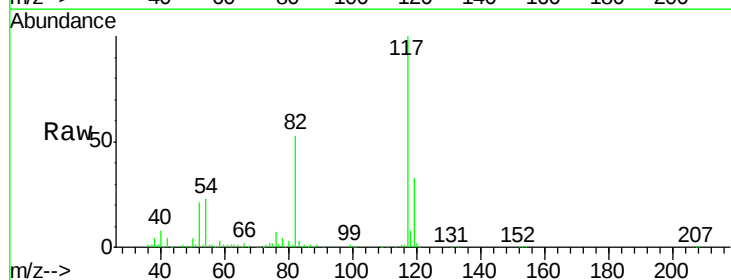
Instrument :  
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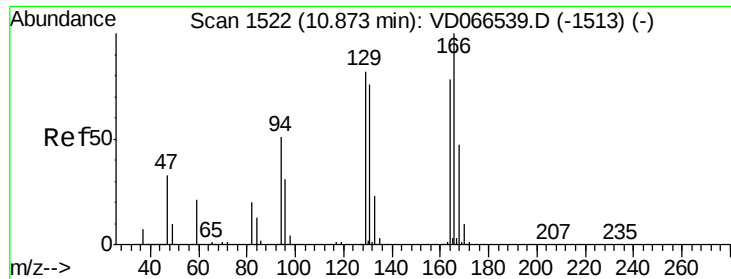
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 79.8  | 0.0   | 155.8 |
| 176     | 74.5  | 0.0   | 148.6 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1653  
Delta R.T. -0.00 min  
Lab File: VD066658.D  
Acq: 11 Sep 2020 19:42

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.3  | 46.2  | 69.2  |
| 119     | 32.5  | 25.8  | 38.8  |





#64

Tetrachloroethene

Concen: 1525.643 ug/l

RT: 10.87 min Scan# 1522

Delta R.T. -0.00 min

Lab File: VD066658.D

Acq: 11 Sep 2020 19:42

Instrument :

MSVOA\_D

ClientSampleId :

B19-7-9

Tot Ion:164 Resp: 6369314

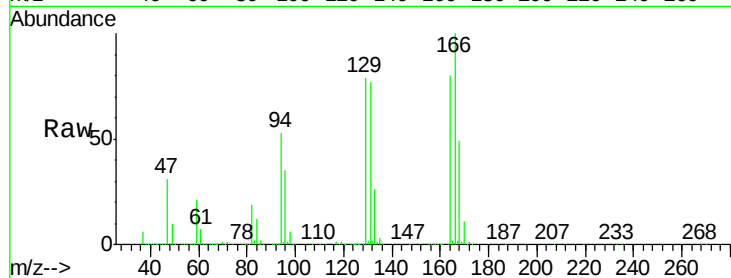
Ion Ratio Lower Upper

164 100

166 125.0 103.2 154.8

129 99.4 84.5 126.7

131 96.3 78.9 118.3

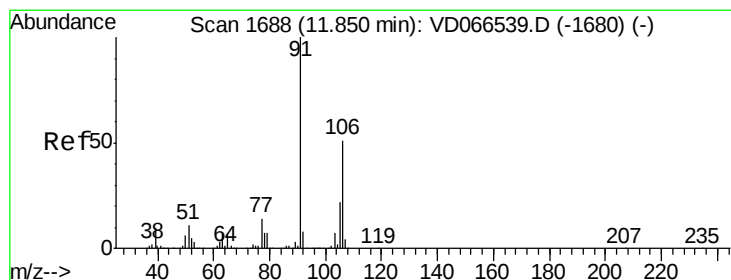
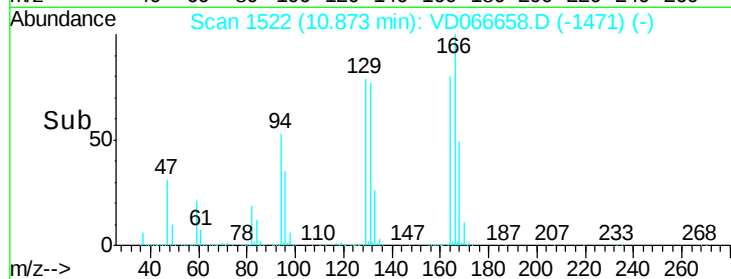
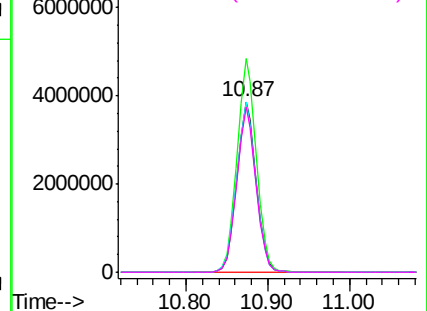


Abundance Ion 163.80 (163.50 to 164.50): V

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



#68

m/p-Xylenes

Concen: 1.630 ug/l

RT: 11.84 min Scan# 1687

Delta R.T. -0.01 min

Lab File: VD066658.D

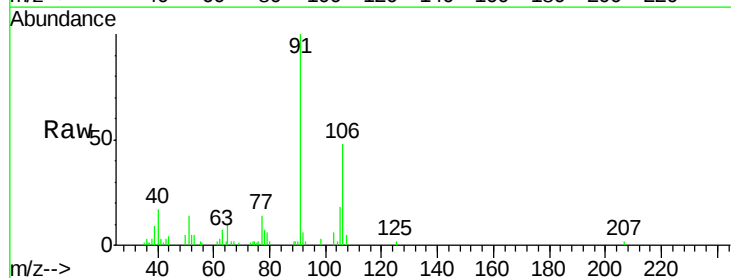
Acq: 11 Sep 2020 19:42

Tgt Ion:106 Resp: 14226

Ion Ratio Lower Upper

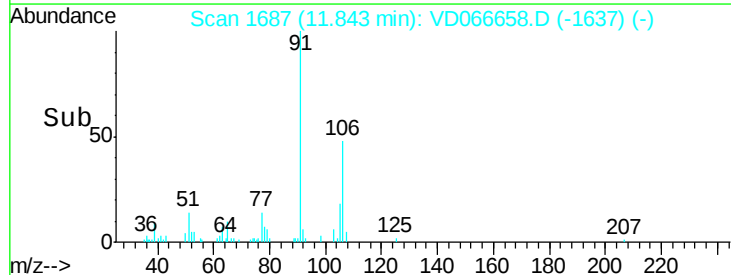
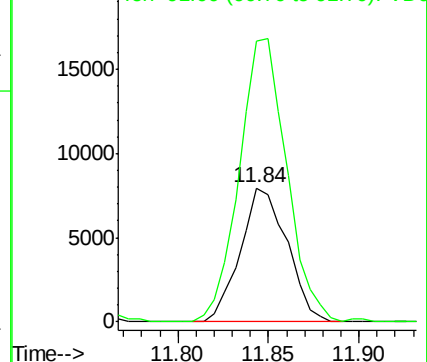
106 100

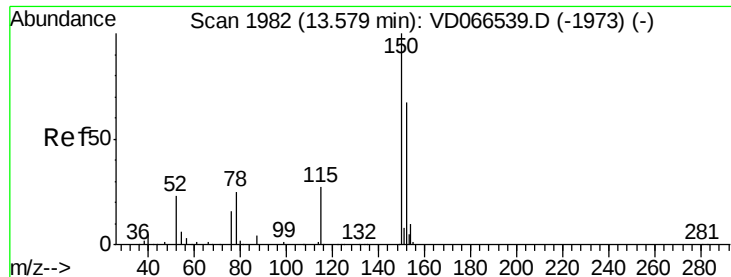
91 214.8 162.4 243.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. -0.00 min

Lab File: VD066658.D

Acq: 11 Sep 2020 19:42

Instrument :

MSVOA\_D

ClientSampleId :

B19-7-9

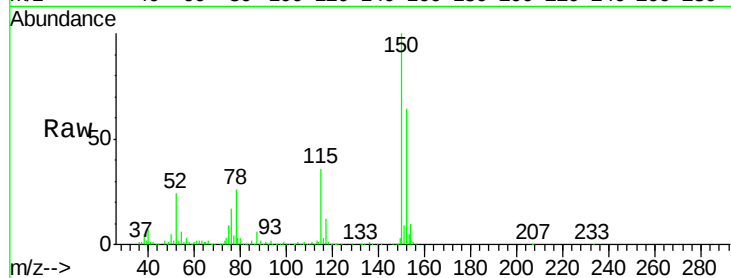
Tot Ion:152 Resp: 261515

Ion Ratio Lower Upper

152 100

115 63.0 30.4 91.2

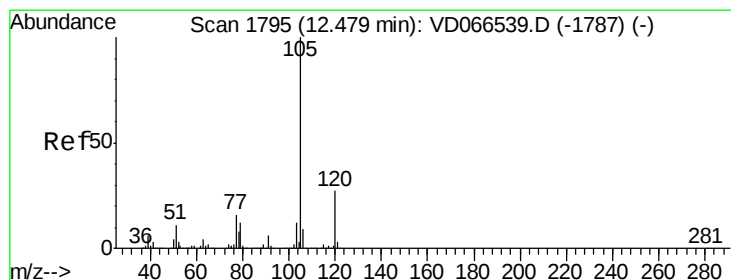
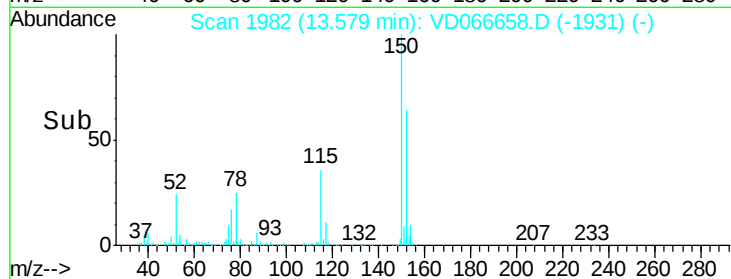
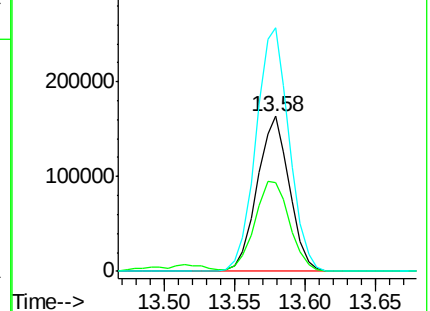
150 161.8 0.0 345.8



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: 52.163 ug/l

RT: 12.48 min Scan# 1796

Delta R.T. 0.01 min

Lab File: VD066658.D

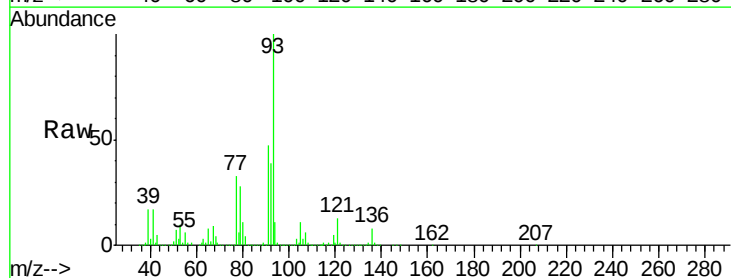
Acq: 11 Sep 2020 19:42

Tgt Ion:105 Resp: 1009990

Ion Ratio Lower Upper

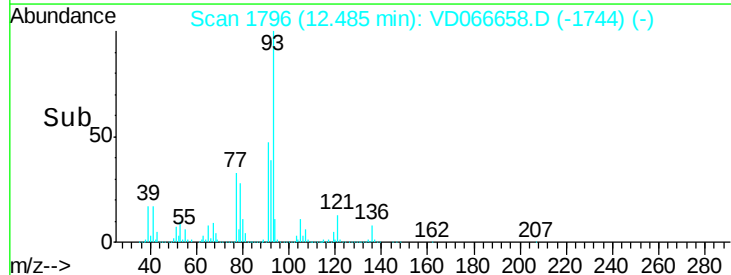
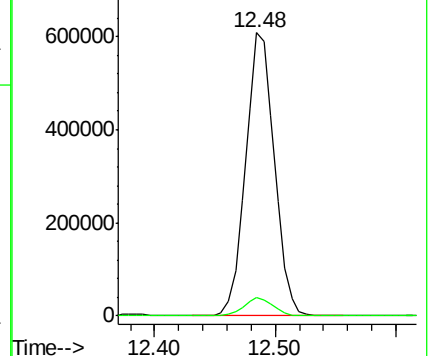
105 100

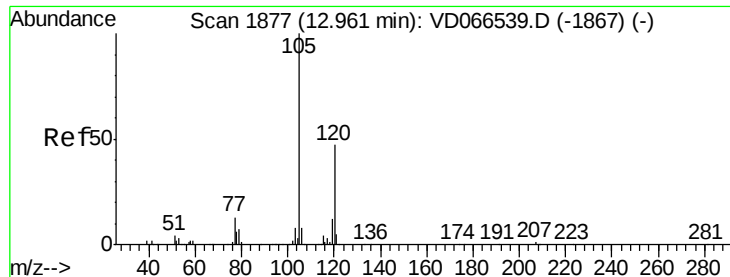
120 6.5 13.0 39.0#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#80

1,3,5-Trimethylbenzene

Concen: 1.673 ug/l

RT: 12.96 min Scan# 1877

Delta R.T. -0.00 min

Lab File: VD066658.D

Acq: 11 Sep 2020 19:42

Instrument :

MSVOA\_D

ClientSampleId :

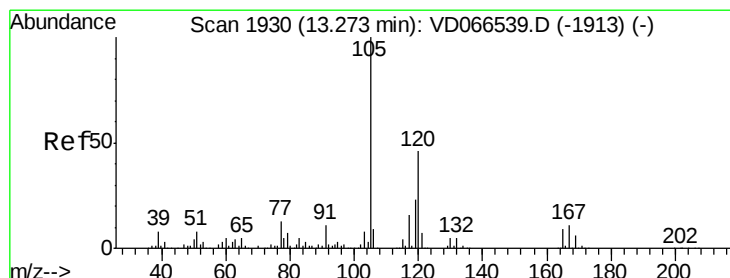
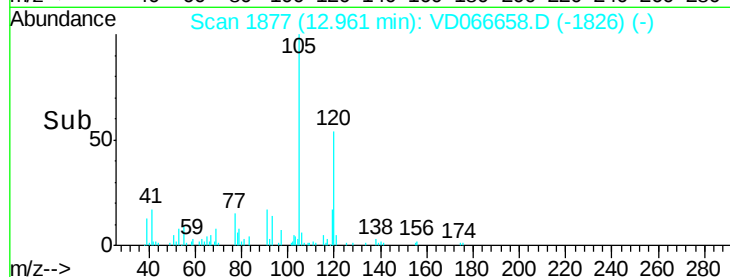
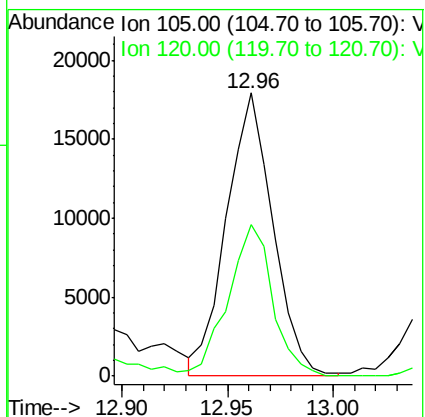
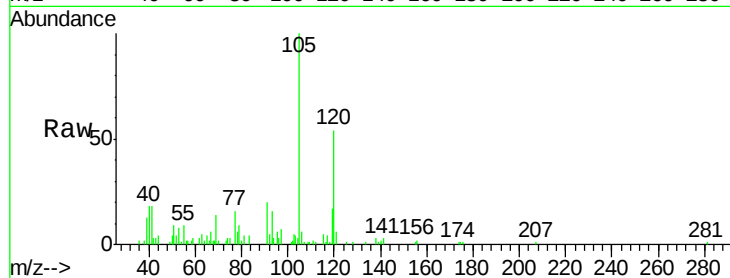
B19-7-9

Tot Ion:105 Resp: 27270

Ion Ratio Lower Upper

105 100

120 51.6 23.9 71.8



#84

1,2,4-Trimethylbenzene

Concen: 2.660 ug/l

RT: 13.27 min Scan# 1929

Delta R.T. -0.01 min

Lab File: VD066658.D

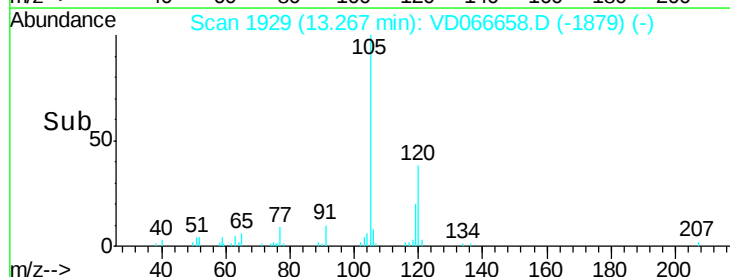
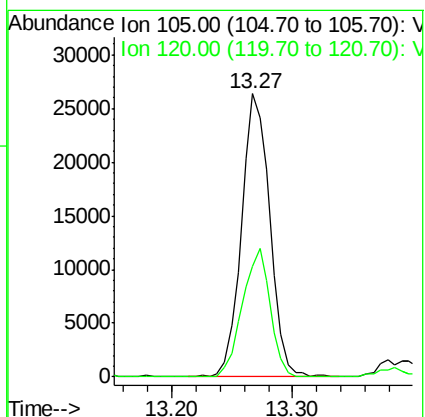
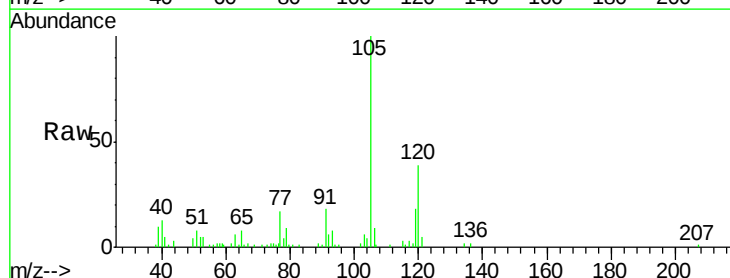
Acq: 11 Sep 2020 19:42

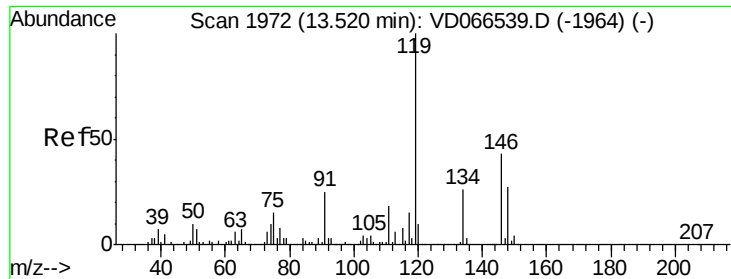
Tgt Ion:105 Resp: 43155

Ion Ratio Lower Upper

105 100

120 44.3 22.6 67.7

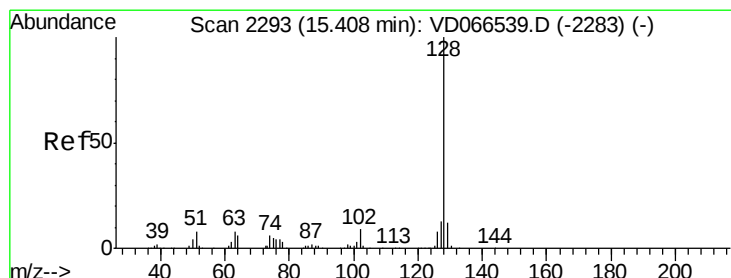
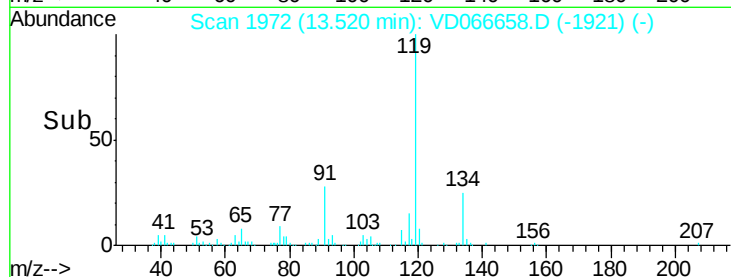
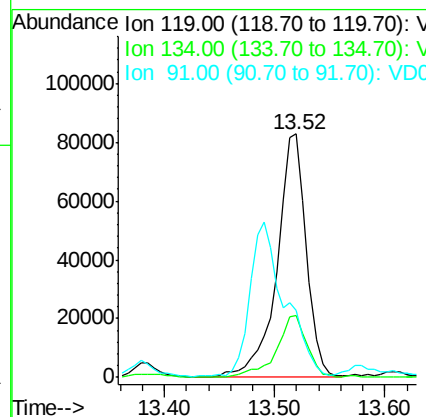
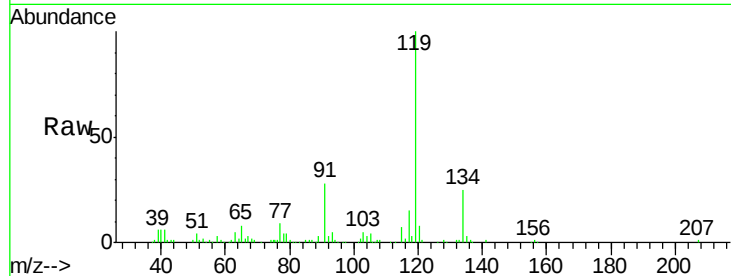




#86  
 p-Isopropyltoluene  
 Concen: 8.906 ug/l  
 RT: 13.52 min Scan# 1972  
 Delta R.T. -0.00 min  
 Lab File: VD066658.D  
 Acq: 11 Sep 2020 19:42

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 B19-7-9

Tot Ion:119 Resp: 153690  
 Ion Ratio Lower Upper  
 119 100  
 134 26.4 12.7 38.0  
 91 0.0 12.5 37.5#



#95  
 Naphthalene  
 Concen: 154.607 ug/l  
 RT: 15.40 min Scan# 2292  
 Delta R.T. -0.01 min  
 Lab File: VD066658.D  
 Acq: 11 Sep 2020 19:42

Tgt Ion:128 Resp: 1214522  
 Ion Ratio Lower Upper  
 128 100  
 127 12.8 10.7 16.1  
 129 10.9 9.1 13.7

