

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD041221\  
 Data File : VD068844.D  
 Acq On : 12 Apr 2021 20:50  
 Operator : VA/SY  
 Sample : M2017-01  
 Misc : 7.91G/5.00ml/MSVOA\_D/soil  
 ALS Vial : 22 Sample Multiplier: 1

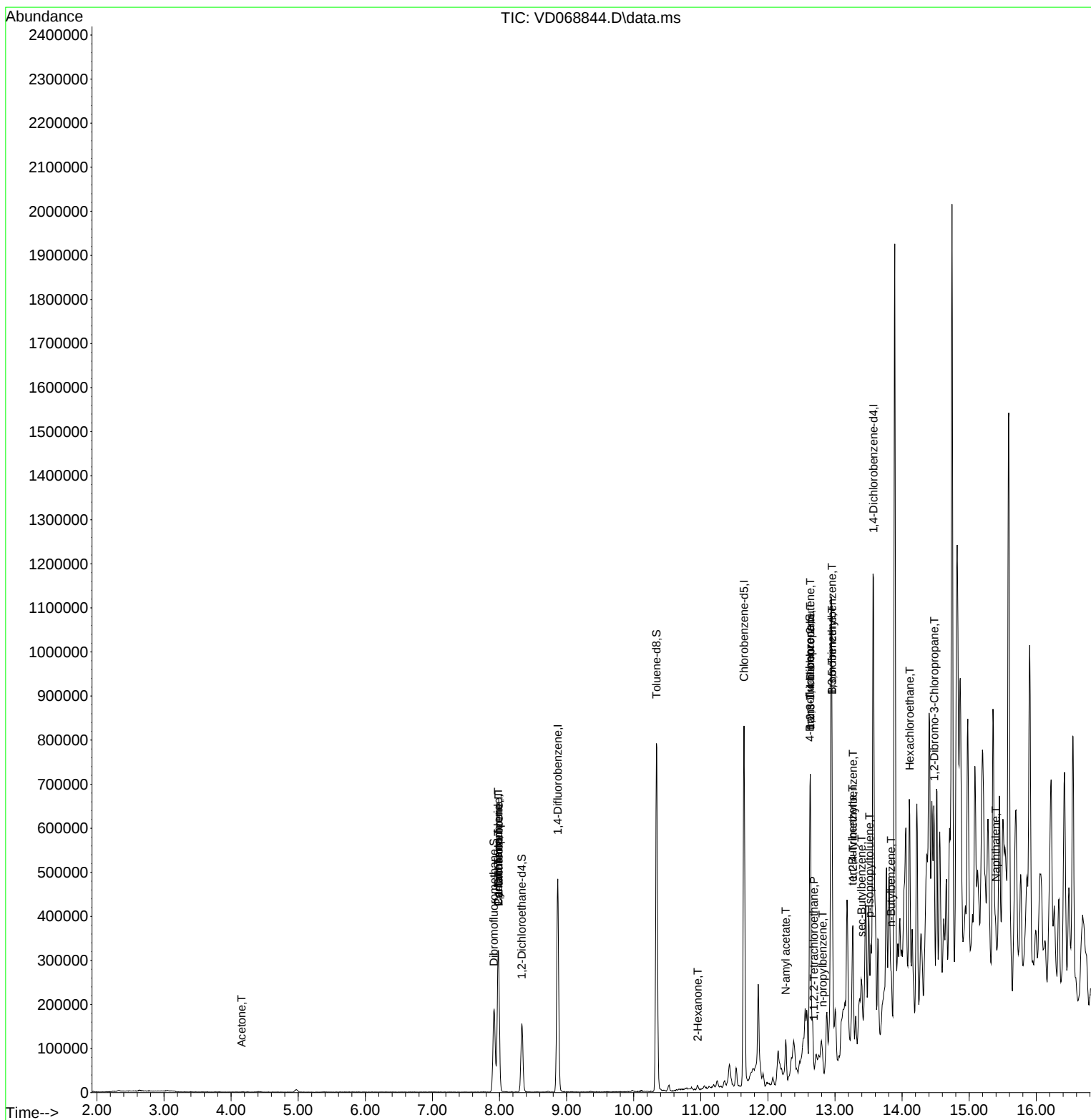
Instrument :  
 MSVOA\_D  
 ClientSampleId :

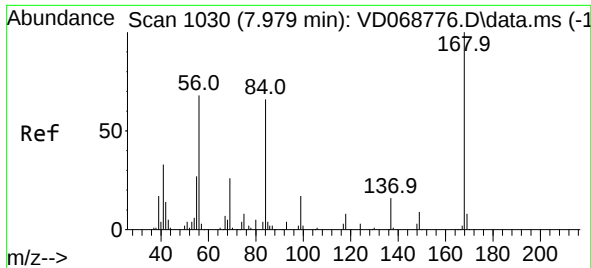
Quant Time: Apr 13 01:13:11 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D040721S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 08 03:50:31 2021  
 Response via : Initial Calibration

| Compound                      | R.T.           | QIon | Response   | Conc      | Units  | Dev(Min) |
|-------------------------------|----------------|------|------------|-----------|--------|----------|
| -----                         |                |      |            |           |        |          |
| Internal Standards            |                |      |            |           |        |          |
| 1) Pentafluorobenzene         | 7.985          | 168  | 249730     | 50.00     | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.867          | 114  | 444312     | 50.00     | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.644         | 117  | 490153     | 50.00     | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.573         | 152  | 237602     | 50.00     | ug/l   | 0.00     |
| System Monitoring Compounds   |                |      |            |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.332          | 65   | 120808     | 45.77     | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 50 - 163 |      | Recovery = | 91.54%    |        |          |
| 35) Dibromofluoromethane      | 7.914          | 113  | 139419     | 48.24     | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 54 - 147 |      | Recovery = | 96.48%    |        |          |
| 50) Toluene-d8                | 10.338         | 98   | 566964     | 52.00     | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 49 - 140 |      | Recovery = | 104.00%   |        |          |
| 62) 4-Bromofluorobenzene      | 12.626         | 95   | 222405     | 61.42     | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 25 - 144 |      | Recovery = | 122.84%   |        |          |
| Target Compounds              |                |      |            |           |        |          |
|                               |                |      |            |           | Qvalue |          |
| 16) Acetone                   | 4.156          | 43   | 539        | 1.47      | ug/l # | 40       |
| 20) Methylene Chloride        | 4.967          | 84   | 5129       | Below Cal | #      | 81       |
| 31) Cyclohexane               | 7.979          | 56   | 5095       | 1.16      | ug/l # | 13       |
| 36) 1,1-Dichloropropene       | 7.985          | 75   | 18699      | 4.16      | ug/l # | 48       |
| 38) Carbon Tetrachloride      | 7.979          | 117  | 24934      | 5.60      | ug/l # | 15       |
| 59) 2-Hexanone                | 10.955         | 43   | 2646       | 2.91      | ug/l # | 19       |
| 74) N-amyl acetate            | 12.267         | 43   | 17654      | 6.00      | ug/l # | 64       |
| 75) 1,1,2,2-Tetrachloroethane | 12.685         | 83   | 3791       | 1.17      | ug/l # | 29       |
| 76) 1,2,3-Trichloropropane    | 12.632         | 75   | 109964     | 50.66     | ug/l # | 100      |
| 77) Bromobenzene              | 12.955         | 156  | 77174      | 18.50     | ug/l # | 1        |
| 78) n-propylbenzene           | 12.814         | 91   | 23762      | 1.13      | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.955         | 105  | 76675      | 5.29      | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.632         | 75   | 109964     | 117.57    | ug/l # | 16       |
| 83) tert-Butylbenzene         | 13.261         | 119  | 23480      | 1.91      | ug/l # | 78       |
| 84) 1,2,4-Trimethylbenzene    | 13.267         | 105  | 170721     | 11.65     | ug/l   | 96       |
| 85) sec-Butylbenzene          | 13.396         | 105  | 36041      | 2.08      | ug/l   | 83       |
| 86) p-Isopropyltoluene        | 13.514         | 119  | 25098      | 1.58      | ug/l   | 97       |
| 89) n-Butylbenzene            | 13.838         | 91   | 53089      | 3.55      | ug/l # | 72       |
| 90) Hexachloroethane          | 14.114         | 117  | 18636      | 5.90      | ug/l # | 14       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.479         | 75   | 1671       | 3.39      | ug/l # | 2        |
| 95) Naphthalene               | 15.396         | 128  | 39075      | 5.07      | ug/l # | 91       |
| -----                         |                |      |            |           |        |          |

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

Quant Time: Apr 13 01:13:11 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\82D040721S.M  
Quant Title : SW846 8260  
QLast Update : Thu Apr 08 03:50:31 2021  
Response via : Initial Calibration

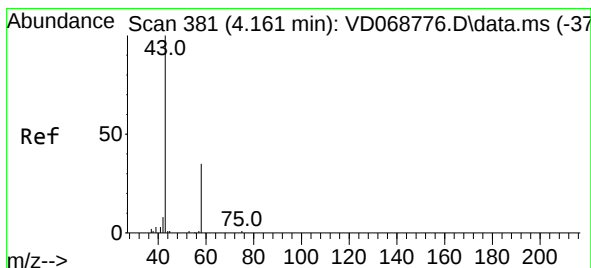
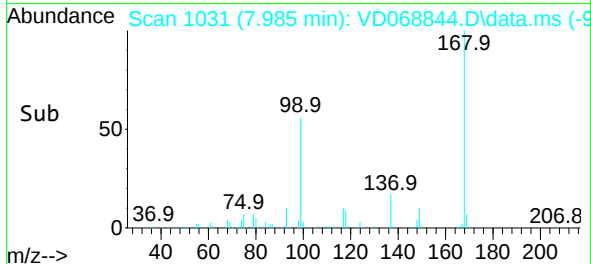
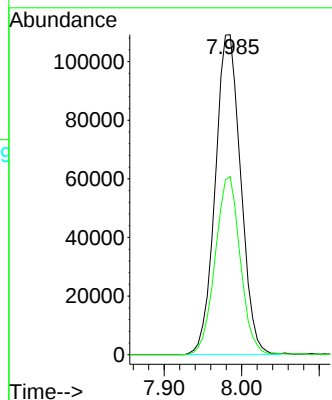
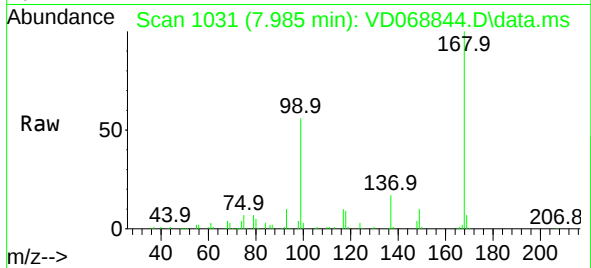




#1  
Pentafluorobenzene  
Concen: 50.00 ug/l  
RT: 7.985 min Scan# 1031  
Delta R.T. 0.006 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

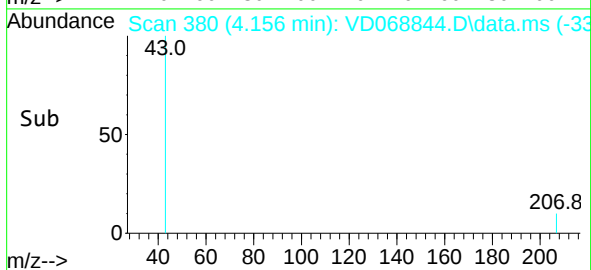
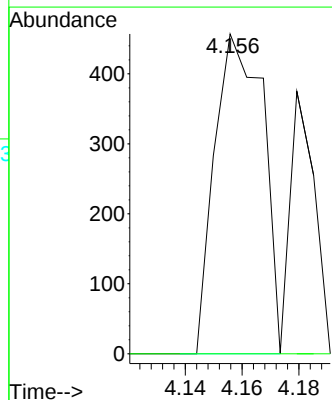
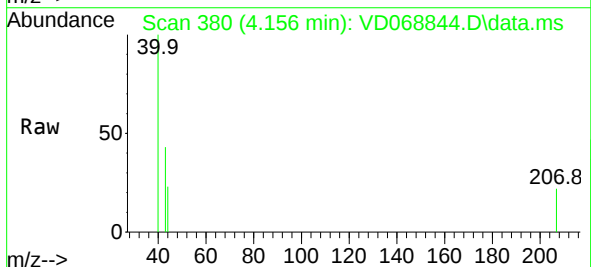
Instrument :  
MSVOA\_D  
ClientSampled :

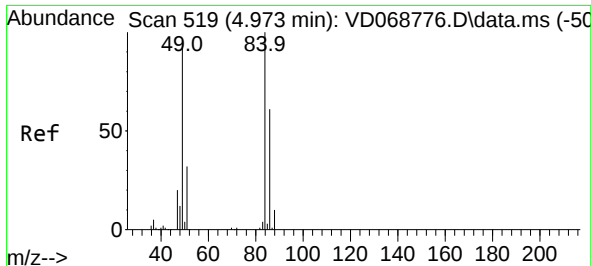
Tgt Ion:168 Resp: 249730  
Ion Ratio Lower Upper  
168 100  
99 55.7 46.2 69.2



#16  
Acetone  
Concen: 1.47 ug/l  
RT: 4.156 min Scan# 380  
Delta R.T. -0.005 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

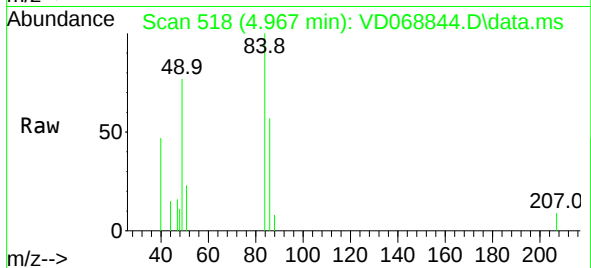
Tgt Ion: 43 Resp: 539  
Ion Ratio Lower Upper  
43 100  
58 0.0 28.0 42.0#





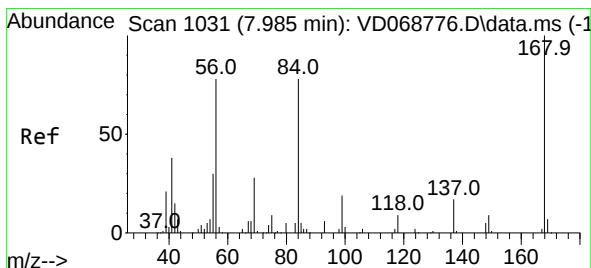
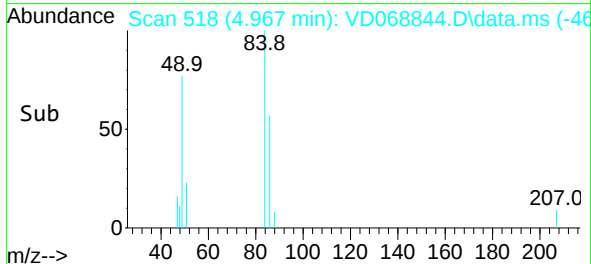
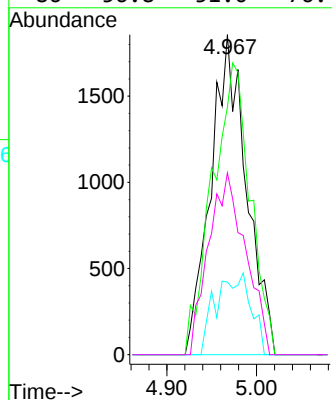
#20  
Methylene Chloride  
Concen: Below Cal  
RT: 4.967 min Scan# 518  
Delta R.T. -0.006 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Instrument :  
MSVOA\_D  
ClientSampled :

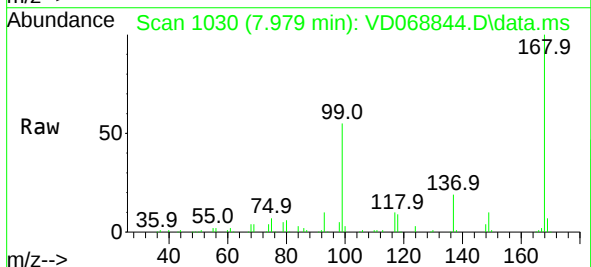


Tgt Ion: 84 Resp: 5129

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 84  | 100   |       |        |
| 49  | 77.3  | 83.4  | 125.0# |
| 51  | 22.7  | 23.4  | 35.2#  |
| 86  | 56.8  | 51.0  | 76.4   |

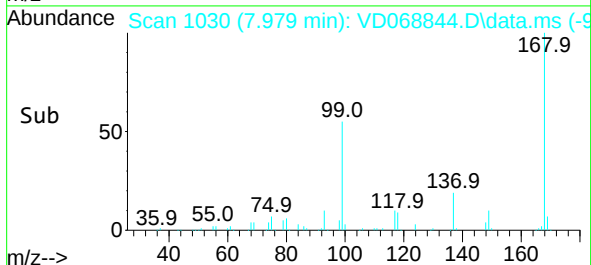
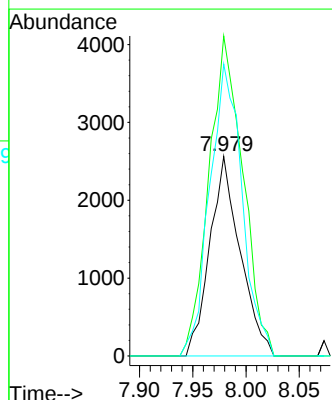


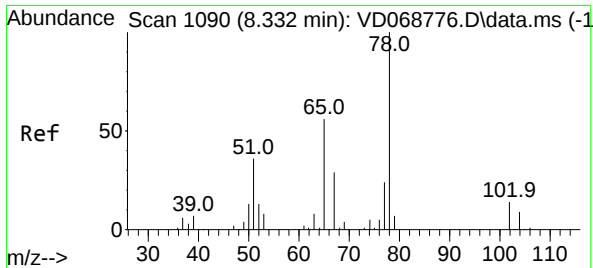
#31  
Cyclohexane  
Concen: 1.16 ug/l  
RT: 7.979 min Scan# 1030  
Delta R.T. -0.006 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50



Tgt Ion: 56 Resp: 5095

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 56  | 100   |       |        |
| 69  | 160.4 | 30.0  | 45.0#  |
| 84  | 146.4 | 82.0  | 123.0# |

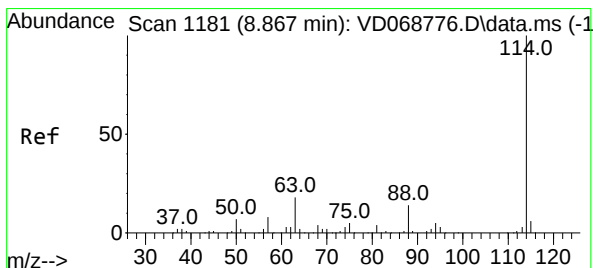
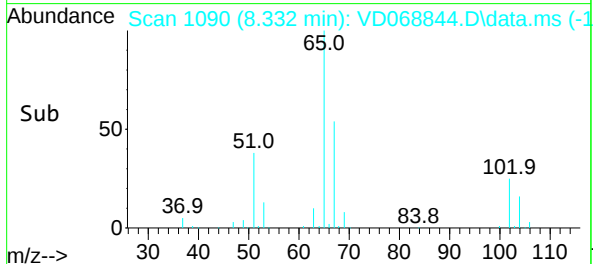
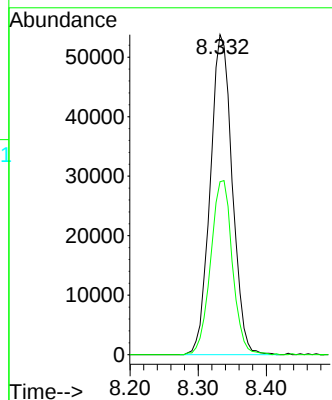
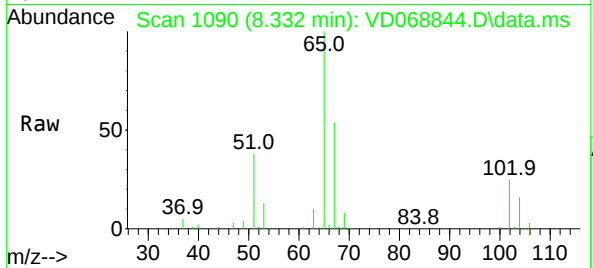




#33  
1,2-Dichloroethane-d4  
Concen: 45.77 ug/l  
RT: 8.332 min Scan# 1090  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

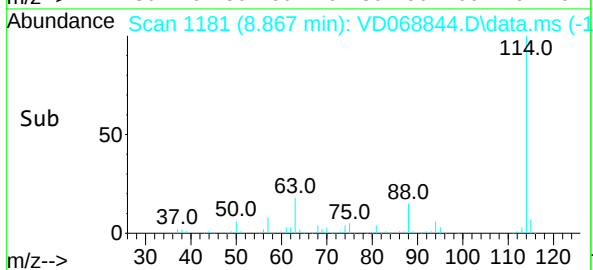
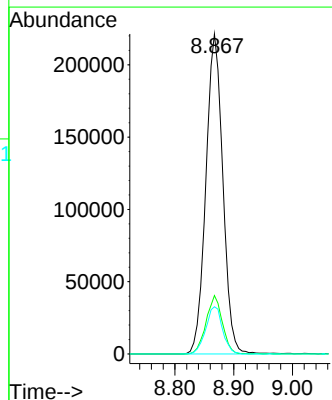
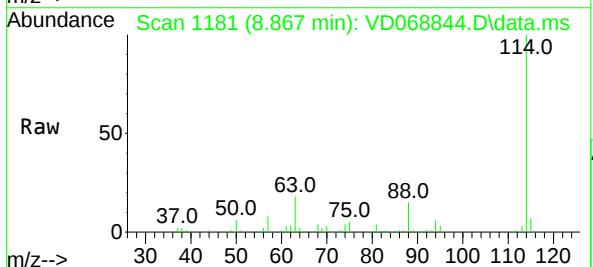
Instrument :  
MSVOA\_D  
ClientSampleId :

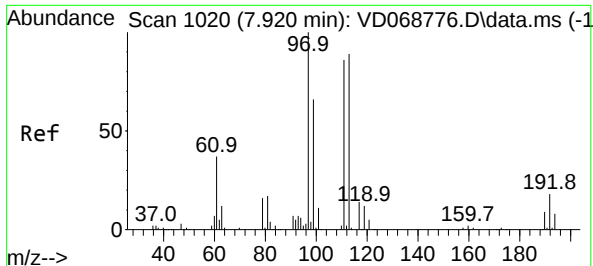
Tgt Ion: 65 Resp: 120808  
Ion Ratio Lower Upper  
65 100  
67 53.9 0.0 106.0



#34  
1,4-Difluorobenzene  
Concen: 50.00 ug/l  
RT: 8.867 min Scan# 1181  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion: 114 Resp: 444312  
Ion Ratio Lower Upper  
114 100  
63 18.3 0.0 38.2  
88 14.8 0.0 29.4





#35

Dibromofluoromethane

Concen: 48.24 ug/l

RT: 7.914 min Scan# 1019

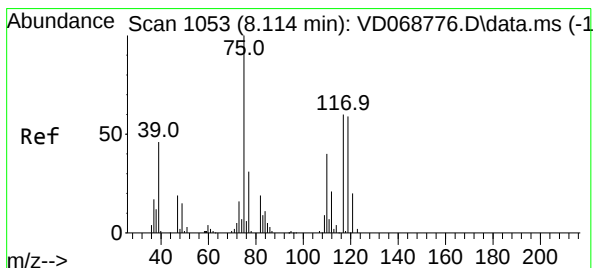
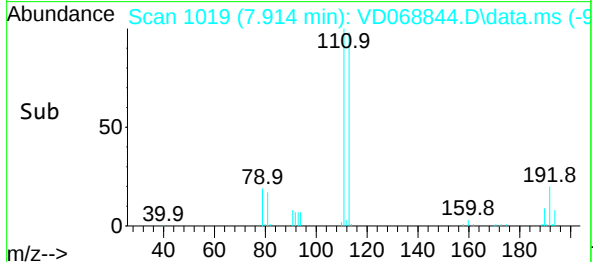
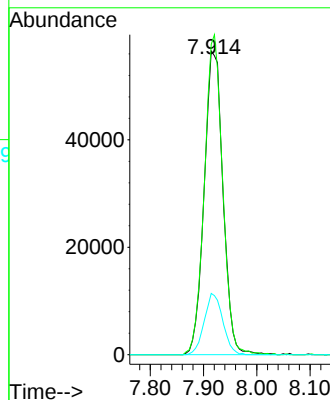
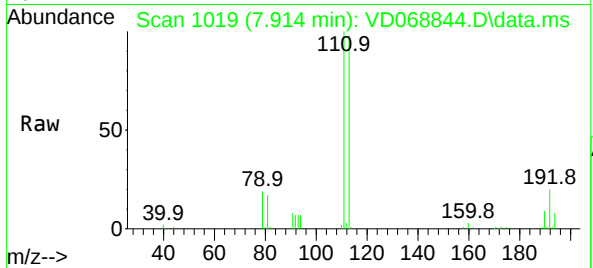
Delta R.T. -0.006 min

Lab File: VD068844.D

Acq: 12 Apr 2021 20:50

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 113   | Resp: | 139419 |
| Ion      | Ratio | Lower | Upper  |
| 113      | 100   |       |        |
| 111      | 101.9 | 82.5  | 123.7  |
| 192      | 19.8  | 15.1  | 22.7   |

Instrument :  
MSVOA\_D  
ClientSampleId :



#36

1,1-Dichloropropene

Concen: 4.16 ug/l

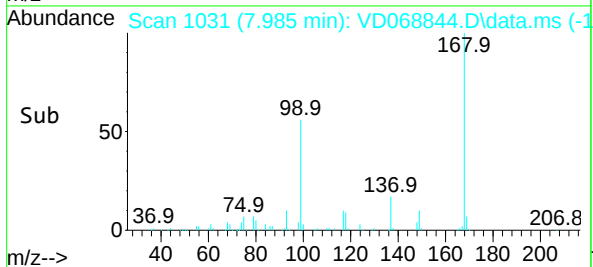
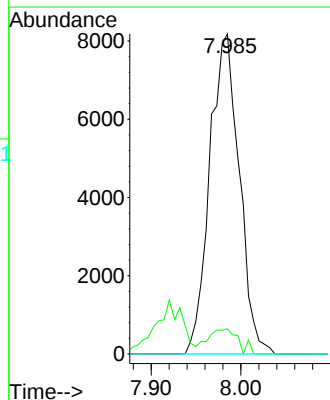
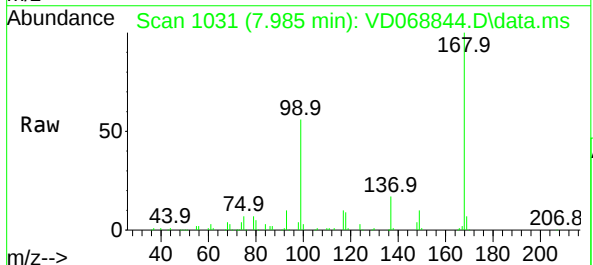
RT: 7.985 min Scan# 1031

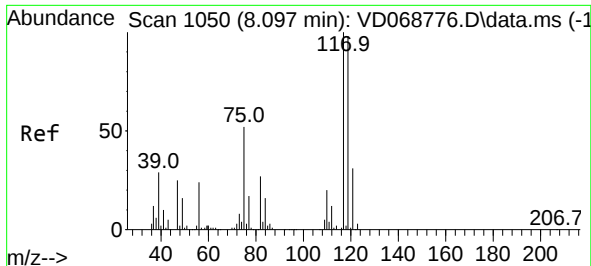
Delta R.T. -0.129 min

Lab File: VD068844.D

Acq: 12 Apr 2021 20:50

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 18699 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 110      | 8.2   | 18.1  | 54.4# |
| 77       | 0.0   | 24.7  | 37.1# |

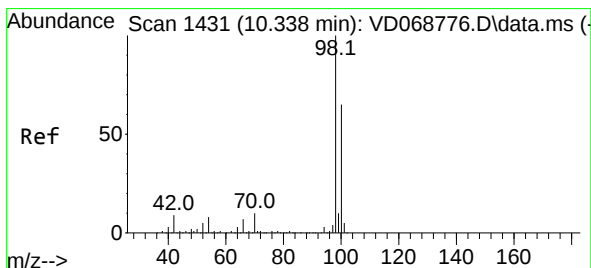
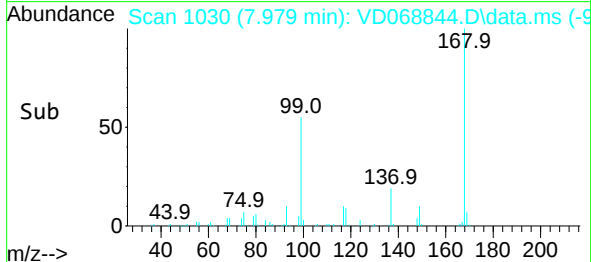
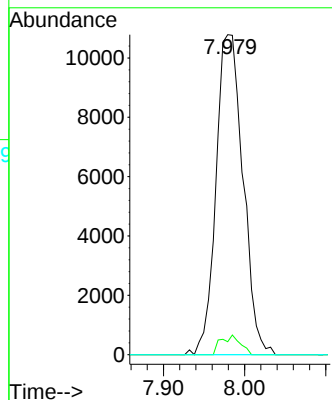
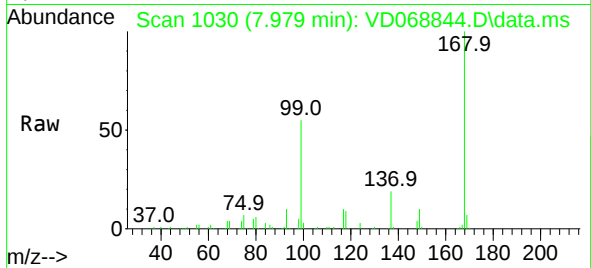




#38  
Carbon Tetrachloride  
Concen: 5.60 ug/l  
RT: 7.979 min Scan# 1030  
Delta R.T. -0.118 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

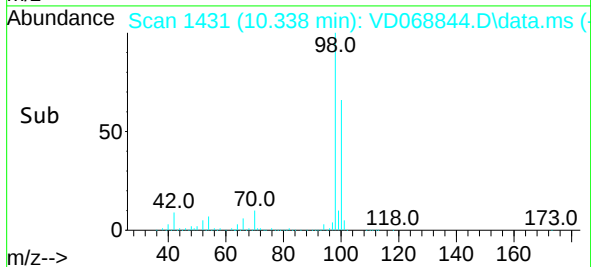
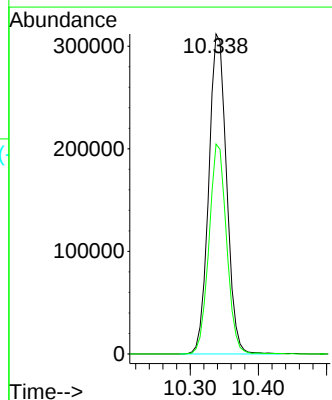
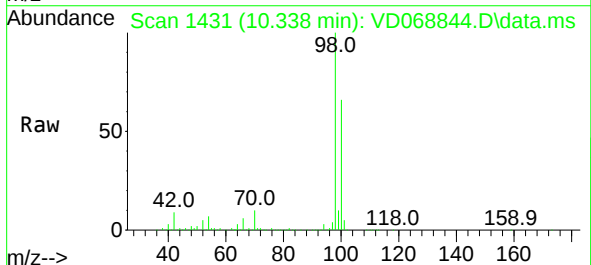
Instrument :  
MSVOA\_D  
ClientSampled :

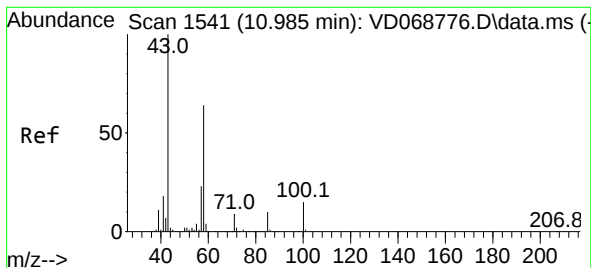
Tgt Ion:117 Resp: 24934  
Ion Ratio Lower Upper  
117 100  
119 4.0 76.6 115.0#  
121 0.0 26.1 39.1#



#50  
Toluene-d8  
Concen: 52.00 ug/l  
RT: 10.338 min Scan# 1431  
Delta R.T. -0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion: 98 Resp: 566964  
Ion Ratio Lower Upper  
98 100  
100 64.8 51.8 77.6

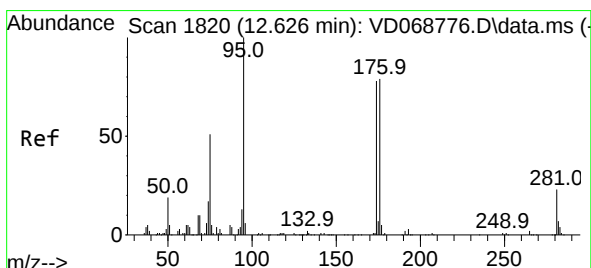
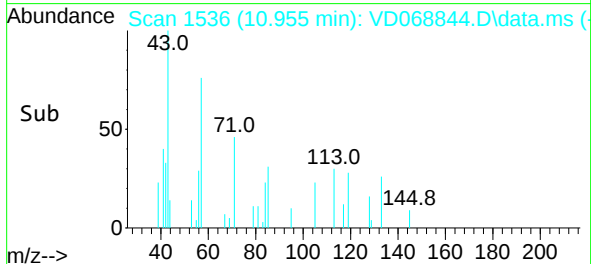
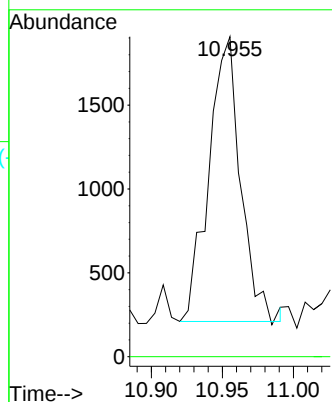
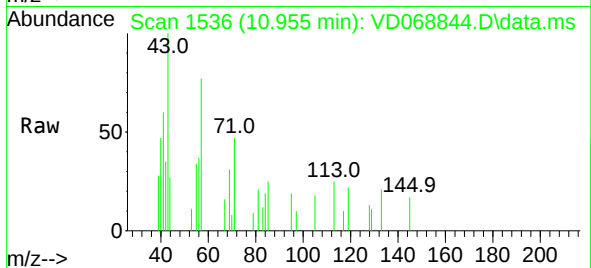




#59  
2-Hexanone  
Concen: 2.91 ug/l  
RT: 10.955 min Scan# 1536  
Delta R.T. -0.030 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

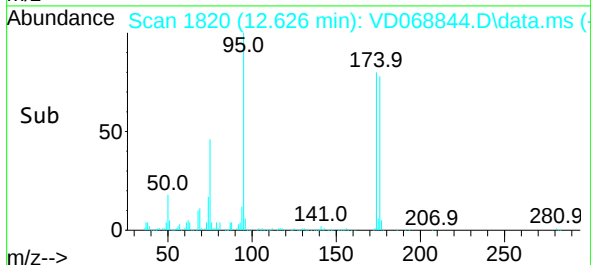
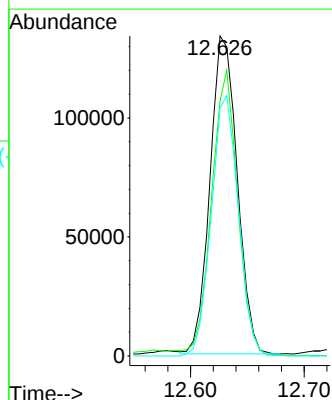
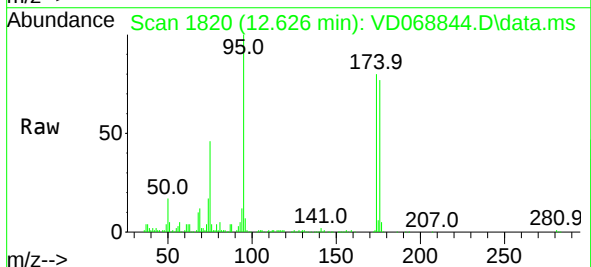
Instrument :  
MSVOA\_D  
ClientSampled :

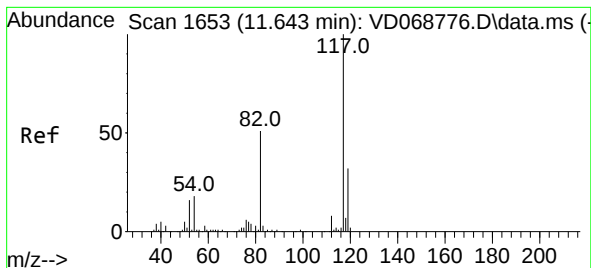
Tgt Ion: 43 Resp: 2646  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.3 93.8#



#62  
4-Bromofluorobenzene  
Concen: 61.42 ug/l  
RT: 12.626 min Scan# 1820  
Delta R.T. -0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion: 95 Resp: 222405  
Ion Ratio Lower Upper  
95 100  
174 86.5 0.0 168.0  
176 81.8 0.0 160.2

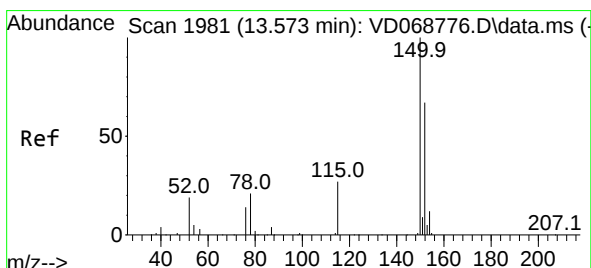
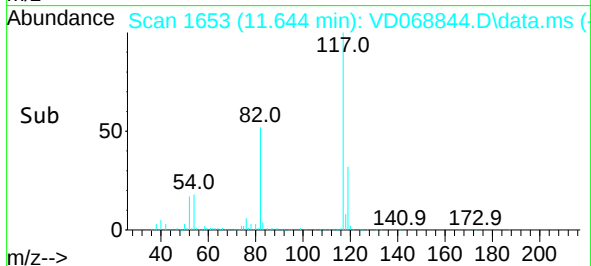
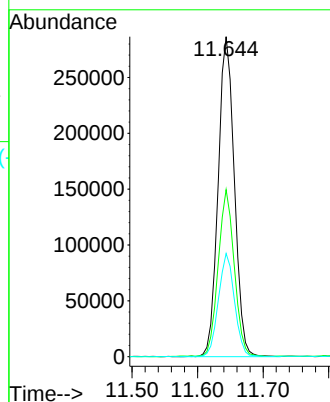
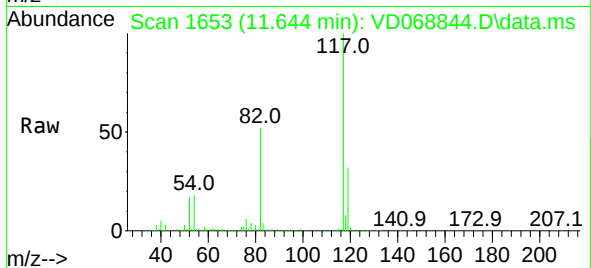




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 11.644 min Scan# 1653  
Delta R.T. 0.001 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

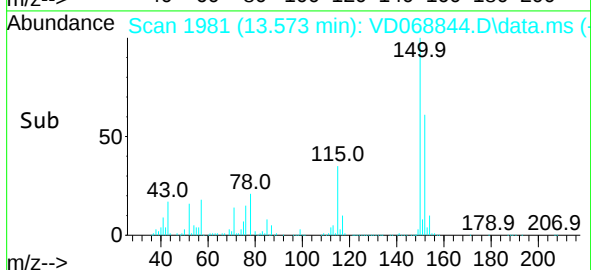
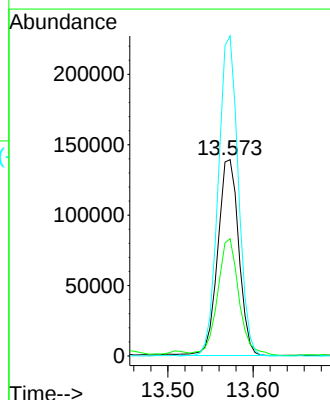
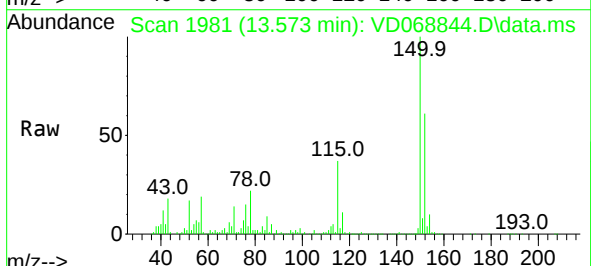
Instrument :  
MSVOA\_D  
ClientSampleId :

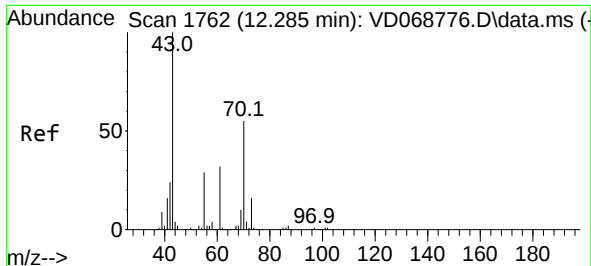
Tgt Ion:117 Resp: 490153  
Ion Ratio Lower Upper  
117 100  
82 52.0 43.5 65.3  
119 32.2 26.7 40.1



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 13.573 min Scan# 1981  
Delta R.T. -0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

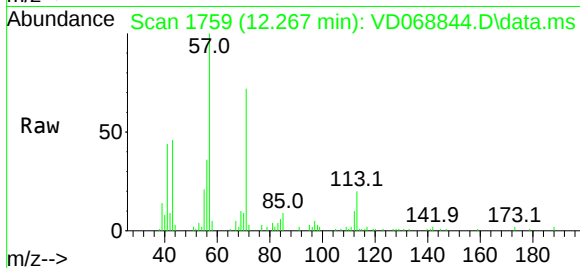
Tgt Ion:152 Resp: 237602  
Ion Ratio Lower Upper  
152 100  
115 60.9 29.3 87.8  
150 156.4 0.0 347.6



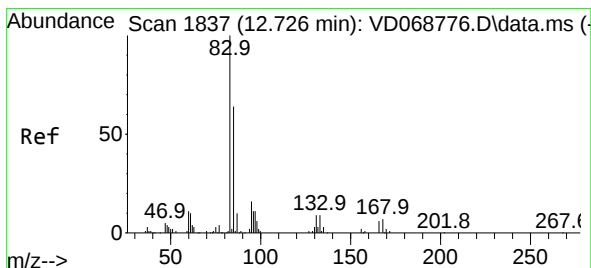
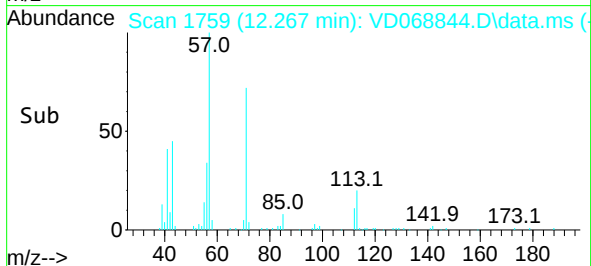
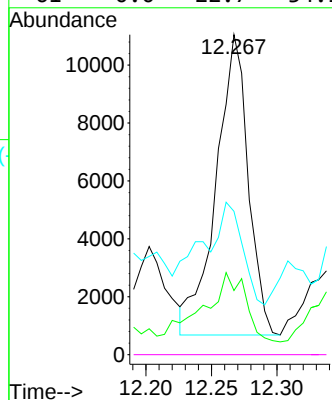


#74  
N-amy1 acetate  
Concen: 6.00 ug/l  
RT: 12.267 min Scan# 1759  
Delta R.T. -0.018 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Instrument :  
MSVOA\_D  
ClientSampled :

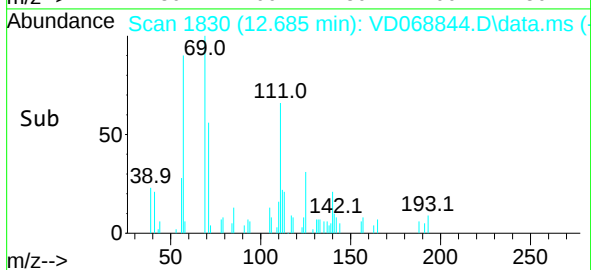
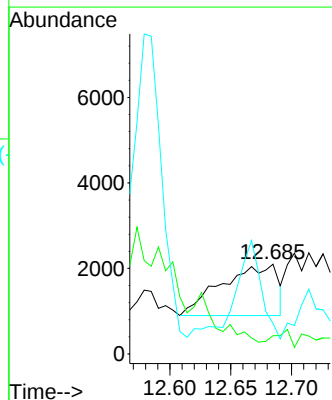
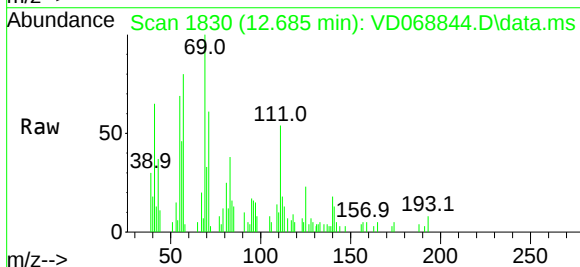


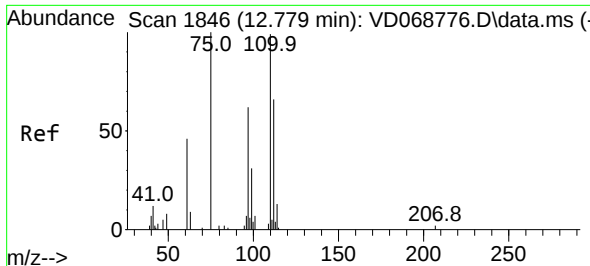
| Tgt Ion:  | 43   | Resp: | 17654 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 43        | 100  |       |       |
| 70        | 30.4 | 41.9  | 62.9# |
| 55        | 43.8 | 22.8  | 34.2# |
| 61        | 0.0  | 22.7  | 34.1# |



#75  
1,1,2,2-Tetrachloroethane  
Concen: 1.17 ug/l  
RT: 12.685 min Scan# 1830  
Delta R.T. -0.041 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

| Tgt Ion:  | 83   | Resp: | 3791  |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 83        | 100  |       |       |
| 131       | 10.4 | 5.1   | 15.3  |
| 85        | 0.0  | 32.0  | 96.0# |

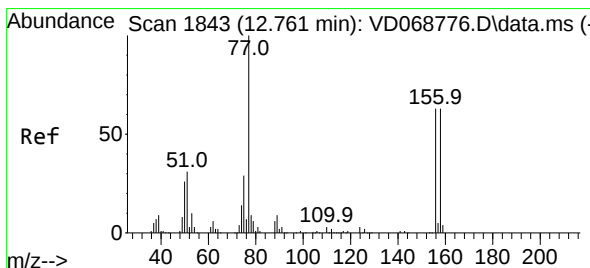
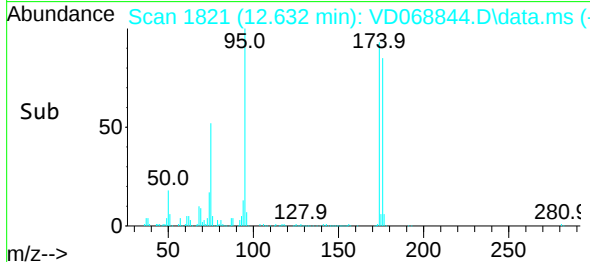
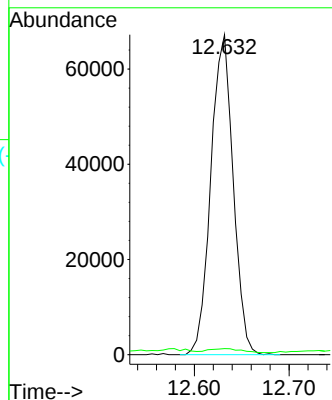
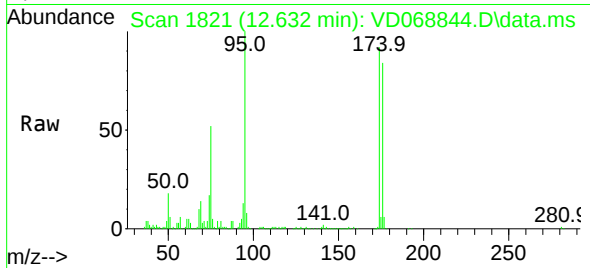




#76  
1,2,3-Trichloropropane  
Concen: 50.66 ug/l  
RT: 12.632 min Scan# 1821  
Delta R.T. -0.147 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

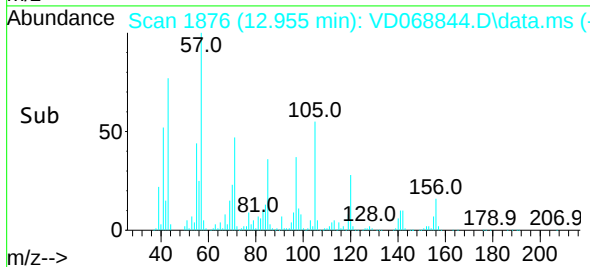
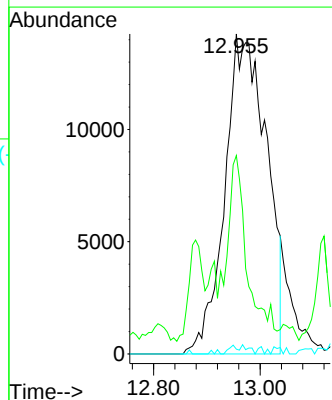
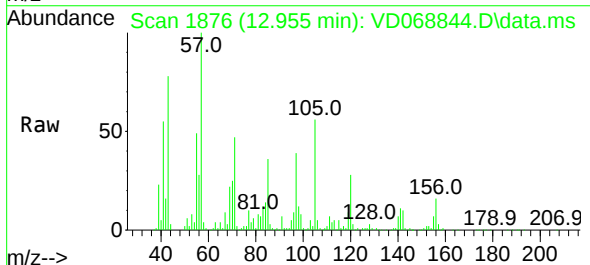
Instrument :  
MSVOA\_D  
ClientSampleId :

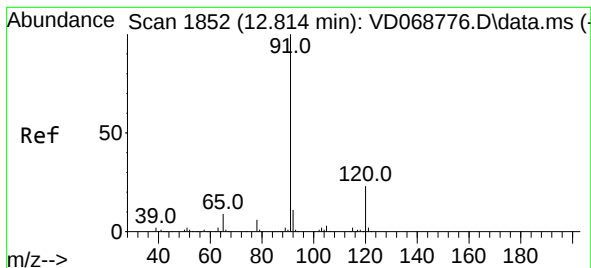
Tgt Ion: 75 Resp: 109964  
Ion Ratio Lower Upper  
75 100  
77 1.8 0.0 0.0#



#77  
Bromobenzene  
Concen: 18.50 ug/l  
RT: 12.955 min Scan# 1876  
Delta R.T. 0.194 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion:156 Resp: 77174  
Ion Ratio Lower Upper  
156 100  
77 22.7 88.9 266.8#  
158 0.6 47.7 143.1#

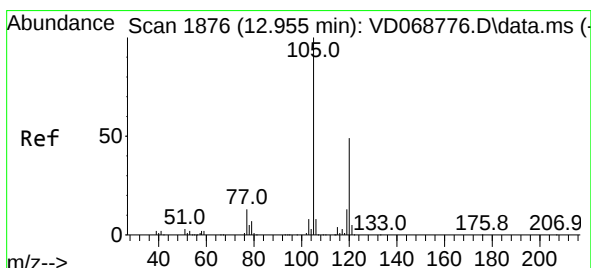
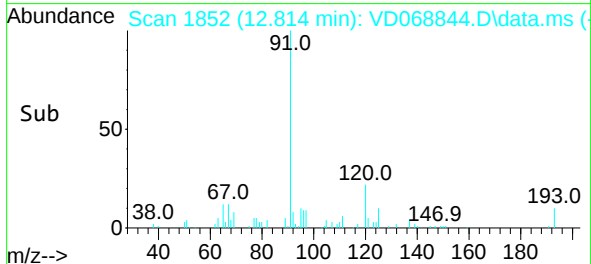
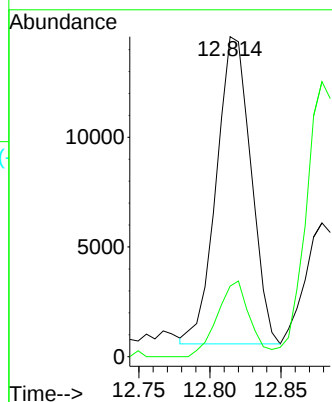
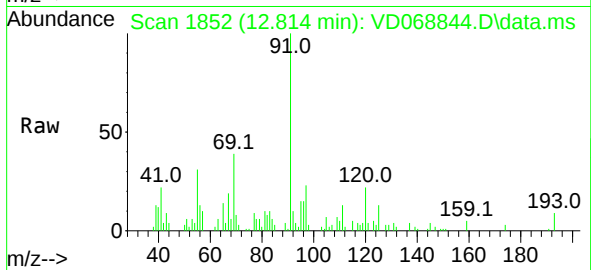




#78  
n-propylbenzene  
Concen: 1.13 ug/l  
RT: 12.814 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

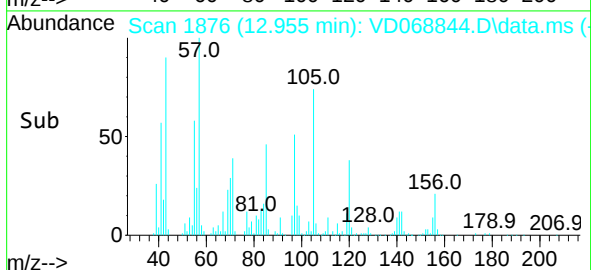
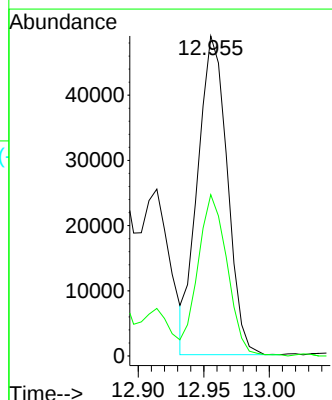
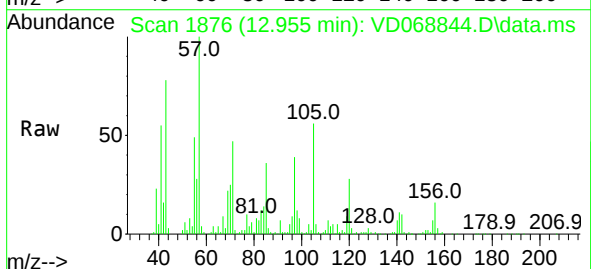
Instrument :  
MSVOA\_D  
ClientSampled :

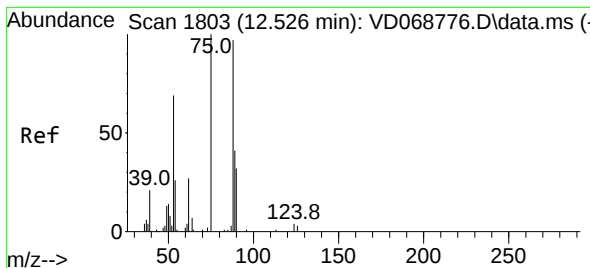
Tgt Ion: 91 Resp: 23762  
Ion Ratio Lower Upper  
91 100  
120 23.1 11.4 34.2



#80  
1,3,5-Trimethylbenzene  
Concen: 5.29 ug/l  
RT: 12.955 min Scan# 1876  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion: 105 Resp: 76675  
Ion Ratio Lower Upper  
105 100  
120 50.2 24.9 74.7

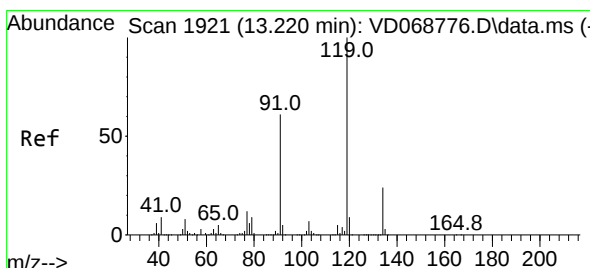
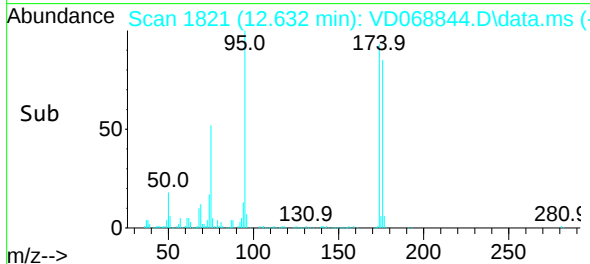
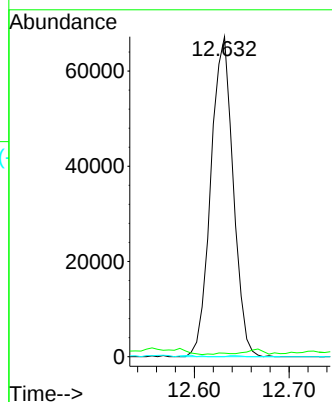
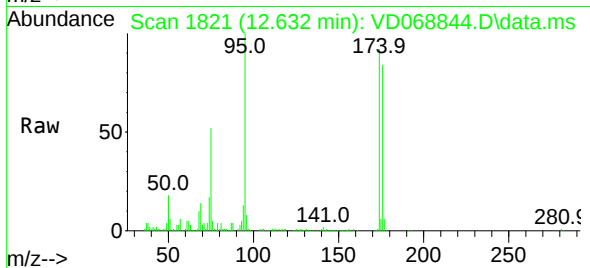




#81  
trans-1,4-Dichloro-2-butene  
Concen: 117.57 ug/l  
RT: 12.632 min Scan# 1821  
Delta R.T. 0.106 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

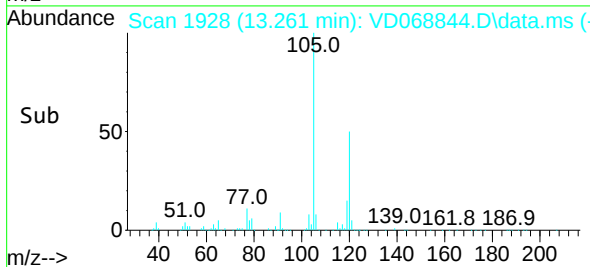
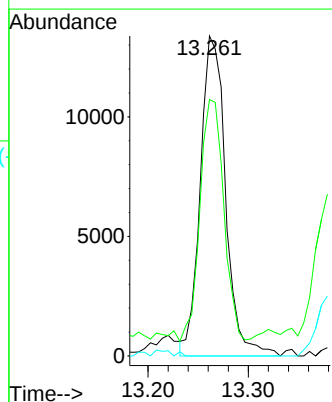
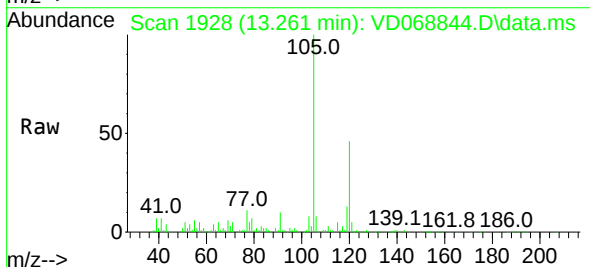
Instrument :  
MSVOA\_D  
ClientSampleId :

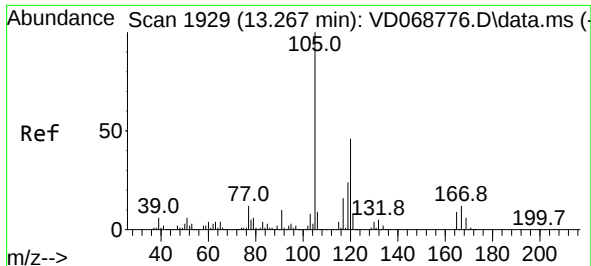
Tgt Ion: 75 Resp: 109964  
Ion Ratio Lower Upper  
75 100  
53 0.4 66.8 100.2#  
89 0.2 36.6 54.8#



#83  
tert-Butylbenzene  
Concen: 1.91 ug/l  
RT: 13.261 min Scan# 1928  
Delta R.T. 0.041 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion: 119 Resp: 23480  
Ion Ratio Lower Upper  
119 100  
91 71.0 31.6 95.0  
134 0.0 13.4 40.2#

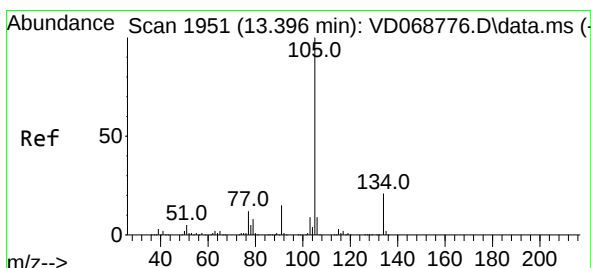
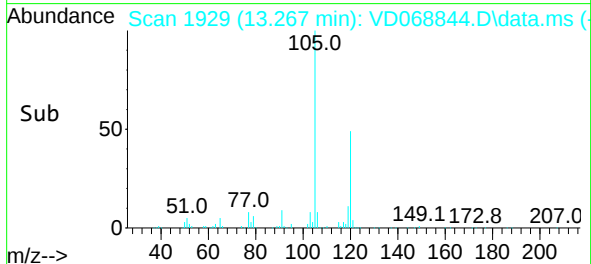
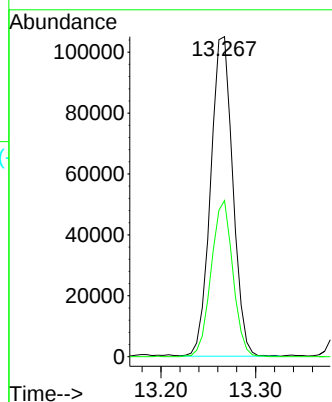
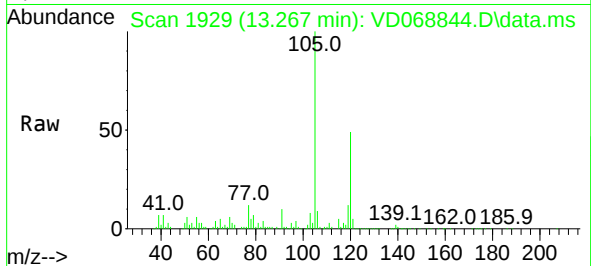




#84  
1,2,4-Trimethylbenzene  
Concen: 11.65 ug/l  
RT: 13.267 min Scan# 1929  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

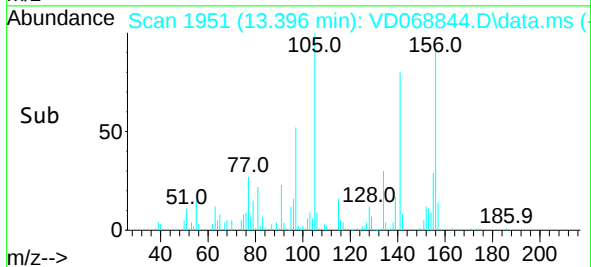
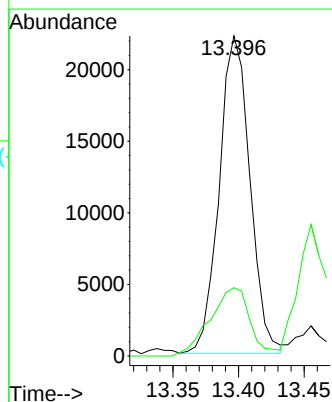
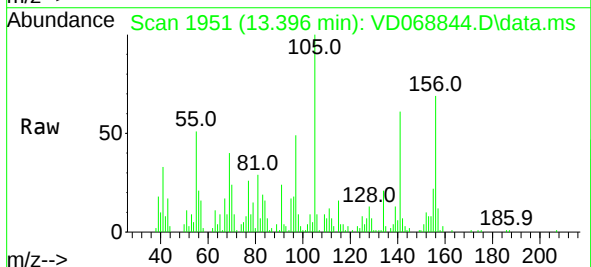
Instrument :  
MSVOA\_D  
ClientSampled :

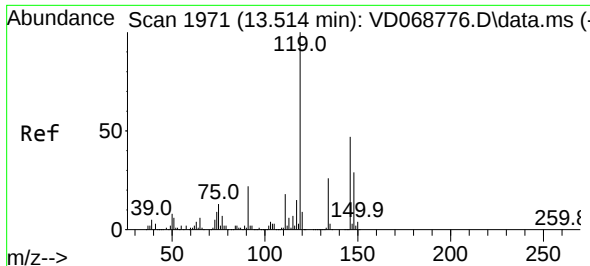
Tgt Ion:105 Resp: 170721  
Ion Ratio Lower Upper  
105 100  
120 47.7 22.6 67.7



#85  
sec-Butylbenzene  
Concen: 2.08 ug/l  
RT: 13.396 min Scan# 1951  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Tgt Ion:105 Resp: 36041  
Ion Ratio Lower Upper  
105 100  
134 27.8 10.0 29.8

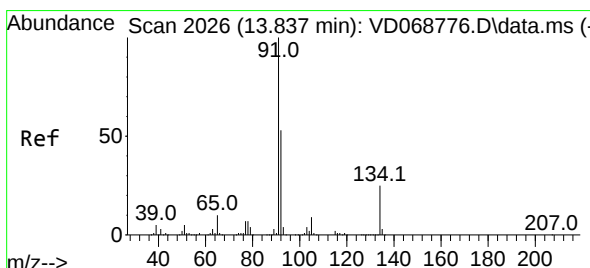
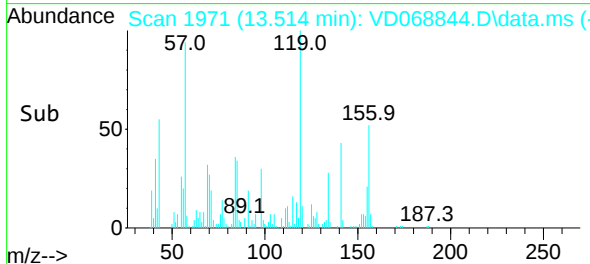
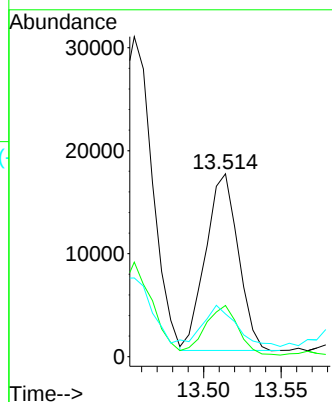
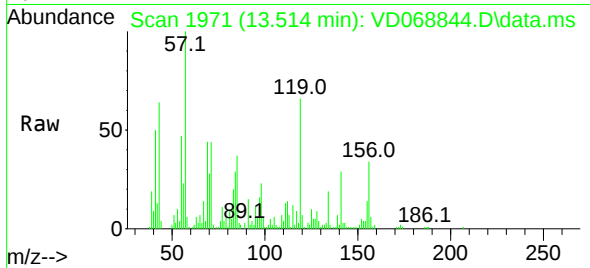




#86  
p-Isopropyltoluene  
Concen: 1.58 ug/l  
RT: 13.514 min Scan# 1971  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

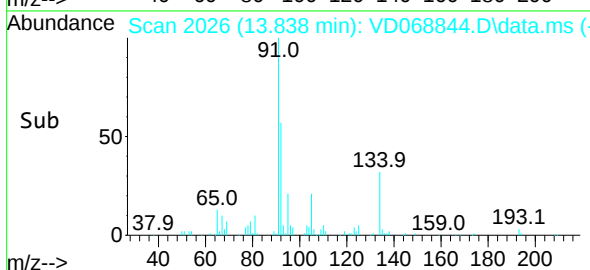
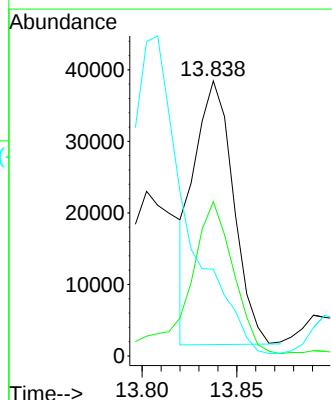
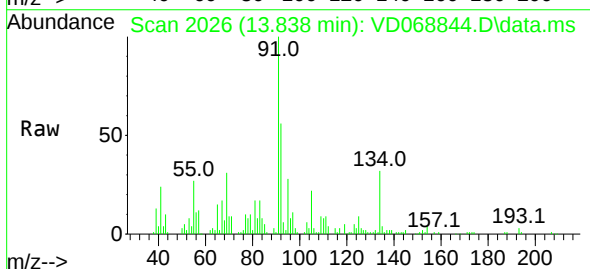
Instrument :  
MSVOA\_D  
ClientSampled :

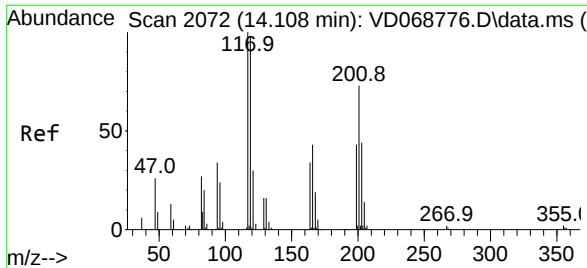
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 119   | Resp: | 25098 |
| Ion Ratio | Lower | Upper |       |
| 119       | 100   |       |       |
| 134       | 28.8  | 13.3  | 39.9  |
| 91        | 22.6  | 11.1  | 33.1  |



#89  
n-Butylbenzene  
Concen: 3.55 ug/l  
RT: 13.838 min Scan# 2026  
Delta R.T. 0.001 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 91    | Resp: | 53089 |
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 92        | 65.5  | 26.7  | 80.1  |
| 134       | 0.0   | 12.9  | 38.6# |

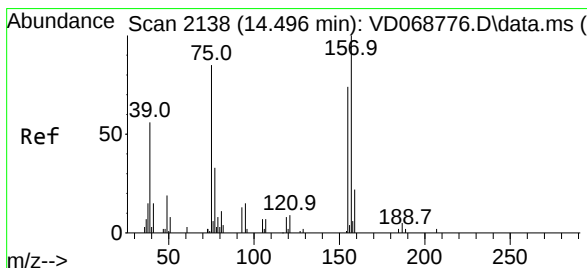
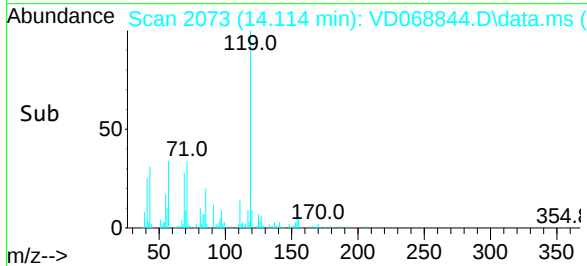
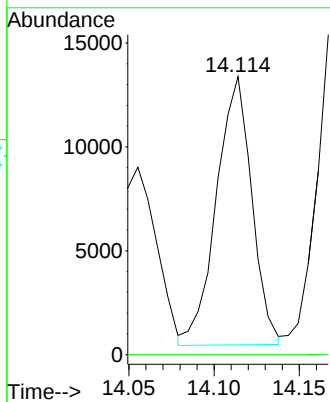
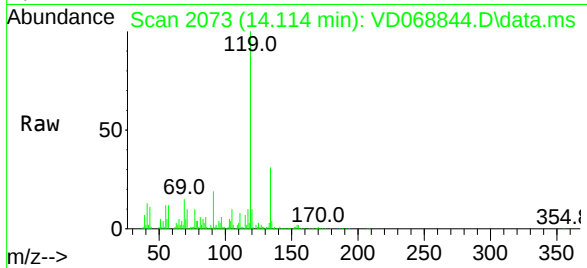




#90  
Hexachloroethane  
Concen: 5.90 ug/l  
RT: 14.114 min Scan# 2073  
Delta R.T. 0.006 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

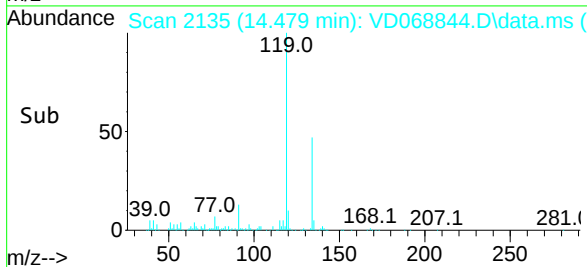
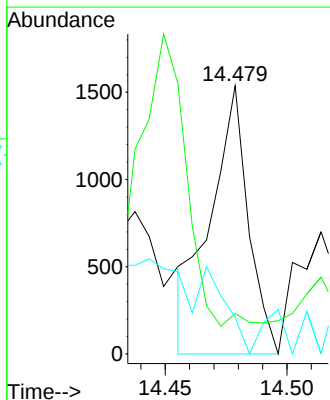
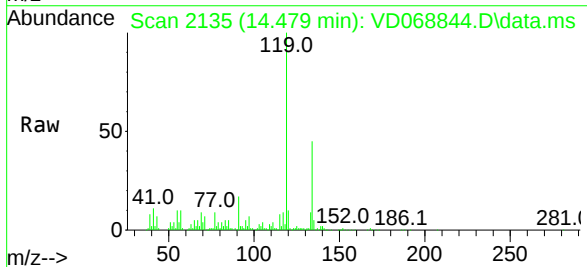
Instrument :  
MSVOA\_D  
ClientSampled :

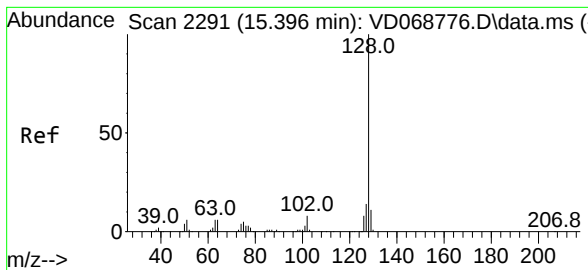
Tgt Ion:117 Resp: 18636  
Ion Ratio Lower Upper  
117 100  
201 0.0 35.4 106.2#



#92  
1,2-Dibromo-3-Chloropropane  
Concen: 3.39 ug/l  
RT: 14.479 min Scan# 2135  
Delta R.T. -0.017 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

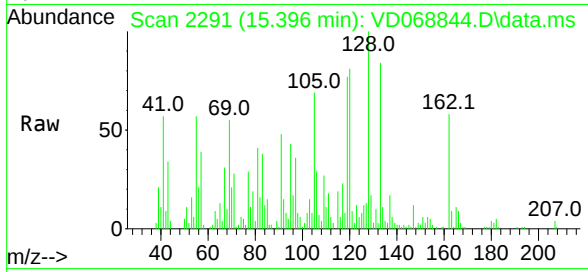
Tgt Ion: 75 Resp: 1671  
Ion Ratio Lower Upper  
75 100  
155 0.0 46.8 140.3#  
157 9.2 59.8 179.3#





#95  
Naphthalene  
Concen: 5.07 ug/l  
RT: 15.396 min Scan# 2291  
Delta R.T. 0.000 min  
Lab File: VD068844.D  
Acq: 12 Apr 2021 20:50

Instrument :  
MSVOA\_D  
ClientSampleId :



Tgt Ion:128 Resp: 39075  
Ion Ratio Lower Upper  
128 100  
127 8.7 10.2 15.4#  
129 8.3 8.9 13.3#

