

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD041221\  
 Data File : VD068829.D  
 Acq On : 12 Apr 2021 13:48  
 Operator : VA/SY  
 Sample : M1996-01  
 Misc : 6.21G/5.00ml/MSVOA\_D/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 26878

Quant Time: Apr 13 01:08:57 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

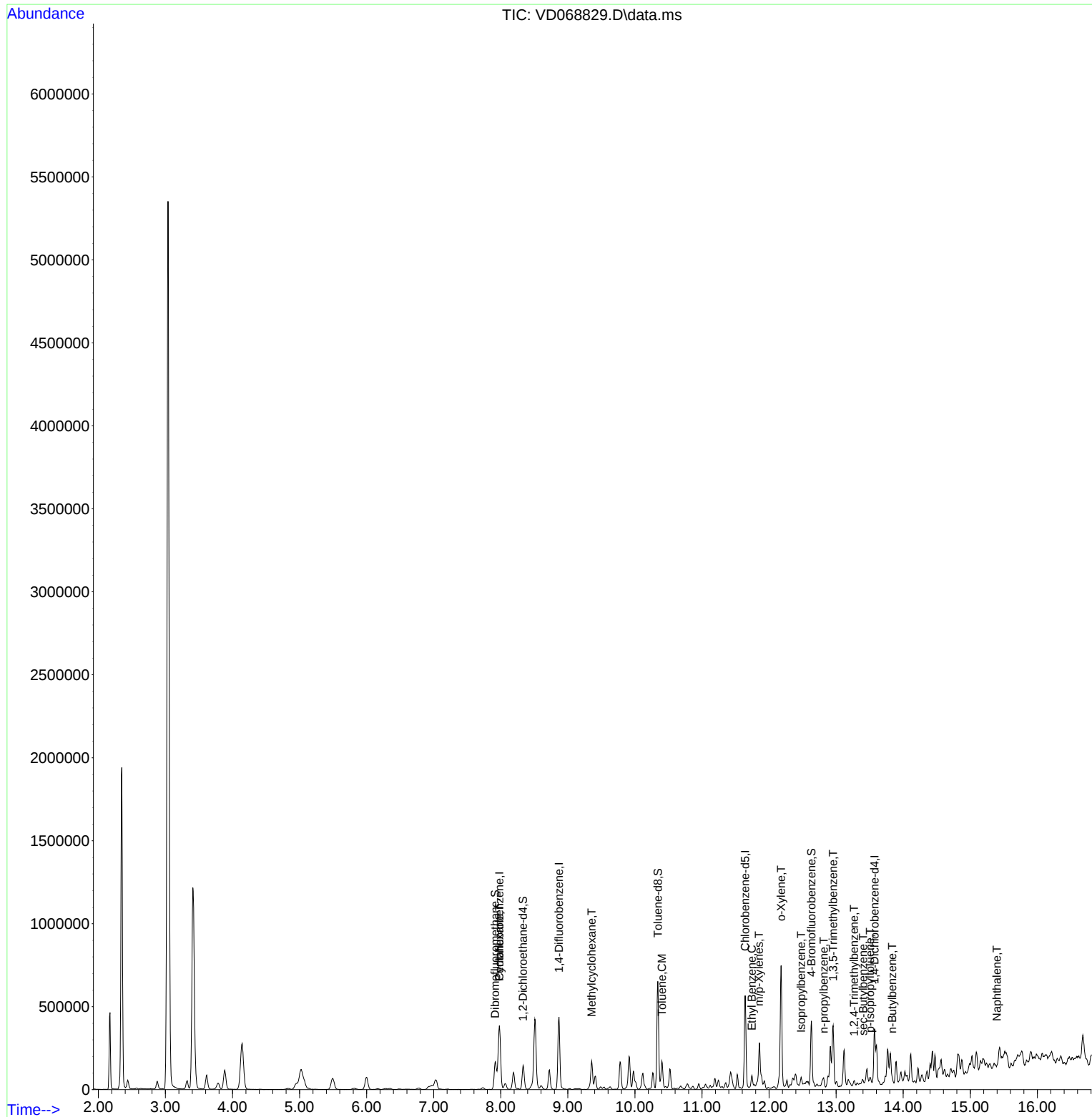
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Pentafluorobenzene       | 7.979  | 168   | 220991   | 50.00    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene     | 8.867  | 114   | 393804   | 50.00    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5        | 11.643 | 117   | 337905   | 50.00    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.573 | 152   | 92393    | 50.00    | ug/l   | 0.00     |
| System Monitoring Compounds |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4   | 8.332  | 65    | 110206   | 47.19    | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =      | 94.38%   |
| 35) Dibromofluoromethane    | 7.914  | 113   | 119728   | 46.74    | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =      | 93.48%   |
| 50) Toluene-d8              | 10.343 | 98    | 447692   | 46.33    | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 49 - 140 | Recovery | =      | 92.66%   |
| 62) 4-Bromofluorobenzene    | 12.631 | 95    | 129393   | 40.32    | ug/l   | 0.00     |
| Spiked Amount               | 50.000 | Range | 25 - 144 | Recovery | =      | 80.64%   |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 31) Cyclohexane             | 7.979  | 56    | 56363    | 14.50    | ug/l   | 93       |
| 39) Methylcyclohexane       | 9.355  | 83    | 39228    | 8.44     | ug/l # | 89       |
| 52) Toluene                 | 10.402 | 92    | 75023    | 10.16    | ug/l   | 98       |
| 67) Ethyl Benzene           | 11.743 | 91    | 50972    | 4.02     | ug/l   | 89       |
| 68) m/p-Xylenes             | 11.849 | 106   | 25240    | 5.16     | ug/l   | 100      |
| 69) o-Xylene                | 12.178 | 106   | 207490   | 46.69    | ug/l   | 98       |
| 73) Isopropylbenzene        | 12.478 | 105   | 27378    | 4.06     | ug/l   | 98       |
| 78) n-propylbenzene         | 12.814 | 91    | 36222    | 4.42     | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene  | 12.955 | 105   | 127488   | 22.60    | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene  | 13.267 | 105   | 19008    | 3.34     | ug/l   | 97       |
| 85) sec-Butylbenzene        | 13.402 | 105   | 18887    | 2.80     | ug/l # | 75       |
| 86) p-Isopropyltoluene      | 13.508 | 119   | 21635    | 3.51     | ug/l   | 97       |
| 89) n-Butylbenzene          | 13.837 | 91    | 17980    | 3.09     | ug/l # | 72       |
| 95) Naphthalene             | 15.396 | 128   | 12500    | 4.17     | ug/l # | 74       |
| -----                       |        |       |          |          |        |          |

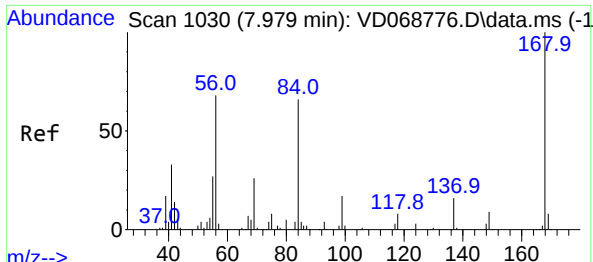
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Data\VD041221\  
Data File : VD068829.D  
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Operator : VA/SY  
Sample : M1996-01  
Misc : 6.21G/5.00ml/MSVOA\_D/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

Quant Time: Apr 13 01:08:57 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

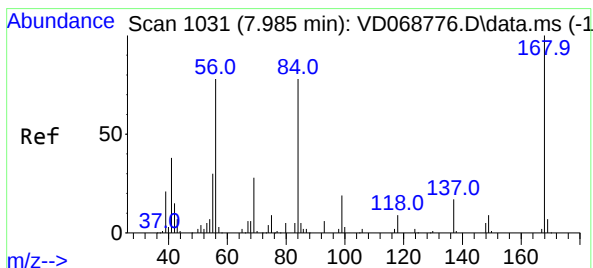
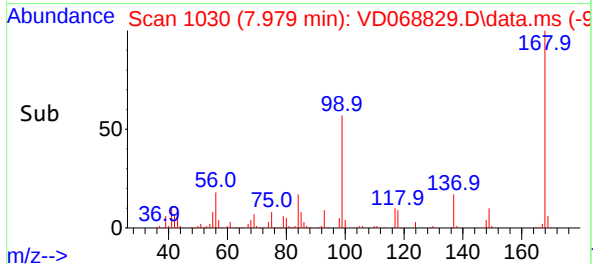
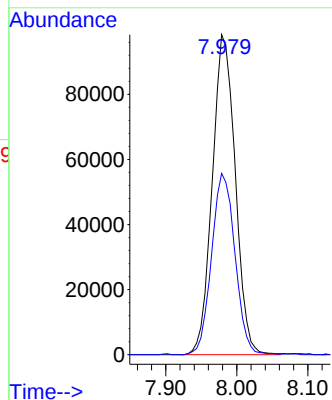
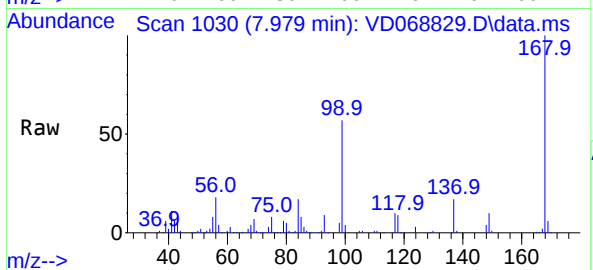




#1  
Pentafluorobenzene  
Concen: 50.00 ug/l  
RT: 7.979 min Scan# 1030  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

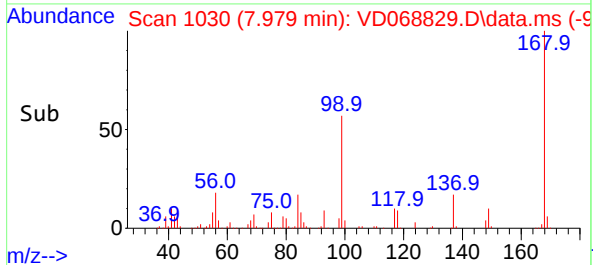
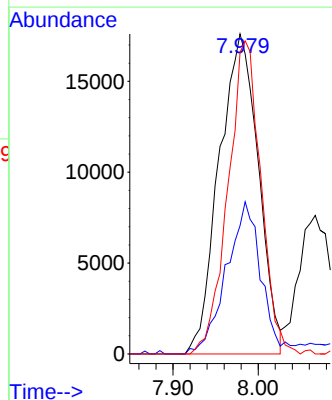
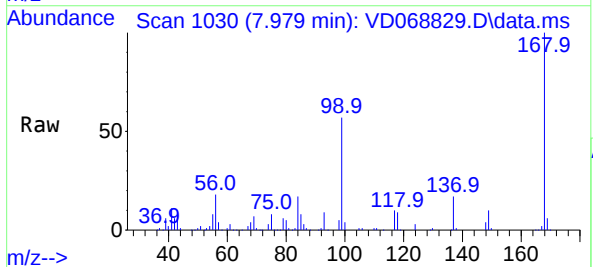
Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

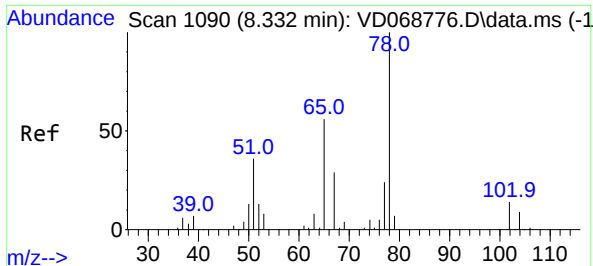
Tgt Ion:168 Resp: 220991  
Ion Ratio Lower Upper  
168 100  
99 56.6 46.2 69.2



#31  
Cyclohexane  
Concen: 14.50 ug/l  
RT: 7.979 min Scan# 1030  
Delta R.T. -0.006 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 56 Resp: 56363  
Ion Ratio Lower Upper  
56 100  
69 40.1 30.0 45.0  
84 94.3 82.0 123.0



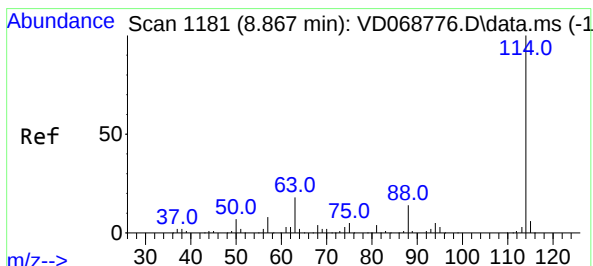
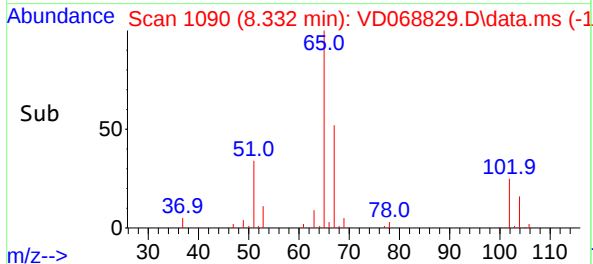
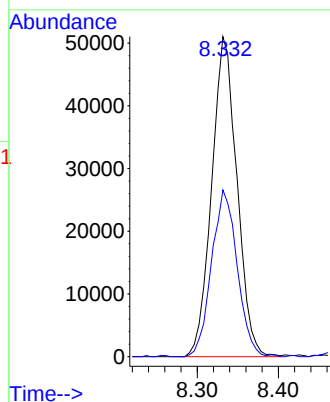
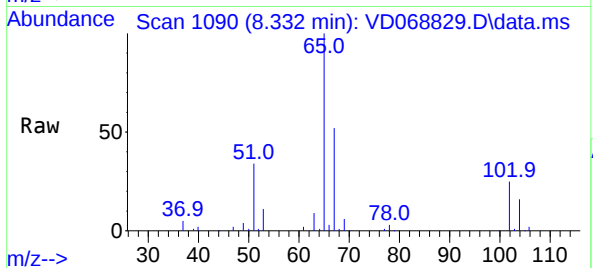


#33

1,2-Dichloroethane-d4  
Concen: 47.19 ug/l  
RT: 8.332 min Scan# 1090  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

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ClientSampleId :  
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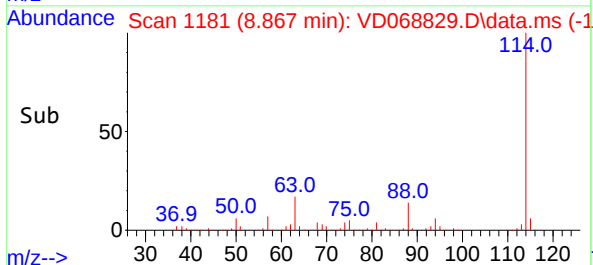
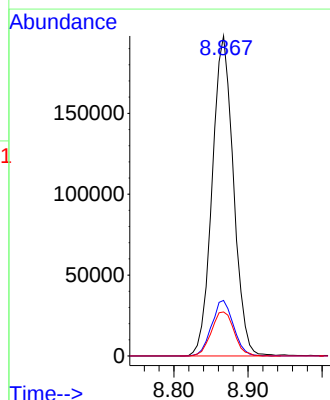
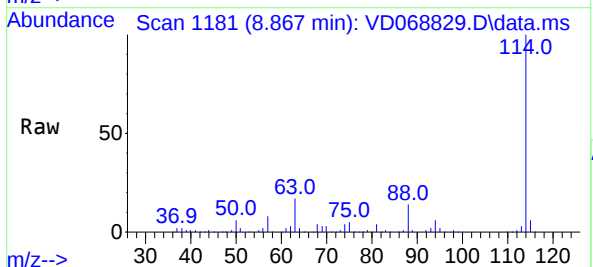
Tgt Ion: 65 Resp: 110206  
Ion Ratio Lower Upper  
65 100  
67 52.9 0.0 106.0

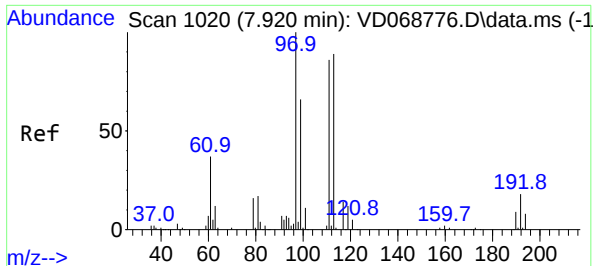


#34

1,4-Difluorobenzene  
Concen: 50.00 ug/l  
RT: 8.867 min Scan# 1181  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 114 Resp: 393804  
Ion Ratio Lower Upper  
114 100  
63 17.4 0.0 38.2  
88 13.7 0.0 29.4

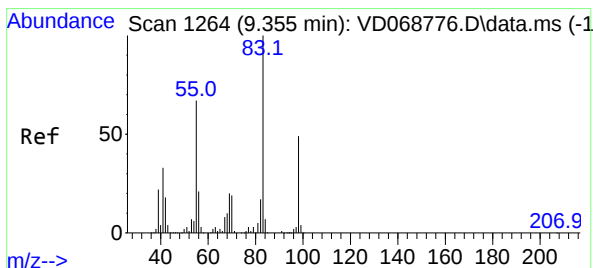
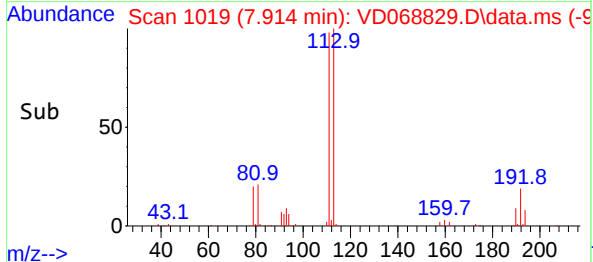
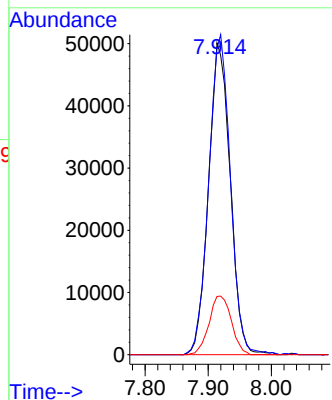
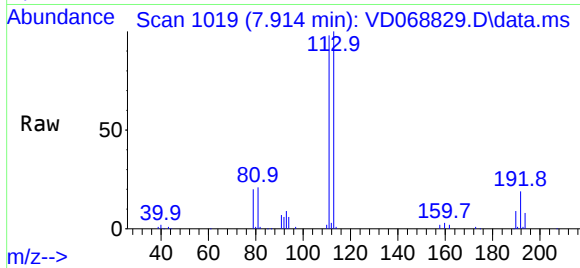




#35  
Dibromofluoromethane  
Concen: 46.74 ug/l  
RT: 7.914 min Scan# 1019  
Delta R.T. -0.006 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

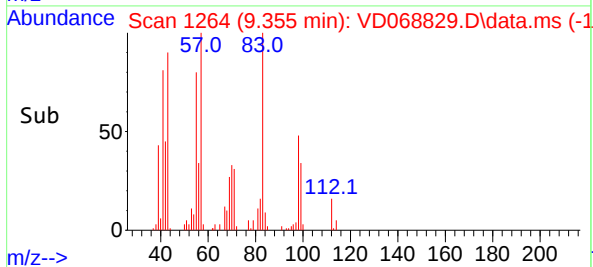
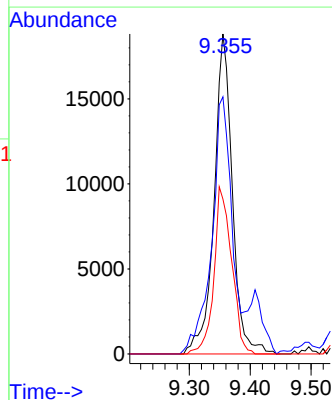
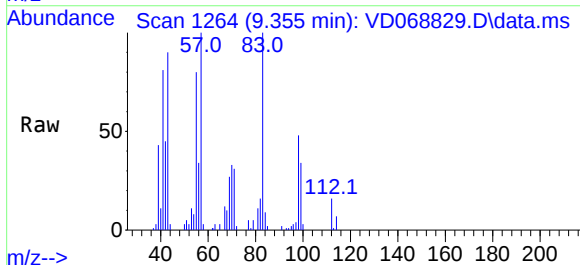
Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

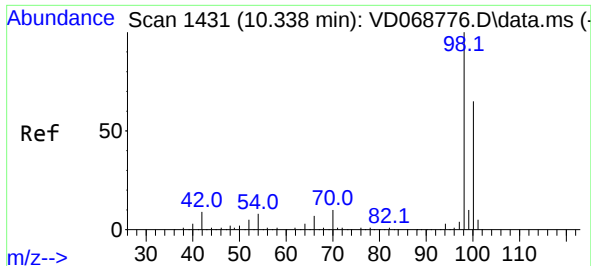
Tgt Ion:113 Resp: 119728  
Ion Ratio Lower Upper  
113 100  
111 102.2 82.5 123.7  
192 19.4 15.1 22.7



#39  
Methylcyclohexane  
Concen: 8.44 ug/l  
RT: 9.355 min Scan# 1264  
Delta R.T. 0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 83 Resp: 39228  
Ion Ratio Lower Upper  
83 100  
55 80.3 51.7 77.5#  
98 48.4 38.8 58.2

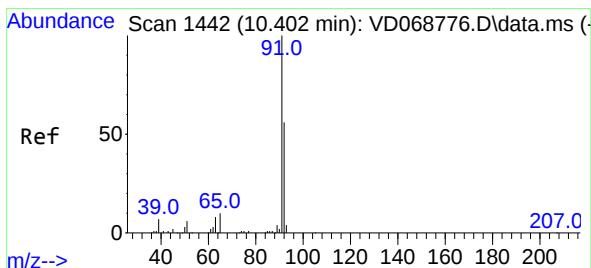
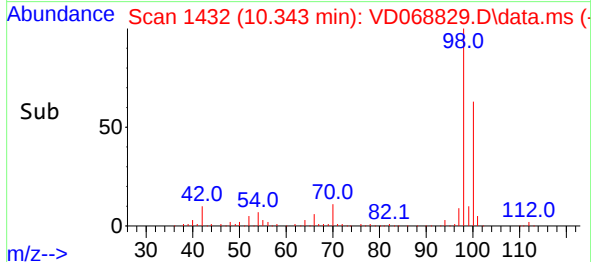
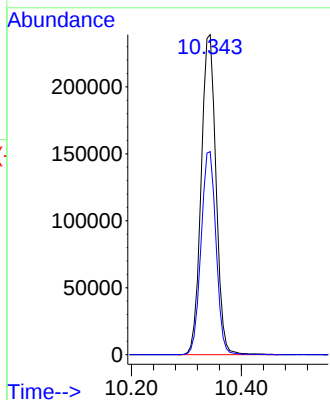
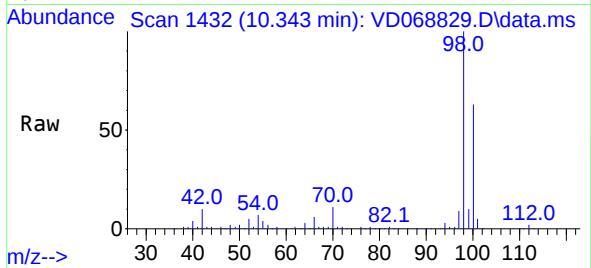




#50  
Toluene-d8  
Concen: 46.33 ug/l  
RT: 10.343 min Scan# 1432  
Delta R.T. 0.005 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

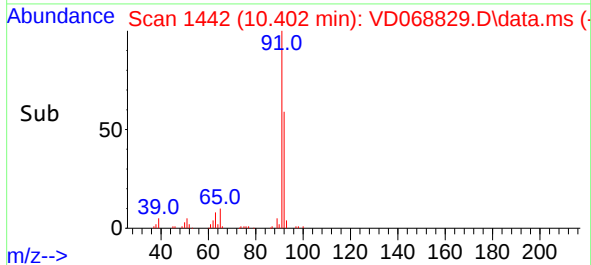
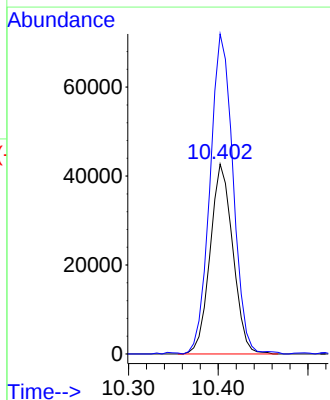
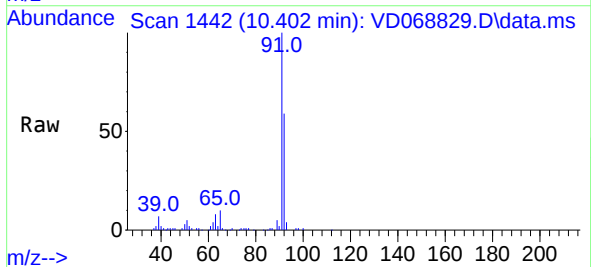
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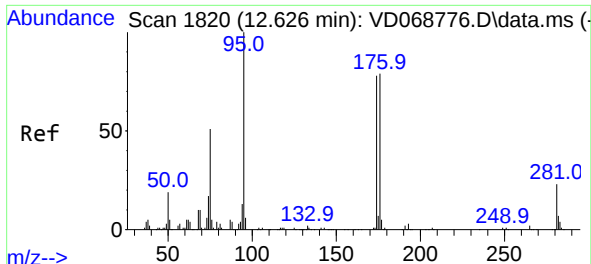
Tgt Ion: 98 Resp: 447692  
Ion Ratio Lower Upper  
98 100  
100 63.9 51.8 77.6



#52  
Toluene  
Concen: 10.16 ug/l  
RT: 10.402 min Scan# 1442  
Delta R.T. 0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 92 Resp: 75023  
Ion Ratio Lower Upper  
92 100  
91 171.2 139.1 208.7



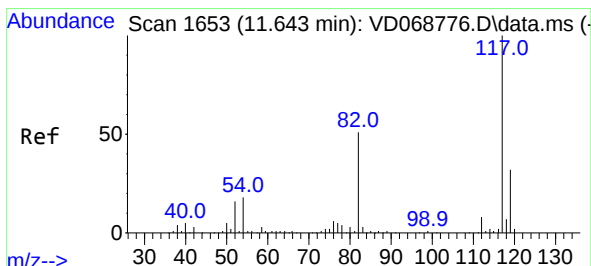
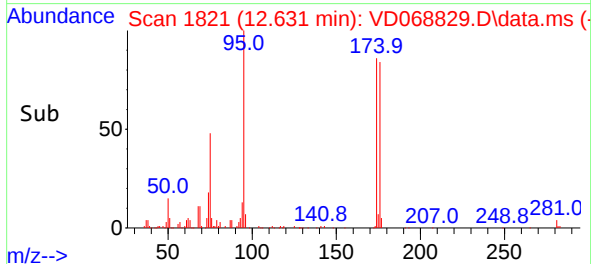
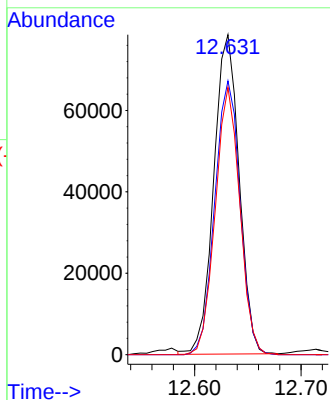
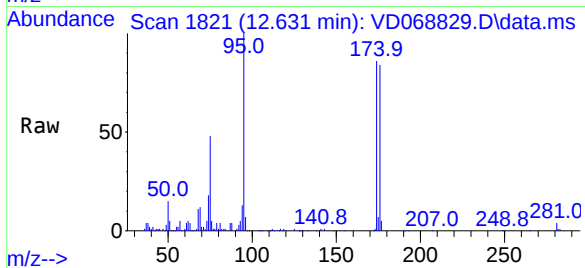


#62  
4-Bromofluorobenzene  
Concen: 40.32 ug/l  
RT: 12.631 min Scan# 1821  
Delta R.T. 0.005 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

Tgt Ion: 95 Resp: 129393

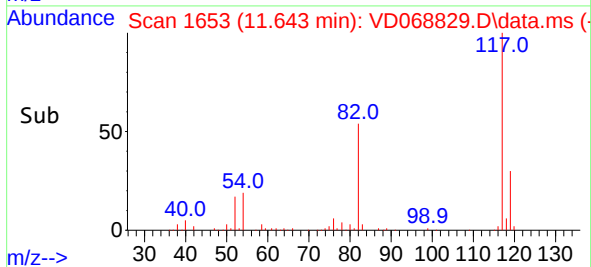
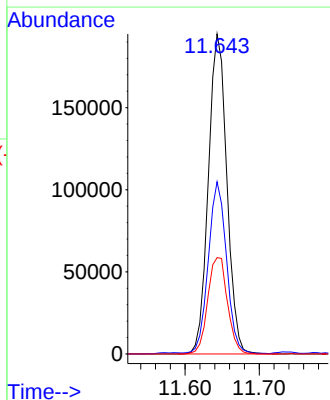
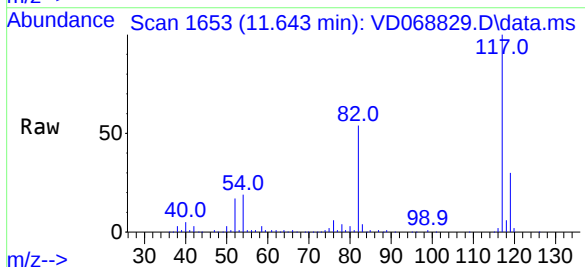
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 174 | 85.6  | 0.0   | 168.0 |
| 176 | 81.0  | 0.0   | 160.2 |

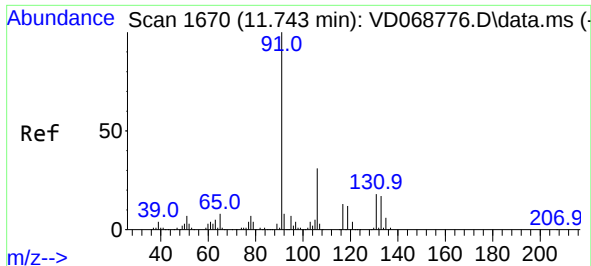


#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 11.643 min Scan# 1653  
Delta R.T. 0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 117 Resp: 337905

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 82  | 53.4  | 43.5  | 65.3  |
| 119 | 30.1  | 26.7  | 40.1  |

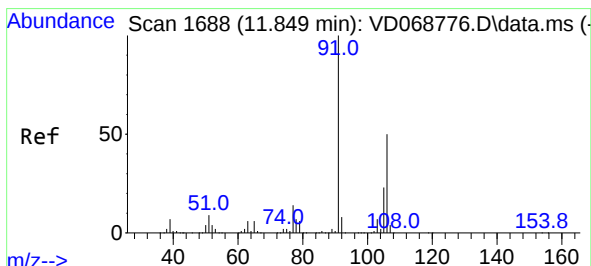
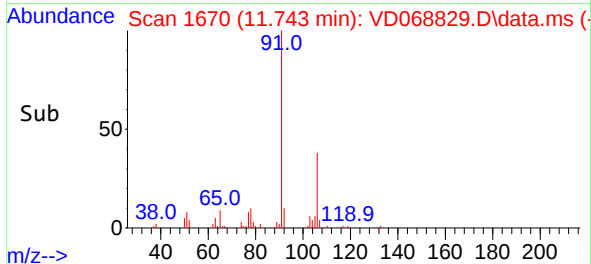
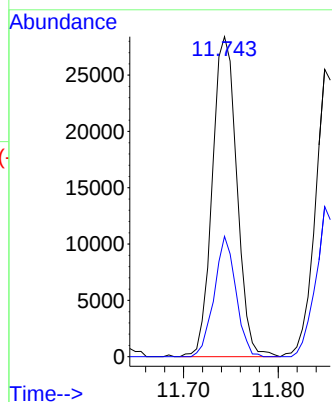
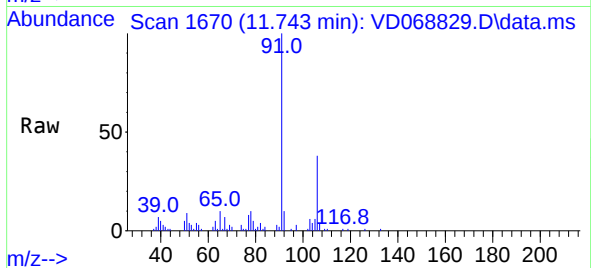




#67  
Ethyl Benzene  
Concen: 4.02 ug/l  
RT: 11.743 min Scan# 1670  
Delta R.T. 0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

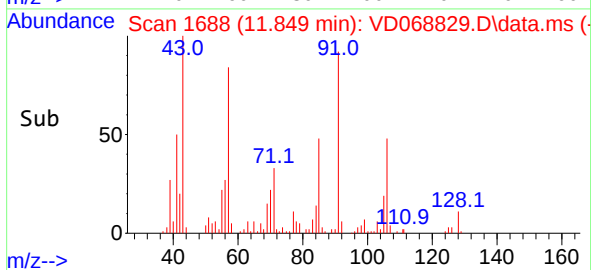
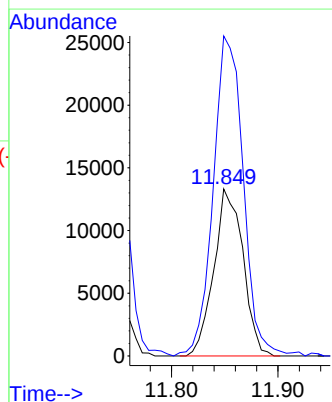
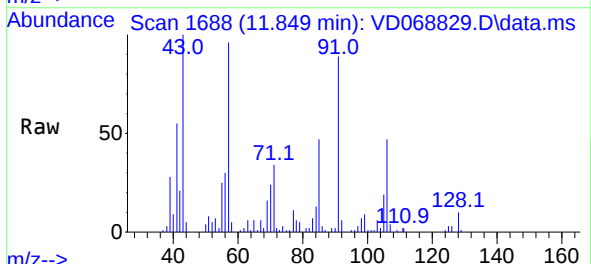
Instrument :  
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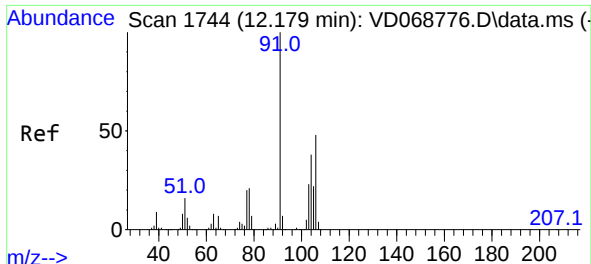
Tgt Ion: 91 Resp: 50972  
Ion Ratio Lower Upper  
91 100  
106 37.6 25.1 37.7



#68  
m/p-Xylenes  
Concen: 5.16 ug/l  
RT: 11.849 min Scan# 1688  
Delta R.T. 0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 106 Resp: 25240  
Ion Ratio Lower Upper  
106 100  
91 198.3 158.6 238.0

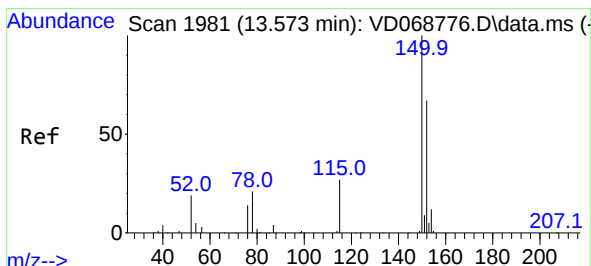
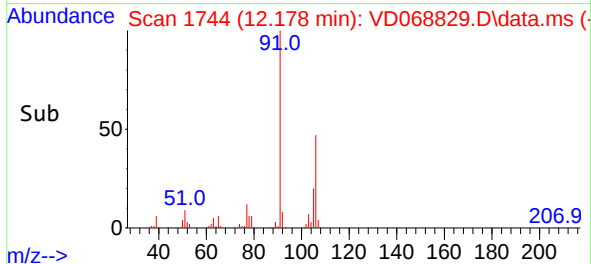
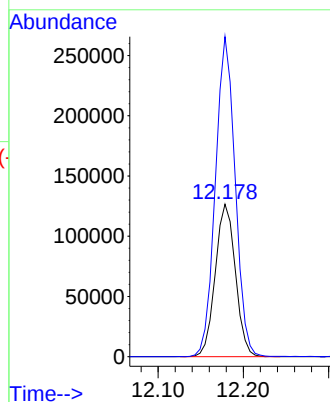
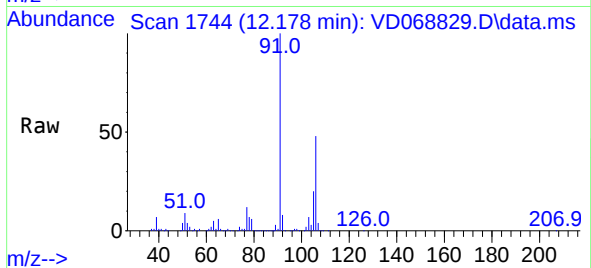




#69  
o-Xylene  
Concen: 46.69 ug/l  
RT: 12.178 min Scan# 1744  
Delta R.T. -0.001 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

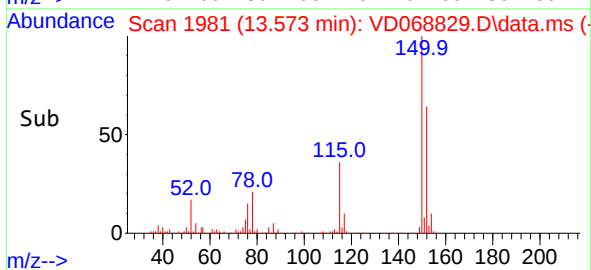
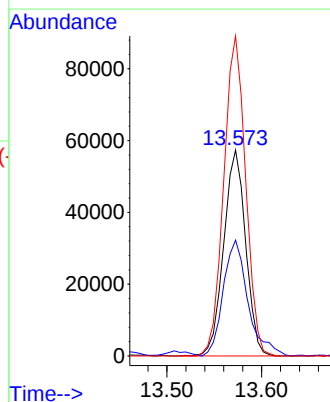
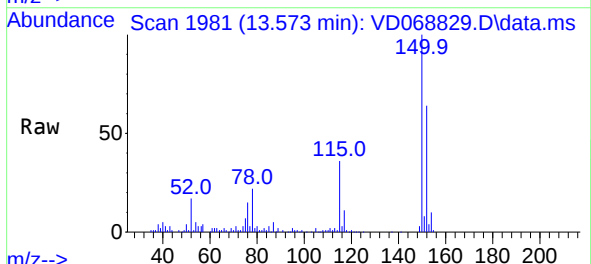
Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

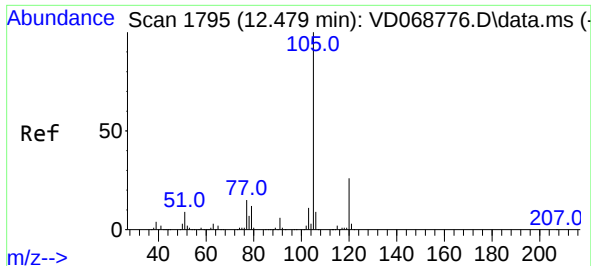
Tgt Ion:106 Resp: 207490  
Ion Ratio Lower Upper  
106 100  
91 206.6 105.0 315.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 13.573 min Scan# 1981  
Delta R.T. -0.001 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion:152 Resp: 92393  
Ion Ratio Lower Upper  
152 100  
115 63.4 29.3 87.8  
150 155.0 0.0 347.6

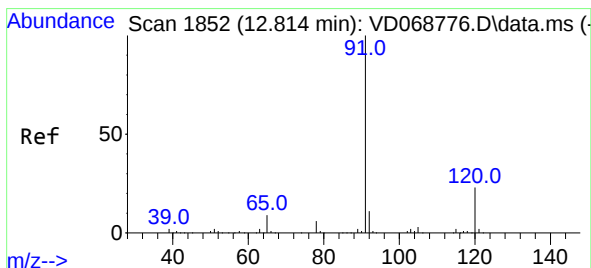
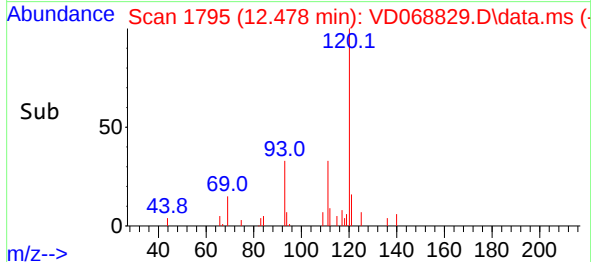
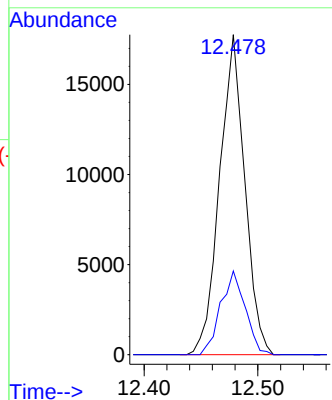
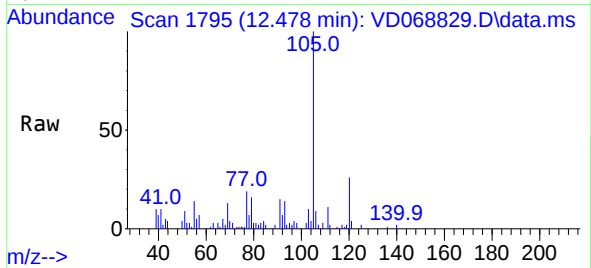




#73  
Isopropylbenzene  
Concen: 4.06 ug/l  
RT: 12.478 min Scan# 1795  
Delta R.T. -0.001 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

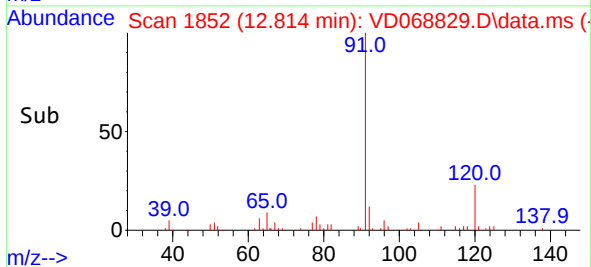
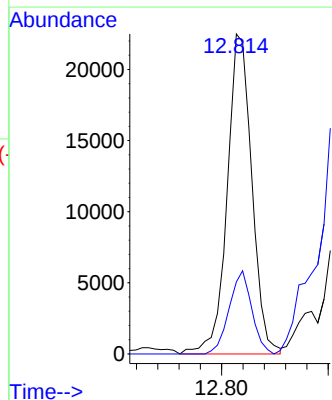
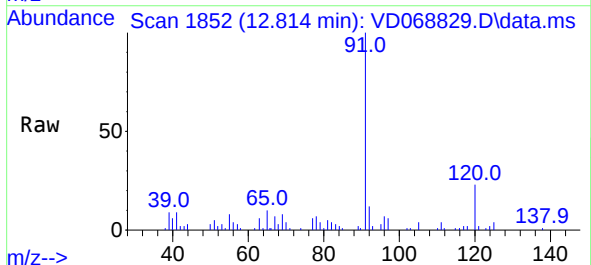
Instrument :  
MSVOA\_D  
ClientSampled :  
26878

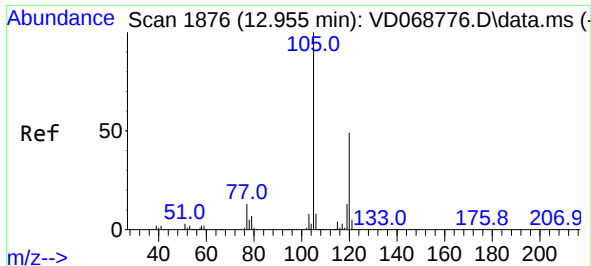
Tgt Ion:105 Resp: 27378  
Ion Ratio Lower Upper  
105 100  
120 25.5 13.4 40.2



#78  
n-propylbenzene  
Concen: 4.42 ug/l  
RT: 12.814 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion: 91 Resp: 36222  
Ion Ratio Lower Upper  
91 100  
120 23.7 11.4 34.2

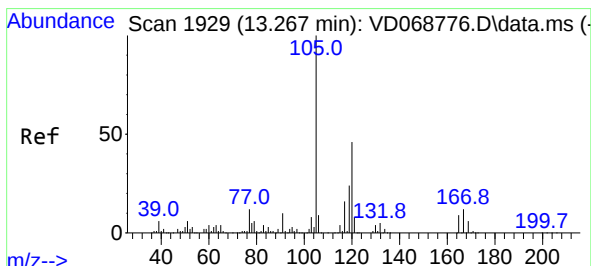
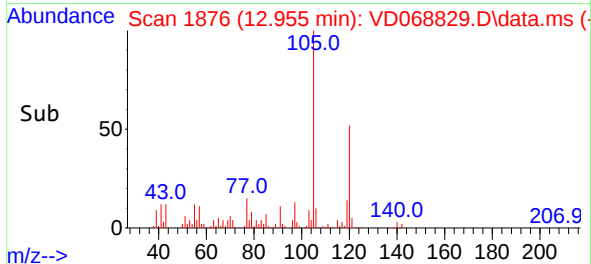
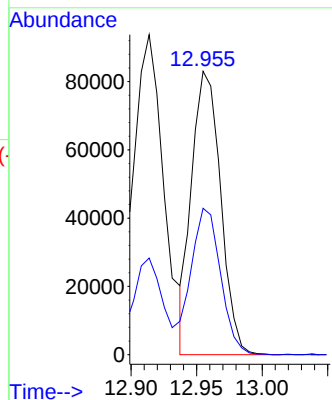
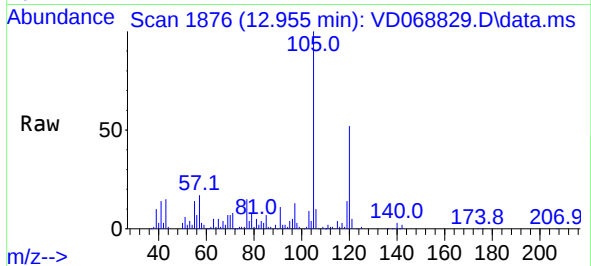




#80  
1,3,5-Trimethylbenzene  
Concen: 22.60 ug/l  
RT: 12.955 min Scan# 1876  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

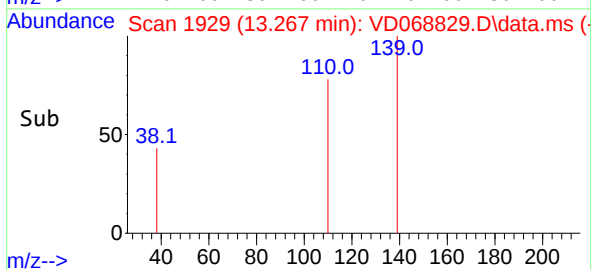
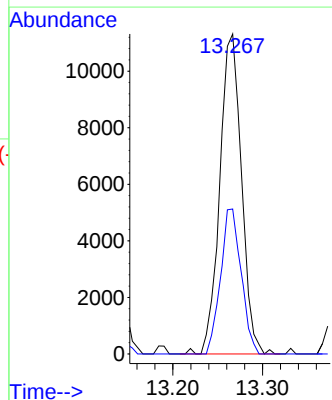
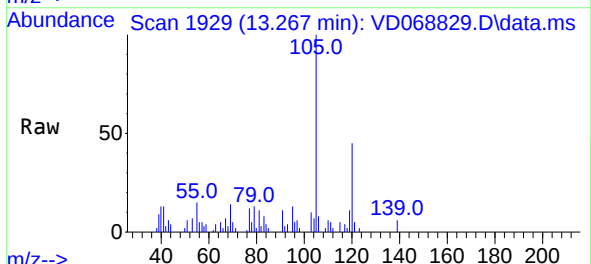
Instrument :  
MSVOA\_D  
ClientSampled :  
26878

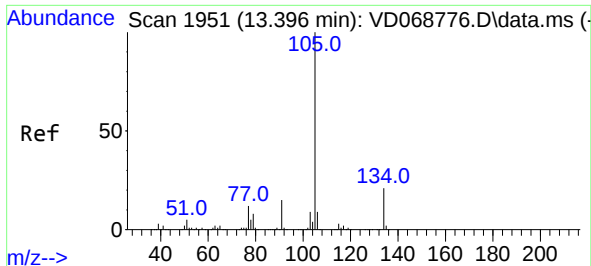
Tgt Ion:105 Resp: 127488  
Ion Ratio Lower Upper  
105 100  
120 53.9 24.9 74.7



#84  
1,2,4-Trimethylbenzene  
Concen: 3.34 ug/l  
RT: 13.267 min Scan# 1929  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion:105 Resp: 19008  
Ion Ratio Lower Upper  
105 100  
120 42.9 22.6 67.7

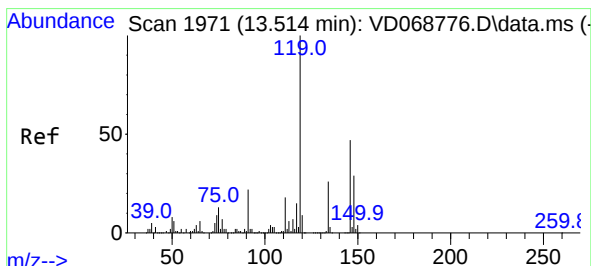
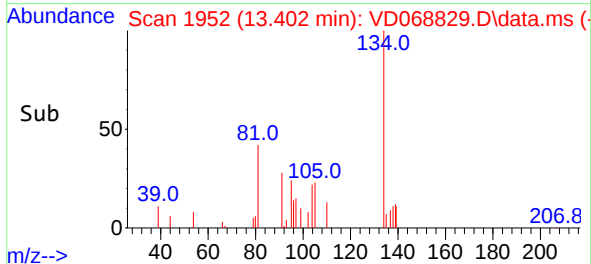
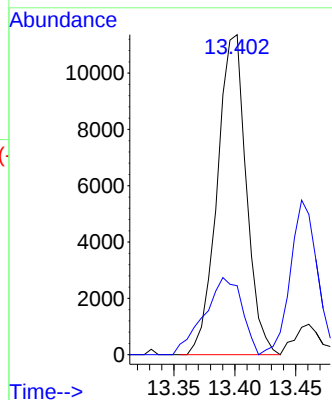
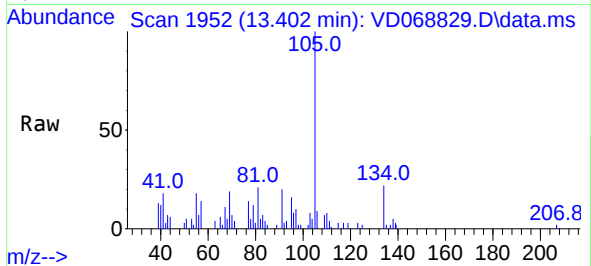




#85  
sec-Butylbenzene  
Concen: 2.80 ug/l  
RT: 13.402 min Scan# 1952  
Delta R.T. 0.006 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

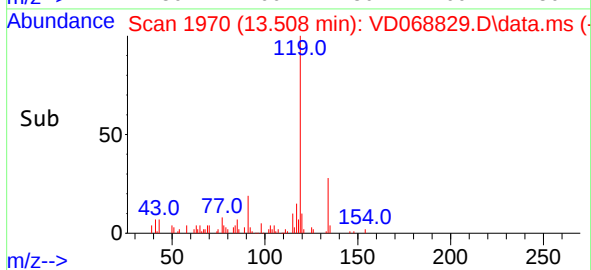
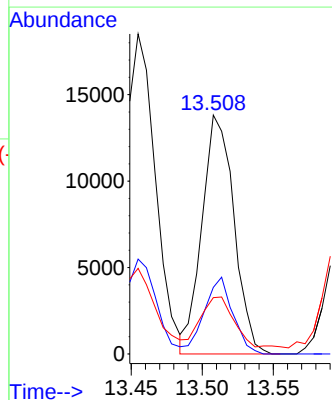
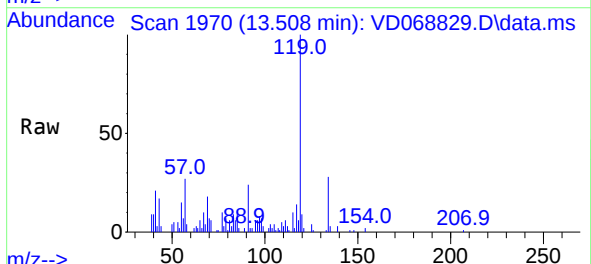
Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

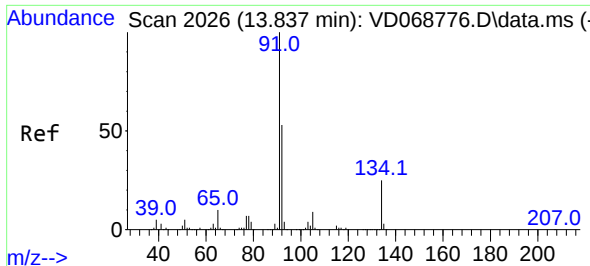
Tgt Ion:105 Resp: 18887  
Ion Ratio Lower Upper  
105 100  
134 31.2 10.0 29.8#



#86  
p-Isopropyltoluene  
Concen: 3.51 ug/l  
RT: 13.508 min Scan# 1970  
Delta R.T. -0.006 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion:119 Resp: 21635  
Ion Ratio Lower Upper  
119 100  
134 28.8 13.3 39.9  
91 22.5 11.1 33.1

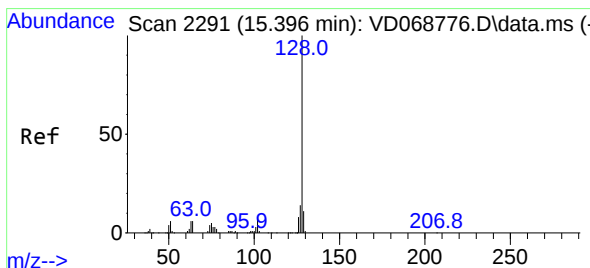
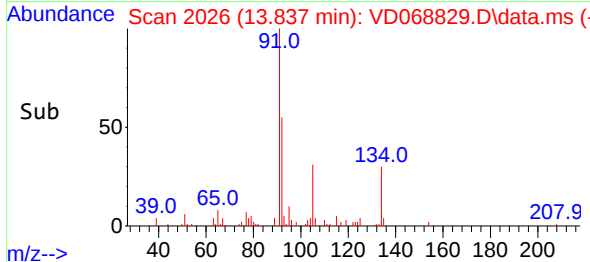
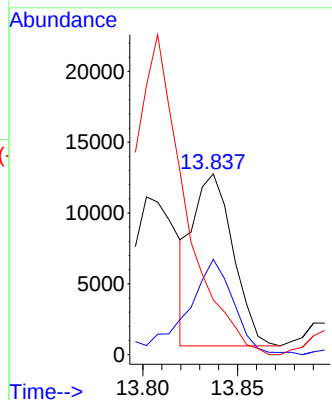
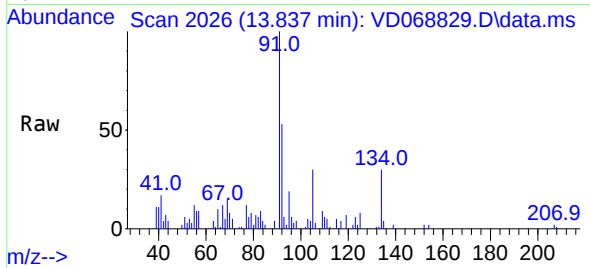




#89  
n-Butylbenzene  
Concen: 3.09 ug/l  
RT: 13.837 min Scan# 2026  
Delta R.T. 0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Instrument :  
MSVOA\_D  
ClientSampleId :  
26878

Tgt Ion: 91 Resp: 17980  
Ion Ratio Lower Upper  
91 100  
92 65.6 26.7 80.1  
134 0.0 12.9 38.6#



#95  
Naphthalene  
Concen: 4.17 ug/l  
RT: 15.396 min Scan# 2291  
Delta R.T. -0.000 min  
Lab File: VD068829.D  
Acq: 12 Apr 2021 13:48

Tgt Ion:128 Resp: 12500  
Ion Ratio Lower Upper  
128 100  
127 30.5 10.2 15.4#  
129 9.7 8.9 13.3

