

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090321\  
 Data File : VN068410.D  
 Acq On : 3 Sep 2021 16:23  
 Operator : JC/MD  
 Sample : M3644-04  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Sep 04 03:12:19 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090321W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 03 13:24:01 2021  
 Response via : Initial Calibration

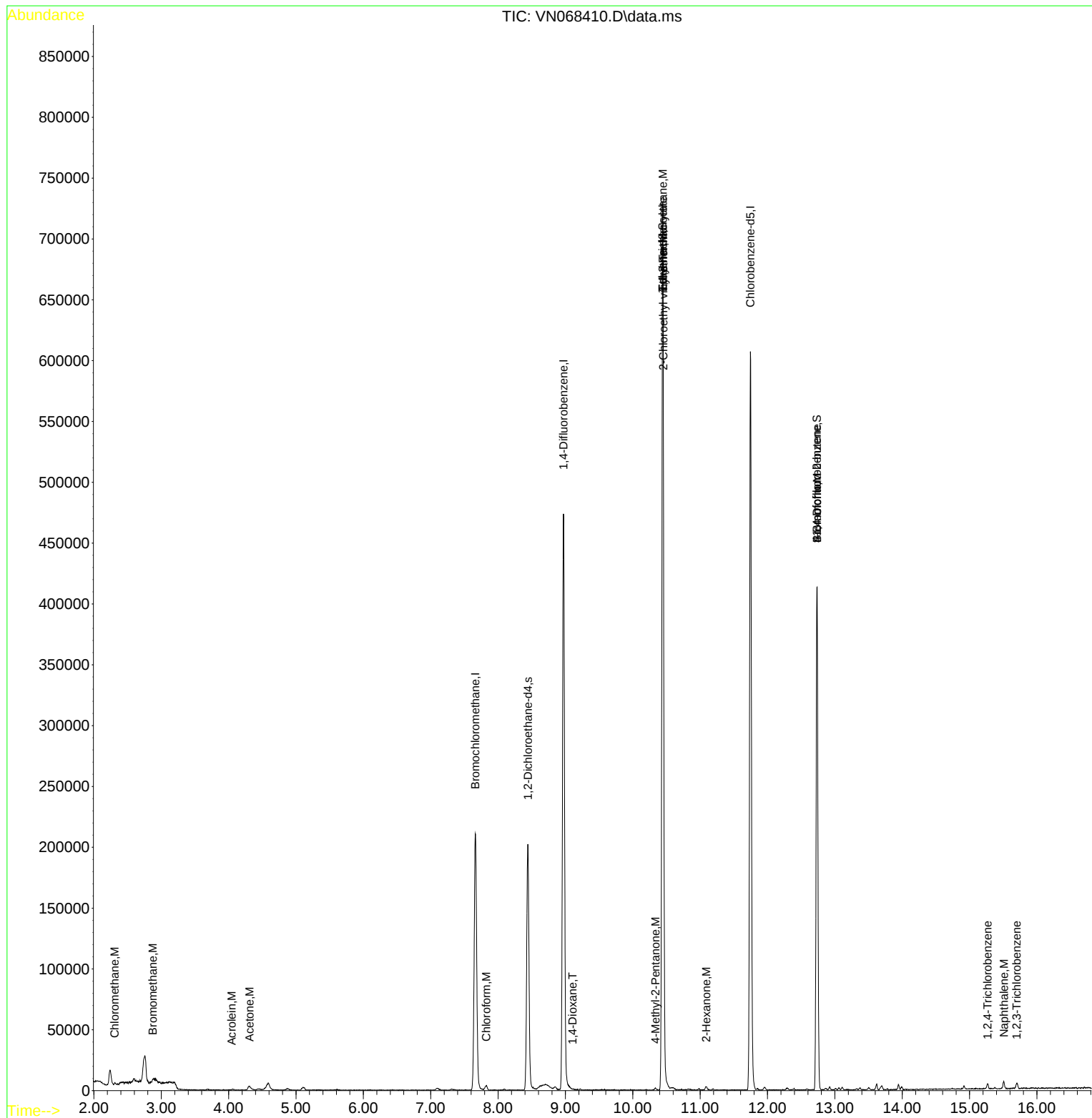
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min)  |
|-------------------------------|--------|-------|----------|----------|--------|-----------|
| -----                         |        |       |          |          |        |           |
| Internal Standards            |        |       |          |          |        |           |
| 1) Bromochloromethane         | 7.662  | 128   | 86921    | 30.000   | ug/l   | 0.00      |
| 28) 1,4-Difluorobenzene       | 8.971  | 114   | 460161   | 30.000   | ug/l   | # 0.00    |
| 57) Chlorobenzene-d5          | 11.746 | 117   | 392265   | 30.000   | ug/l   | # 0.00    |
|                               |        |       |          |          |        |           |
| System Monitoring Compounds   |        |       |          |          |        |           |
| 27) 1,2-Dichloroethane-d4     | 8.442  | 65    | 171576   | 33.295   | ug/l   | 0.00      |
| Spiked Amount                 | 30.000 | Range | 91 - 110 | Recovery | =      | 111.000%# |
| 60) 4-Bromofluorobenzene      | 12.733 | 95    | 145871   | 26.259   | ug/l   | 0.00      |
| Spiked Amount                 | 30.000 | Range | 63 - 112 | Recovery | =      | 87.533%   |
| 63) Toluene-d8                | 10.443 | 98    | 541750   | 31.013   | ug/l   | 0.00      |
| Spiked Amount                 | 30.000 | Range | 91 - 112 | Recovery | =      | 103.367%  |
|                               |        |       |          |          |        |           |
| Target Compounds              |        |       |          |          |        |           |
|                               |        |       |          |          | Qvalue |           |
| 3) Chloromethane              | 2.309  | 50    | 1919     | 0.482    | ug/l   | 97        |
| 5) Bromomethane               | 2.874  | 94    | 1219     | 0.224    | ug/l   | # 70      |
| 13) Acrolein                  | 4.044  | 56    | 327      | 0.836    | ug/l   | 88        |
| 15) Acetone                   | 4.312  | 58    | 1464     | 2.815    | ug/l   | # 11      |
| 25) Chloroform                | 7.825  | 83    | 3815     | 0.423    | ug/l   | 95        |
| 45) 1,4-Dioxane               | 9.105  | 88    | 57       | 0.747    | ug/l   | # 1       |
| 50) 1,1,2-Trichloroethane     | 10.448 | 97    | 20643    | 3.997    | ug/l   | # 1       |
| 51) Ethyl methacrylate        | 10.448 | 69    | 1681     | 0.253    | ug/l   | 82        |
| 55) 2-Chloroethyl vinyl ether | 10.454 | 63    | 473      | 46.784   | ug/l   | # 1       |
| 56) Bromoform                 | 12.736 | 173   | 1558     | 0.327    | ug/l   | # 1       |
| 58) 4-Methyl-2-Pentanone      | 10.338 | 43    | 1406     | 0.308    | ug/l   | # 65      |
| 59) 2-Hexanone                | 11.089 | 43    | 1296     | 0.409    | ug/l   | # 61      |
| 77) t-1,4-Dichloro-2-butene   | 12.733 | 75    | 73845    | 49.022   | ug/l   | # 6       |
| 89) 1,2,4-Trichlorobenzene    | 15.268 | 180   | 1829     | 0.309    | ug/l   | # 81      |
| 91) Naphthalene               | 15.509 | 128   | 6247     | 0.500    | ug/l   | # 83      |
| 92) 1,2,3-Trichlorobenzene    | 15.700 | 180   | 1255     | 0.223    | ug/l   | 52        |
| -----                         |        |       |          |          |        |           |

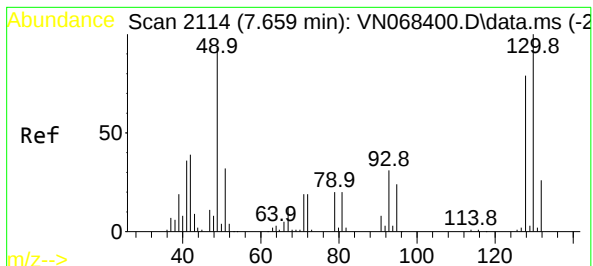
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090321\  
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Sample : M3644-04  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Sep 04 03:12:19 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090321W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Fri Sep 03 13:24:01 2021  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.662 min Scan# 2115

Delta R.T. 0.003 min

Lab File: VN068410.D

Acq: 3 Sep 2021 16:23

Tgt Ion:128 Resp: 86921

Ion Ratio Lower Upper

128 100

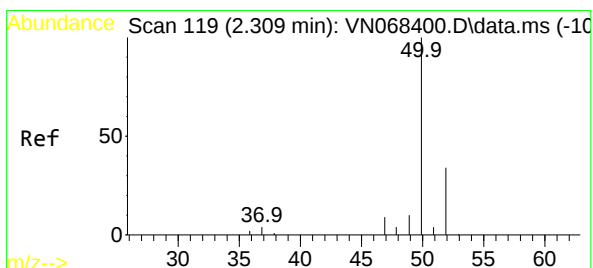
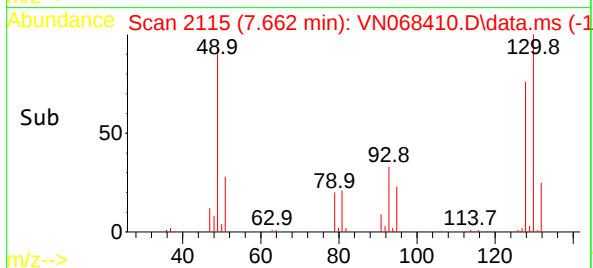
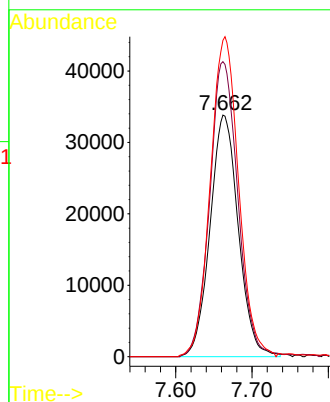
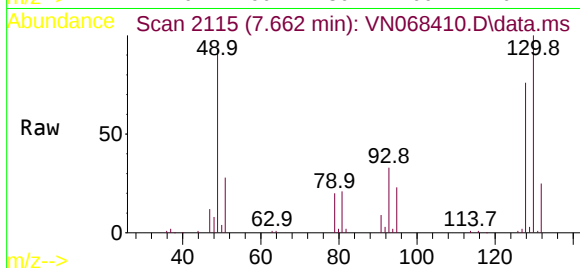
49 122.4 0.0 517.5

130 132.6 0.0 325.8

Instrument :

MSVOA\_N

ClientSampleId :



#3

Chloromethane

Concen: 0.482 ug/l

RT: 2.309 min Scan# 119

Delta R.T. 0.000 min

Lab File: VN068410.D

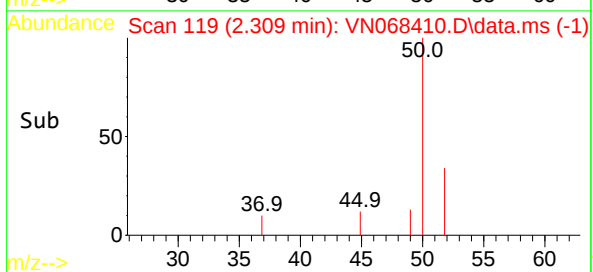
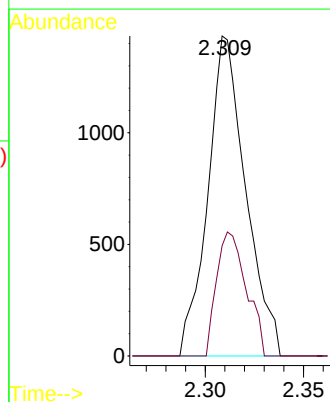
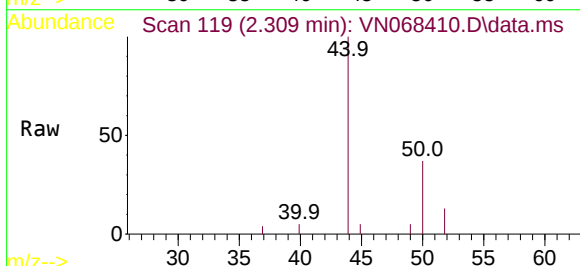
Acq: 3 Sep 2021 16:23

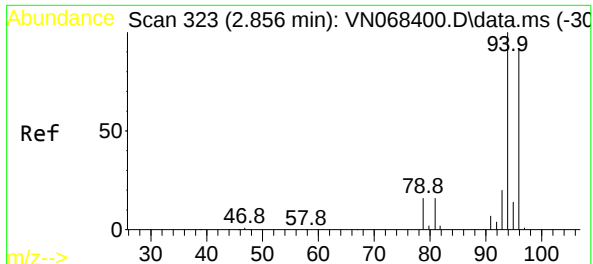
Tgt Ion: 50 Resp: 1919

Ion Ratio Lower Upper

50 100

52 34.4 26.0 39.0

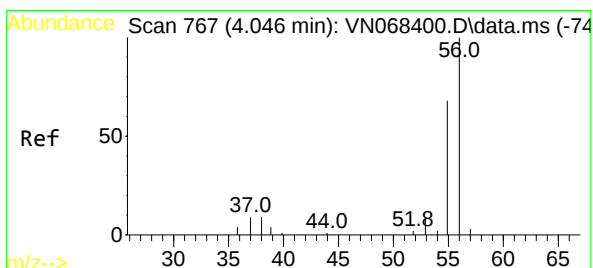
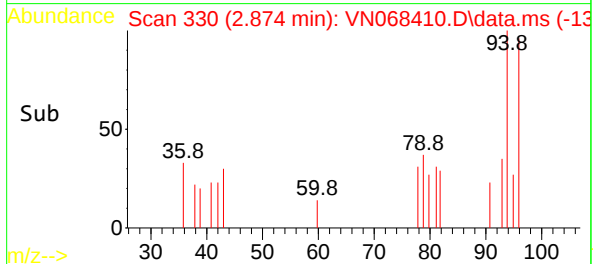
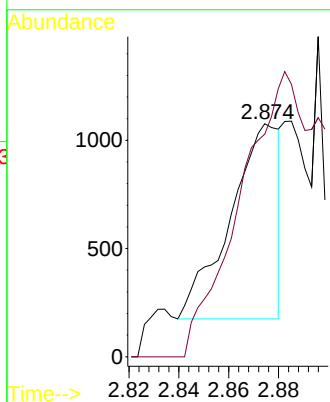
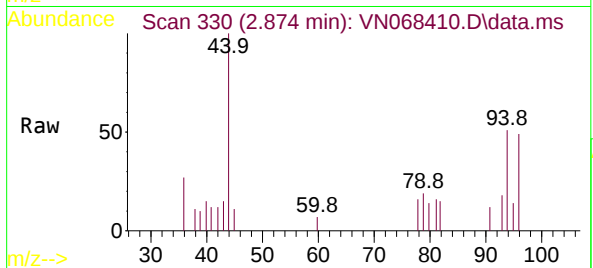




#5  
Bromomethane  
Concen: 0.224 ug/l  
RT: 2.874 min Scan# 330  
Delta R.T. 0.019 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

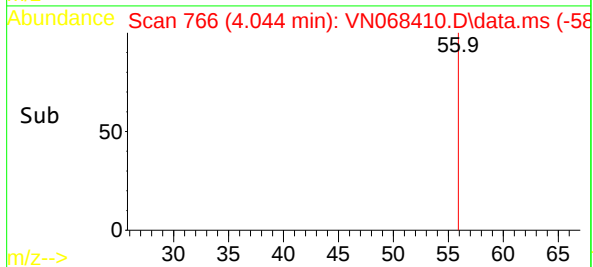
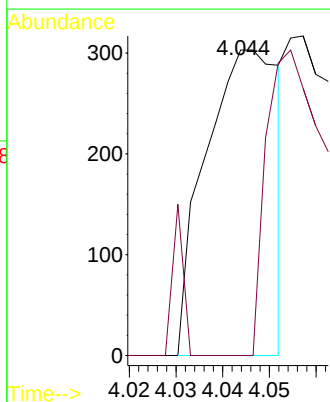
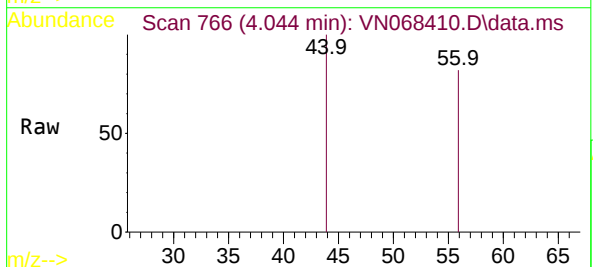
Instrument :  
MSVOA\_N  
ClientSampleId :

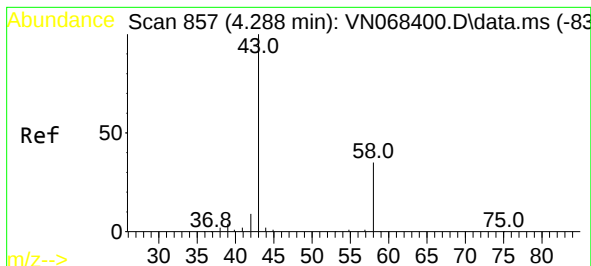
Tgt Ion: 94 Resp: 1219  
Ion Ratio Lower Upper  
94 100  
96 114.1 69.4 104.2#



#13  
Acrolein  
Concen: 0.836 ug/l  
RT: 4.044 min Scan# 766  
Delta R.T. -0.003 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Tgt Ion: 56 Resp: 327  
Ion Ratio Lower Upper  
56 100  
55 81.7 57.5 86.3





#15

Acetone

Concen: 2.815 ug/l

RT: 4.312 min Scan# 866

Delta R.T. 0.024 min

Lab File: VN068410.D

Acq: 3 Sep 2021 16:23

Tgt Ion: 58 Resp: 1464

Ion Ratio Lower Upper

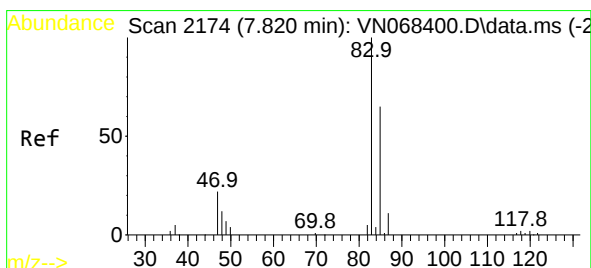
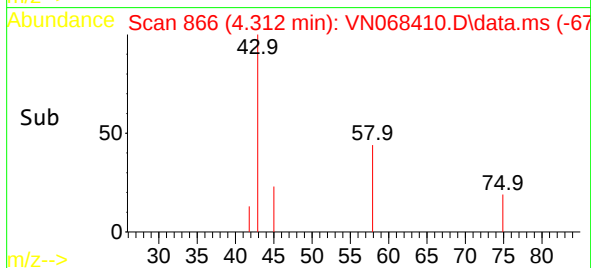
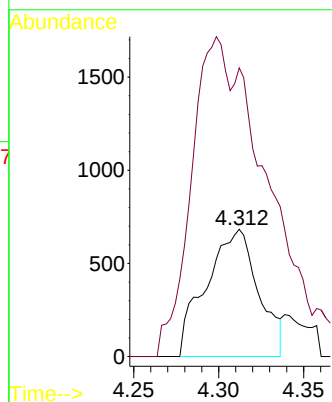
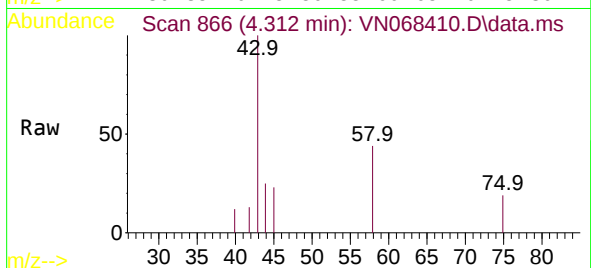
58 100

43 165.6 289.6 434.4#

Instrument :

MSVOA\_N

ClientSampleId :



#25

Chloroform

Concen: 0.423 ug/l

RT: 7.825 min Scan# 2176

Delta R.T. 0.005 min

Lab File: VN068410.D

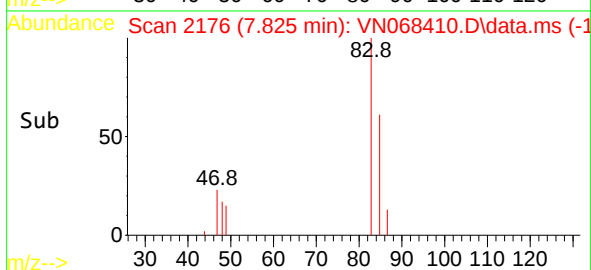
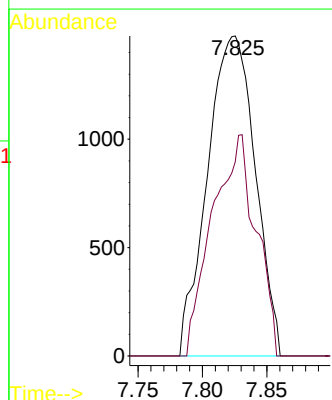
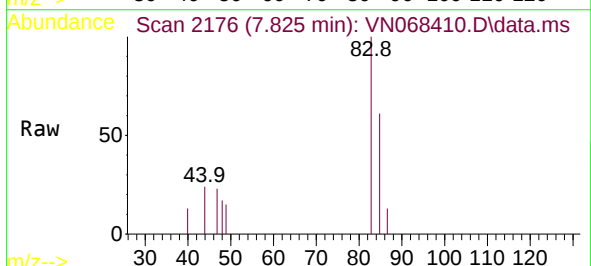
Acq: 3 Sep 2021 16:23

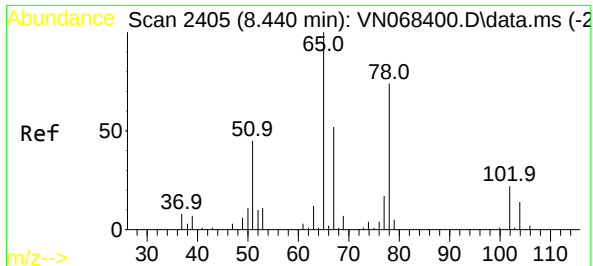
Tgt Ion: 83 Resp: 3815

Ion Ratio Lower Upper

83 100

85 60.6 51.5 77.3



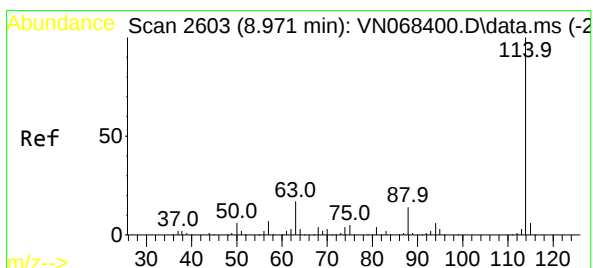
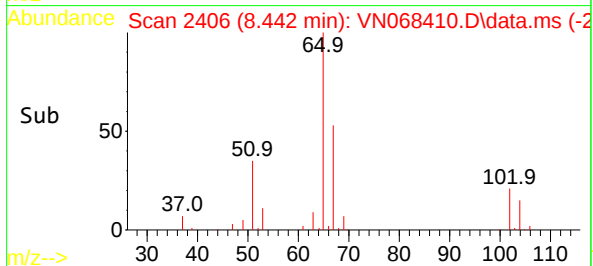
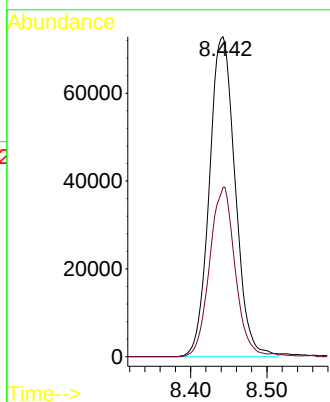
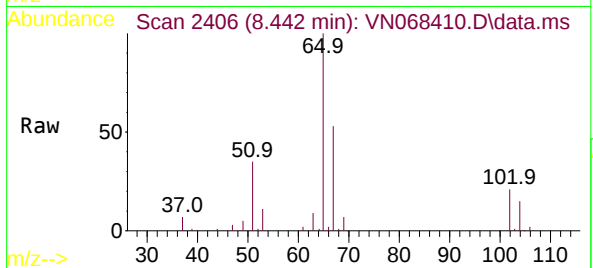


#27

1,2-Dichloroethane-d4  
Concen: 33.295 ug/l  
RT: 8.442 min Scan# 2406  
Delta R.T. 0.003 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Instrument :  
MSVOA\_N  
ClientSampleId :

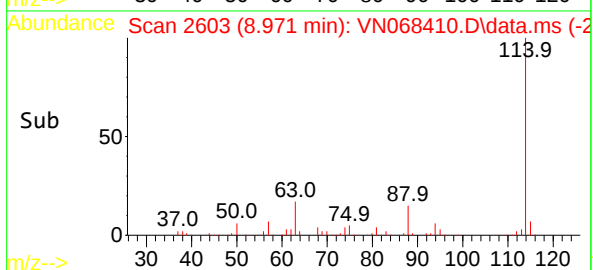
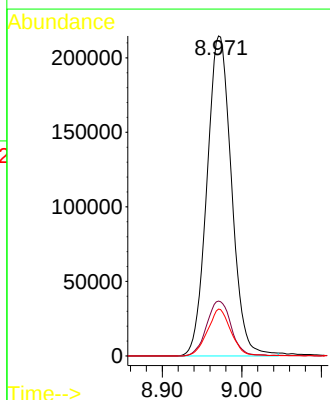
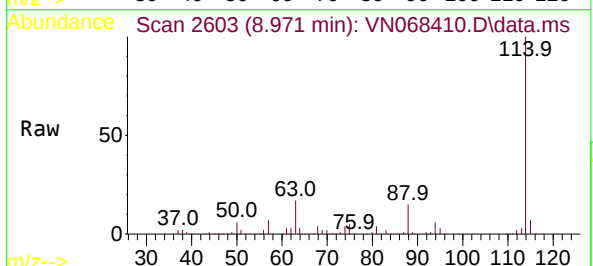
Tgt Ion: 65 Resp: 171576  
Ion Ratio Lower Upper  
65 100  
67 52.0 39.8 59.8

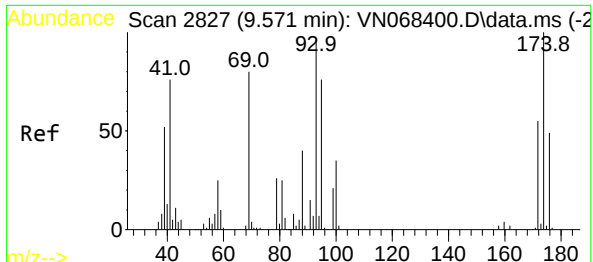


#28

1,4-Difluorobenzene  
Concen: 30.000 ug/l  
RT: 8.971 min Scan# 2603  
Delta R.T. 0.000 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

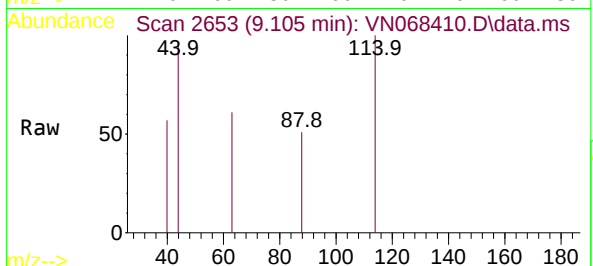
Tgt Ion: 114 Resp: 460161  
Ion Ratio Lower Upper  
114 100  
63 17.2 20.3 30.5#  
88 14.0 14.6 22.0#



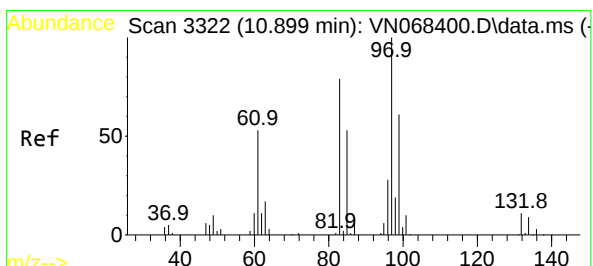
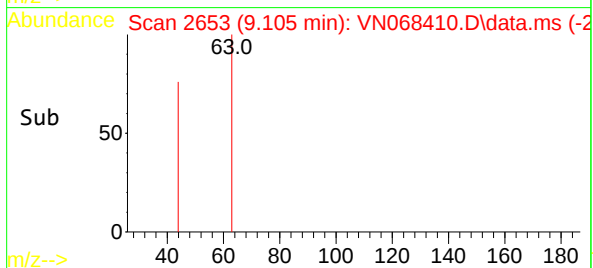
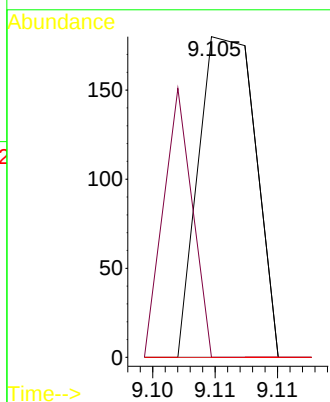


#45  
1,4-Dioxane  
Concen: 0.747 ug/l  
RT: 9.105 min Scan# 2653  
Delta R.T. -0.467 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Instrument :  
MSVOA\_N  
ClientSampled :

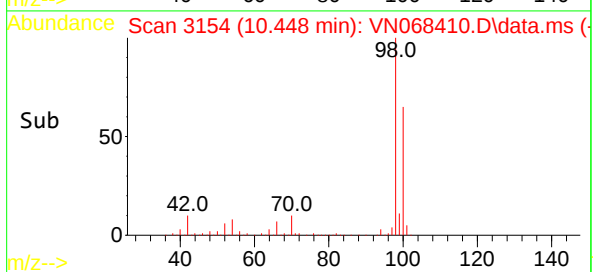
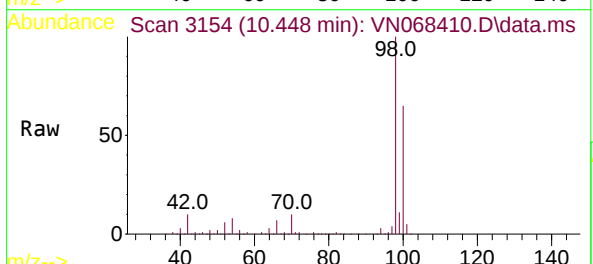
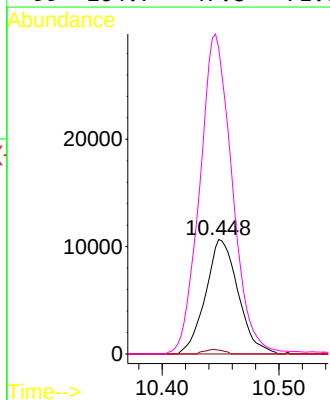


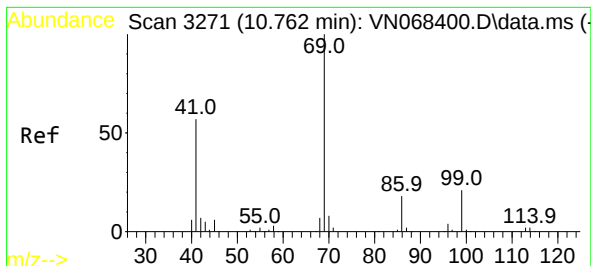
Tgt Ion: 88 Resp: 57  
Ion Ratio Lower Upper  
88 100  
43 93.0 18.0 27.0#  
58 0.0 57.7 86.5#



#50  
1,1,2-Trichloroethane  
Concen: 3.997 ug/l  
RT: 10.448 min Scan# 3154  
Delta R.T. -0.451 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Tgt Ion: 97 Resp: 20643  
Ion Ratio Lower Upper  
97 100  
83 3.4 69.6 104.4#  
85 0.0 45.2 67.8#  
99 264.7 47.8 71.6#

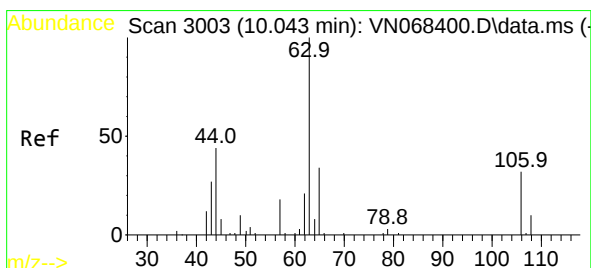
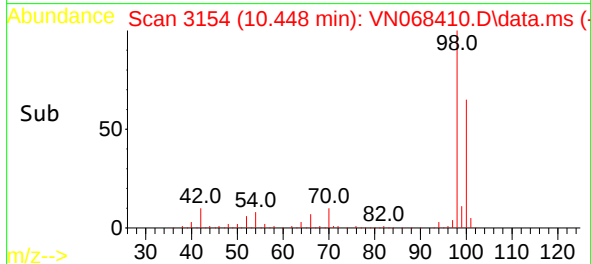
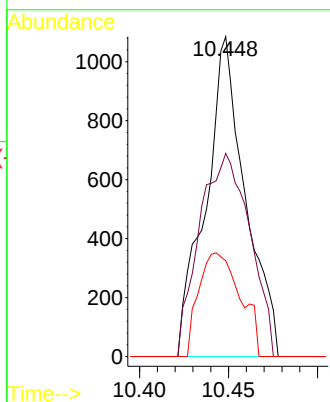
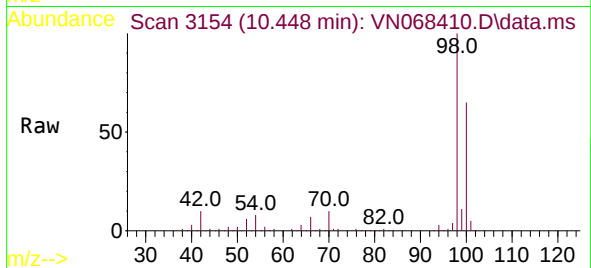




#51  
Ethyl methacrylate  
Concen: 0.253 ug/l  
RT: 10.448 min Scan# 3154  
Delta R.T. -0.314 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

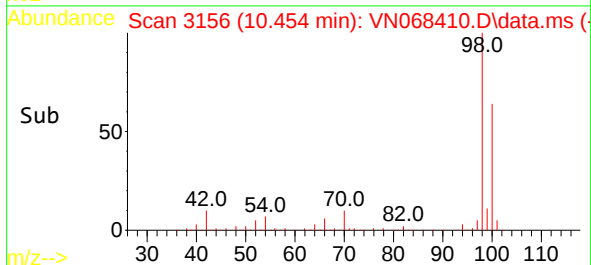
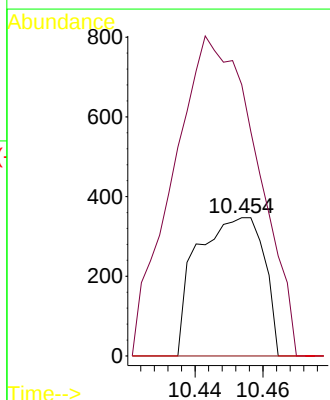
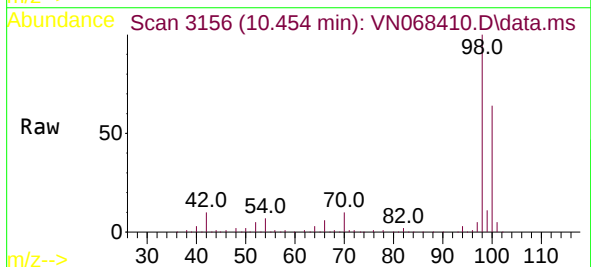
Instrument :  
MSVOA\_N  
ClientSampleId :

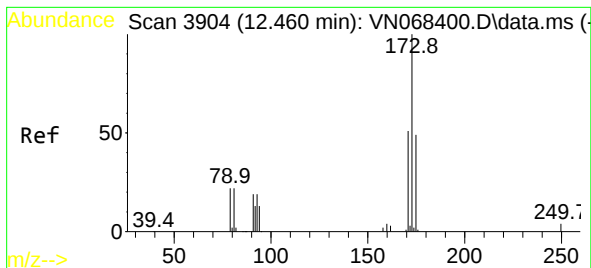
Tgt Ion: 69 Resp: 1681  
Ion Ratio Lower Upper  
69 100  
41 63.5 36.8 110.4  
39 30.0 23.8 71.2



#55  
2-Chloroethyl vinyl ether  
Concen: 46.784 ug/l  
RT: 10.454 min Scan# 3156  
Delta R.T. 0.411 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Tgt Ion: 63 Resp: 473  
Ion Ratio Lower Upper  
63 100  
65 290.1 25.6 38.4#  
106 0.0 20.0 30.0#

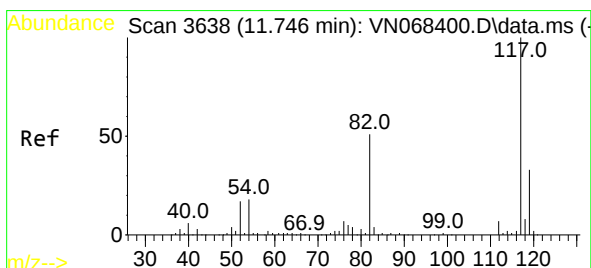
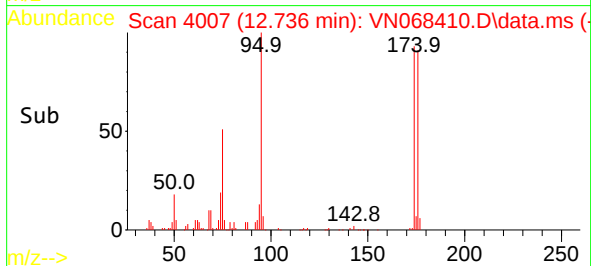
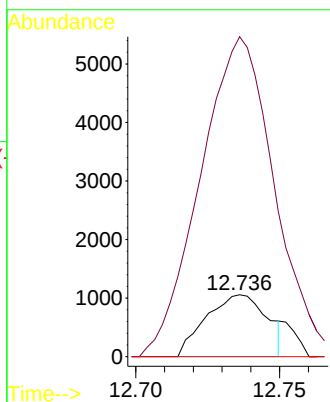
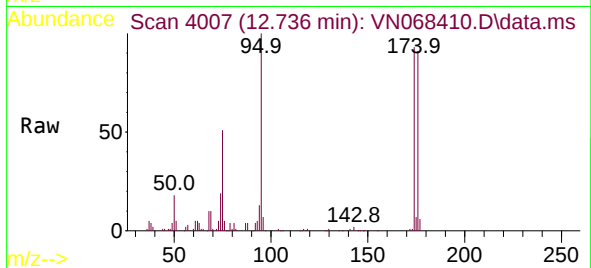




#56  
Bromoform  
Concen: 0.327 ug/l  
RT: 12.736 min Scan# 4007  
Delta R.T. 0.276 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

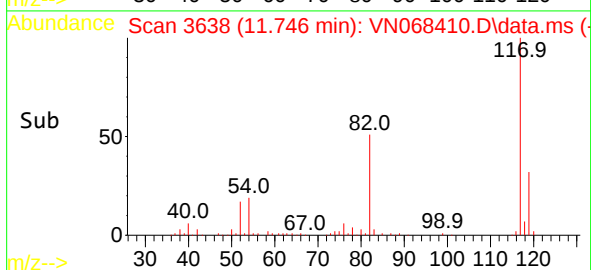
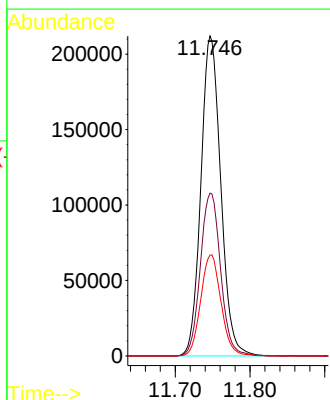
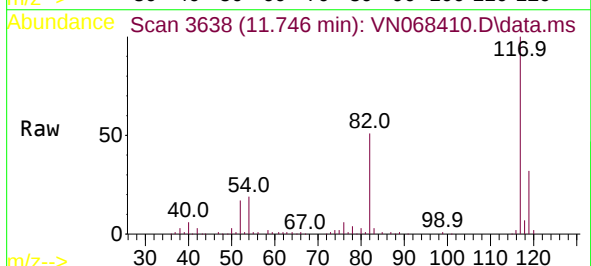
Instrument :  
MSVOA\_N  
ClientSampled :

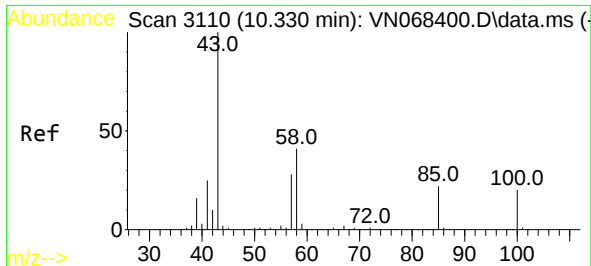
Tgt Ion:173 Resp: 1558  
Ion Ratio Lower Upper  
173 100  
175 626.9 39.4 59.2#  
254 0.0 0.0 0.0



#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.746 min Scan# 3638  
Delta R.T. 0.000 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Tgt Ion:117 Resp: 392265  
Ion Ratio Lower Upper  
117 100  
82 51.8 52.5 78.7#  
119 32.3 25.8 38.8

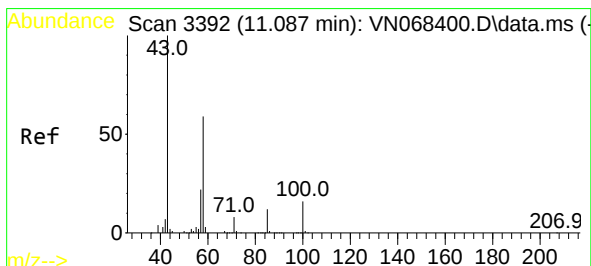
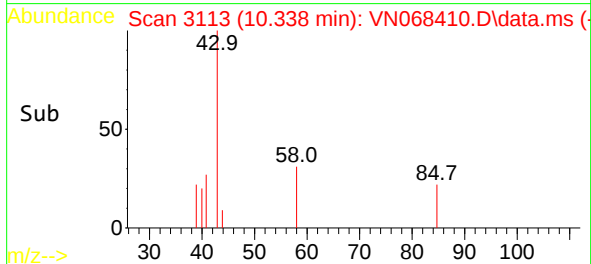
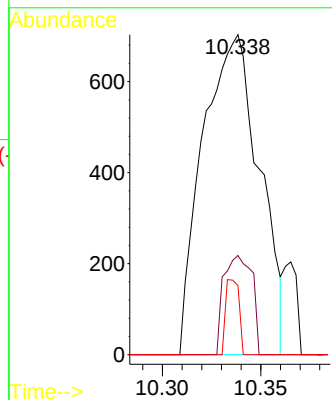
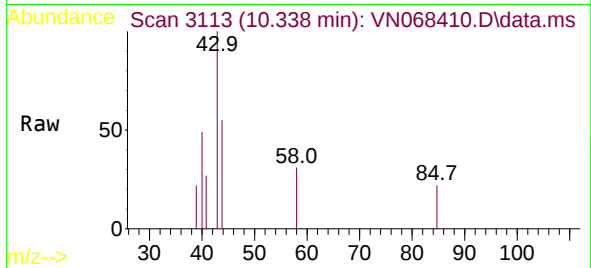




#58  
4-Methyl-2-Pentanone  
Concen: 0.308 ug/l  
RT: 10.338 min Scan# 3113  
Delta R.T. 0.008 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

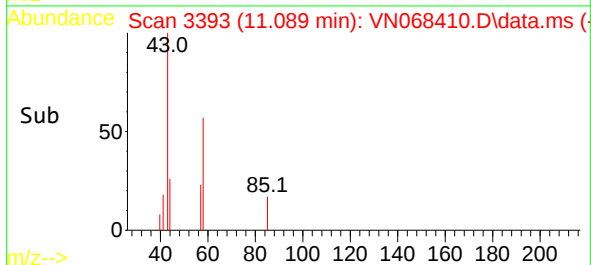
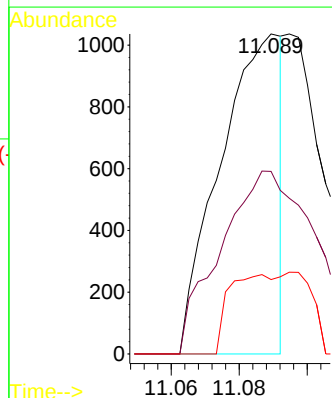
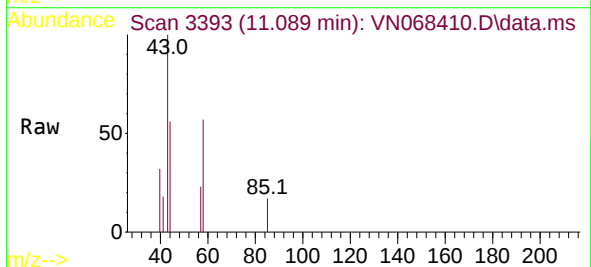
Instrument :  
MSVOA\_N  
ClientSampleId :

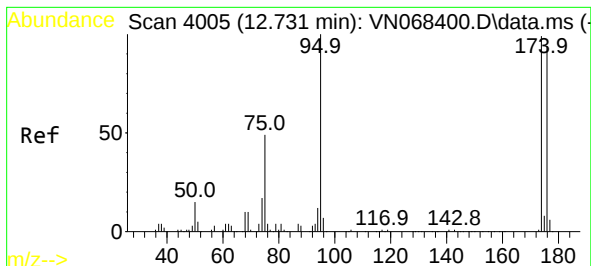
Tgt Ion: 43 Resp: 1406  
Ion Ratio Lower Upper  
43 100  
58 13.4 29.0 43.4#  
85 5.5 13.2 19.8#



#59  
2-Hexanone  
Concen: 0.409 ug/l  
RT: 11.089 min Scan# 3393  
Delta R.T. 0.003 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Tgt Ion: 43 Resp: 1296  
Ion Ratio Lower Upper  
43 100  
58 85.0 39.4 59.0#  
57 17.7 14.4 21.6

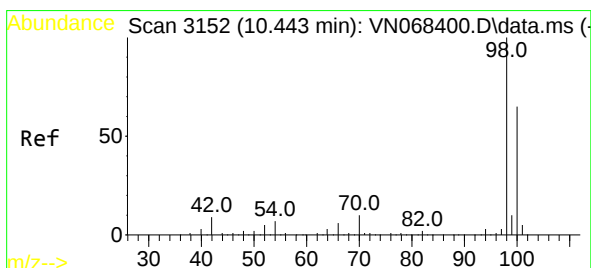
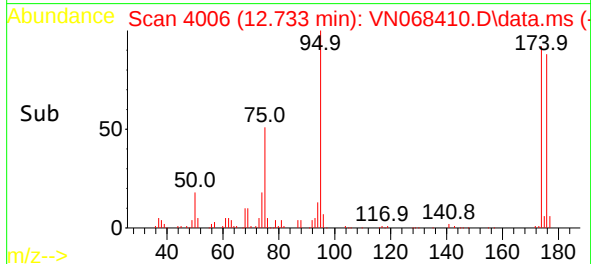
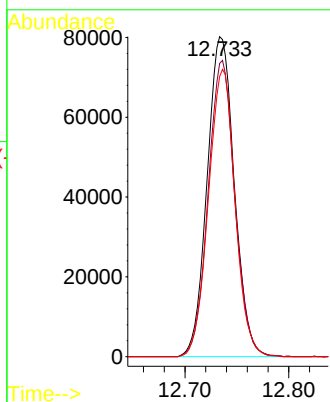
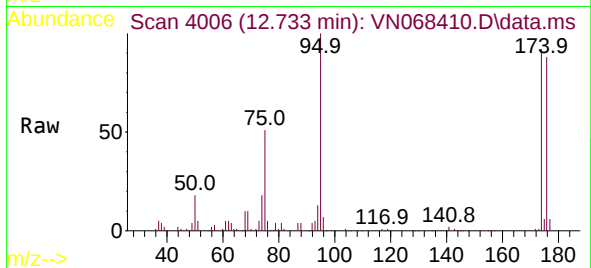




#60  
4-Bromofluorobenzene  
Concen: 26.259 ug/l  
RT: 12.733 min Scan# 4006  
Delta R.T. 0.003 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

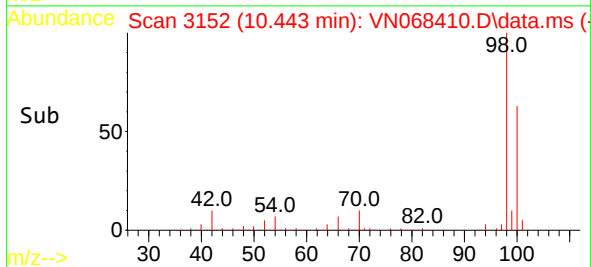
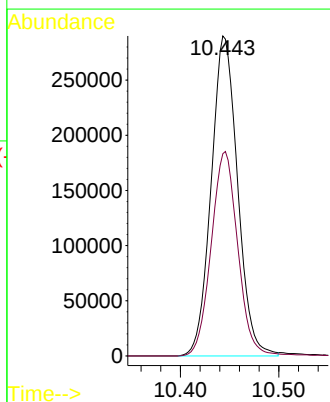
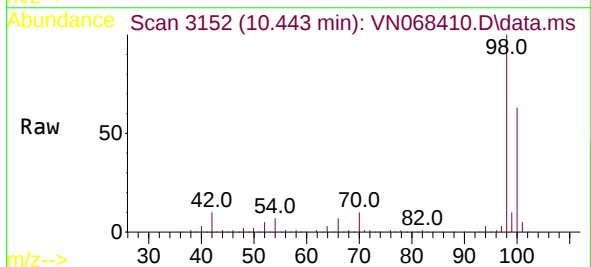
Instrument :  
MSVOA\_N  
ClientSampleId :

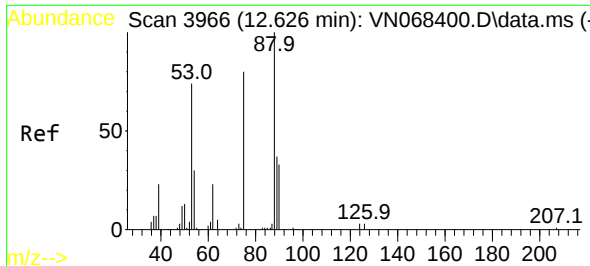
Tgt Ion: 95 Resp: 145871  
Ion Ratio Lower Upper  
95 100  
174 90.9 47.7 71.5#  
176 87.8 45.7 68.5#



#63  
Toluene-d8  
Concen: 31.013 ug/l  
RT: 10.443 min Scan# 3152  
Delta R.T. 0.000 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

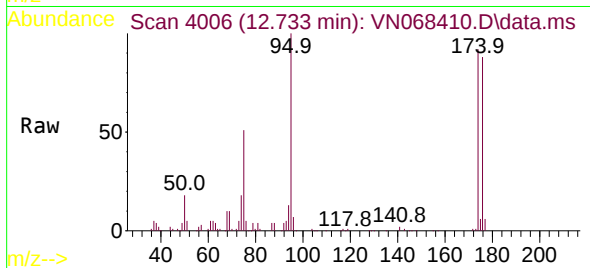
Tgt Ion: 98 Resp: 541750  
Ion Ratio Lower Upper  
98 100  
100 64.2 51.2 76.8



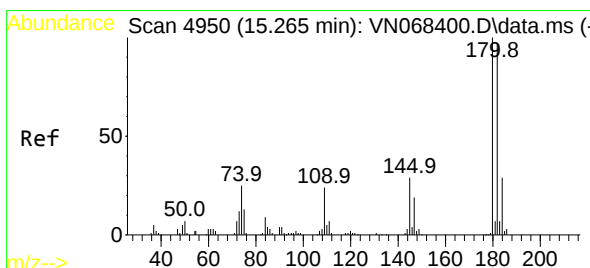
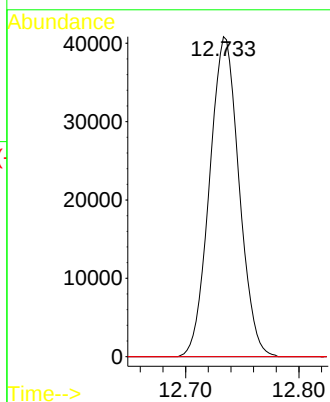
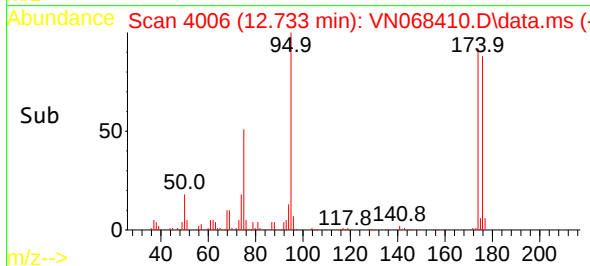


#77  
t-1,4-Dichloro-2-butene  
Concen: 49.022 ug/l  
RT: 12.733 min Scan# 4006  
Delta R.T. 0.107 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

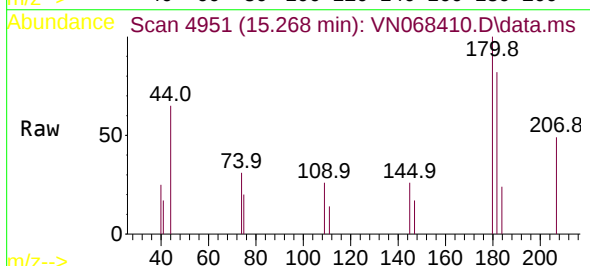
Instrument :  
MSVOA\_N  
ClientSampleId :



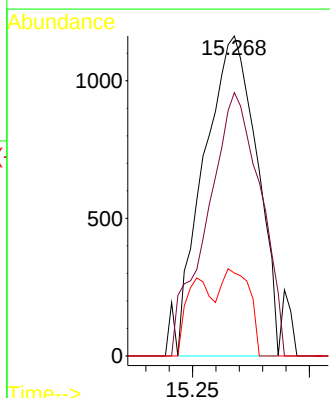
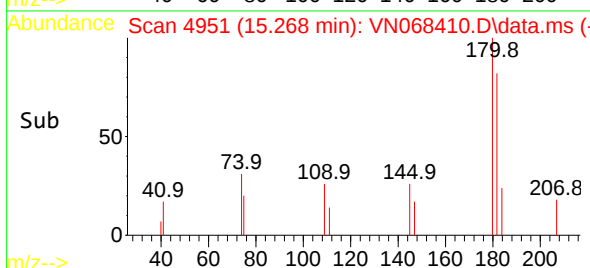
Tgt Ion: 75 Resp: 73845  
Ion Ratio Lower Upper  
75 100  
53 0.0 55.2 165.6#  
89 0.0 24.5 73.5#

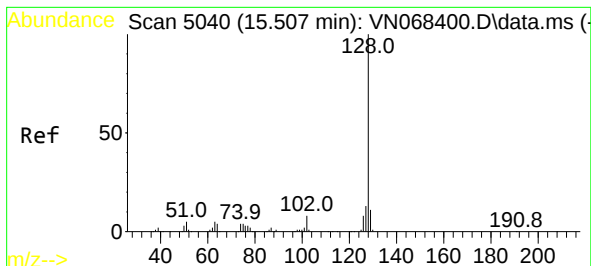


#89  
1,2,4-Trichlorobenzene  
Concen: 0.309 ug/l  
RT: 15.268 min Scan# 4951  
Delta R.T. 0.003 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23



Tgt Ion:180 Resp: 1829  
Ion Ratio Lower Upper  
180 100  
182 83.3 75.9 113.9  
145 14.5 28.8 43.2#

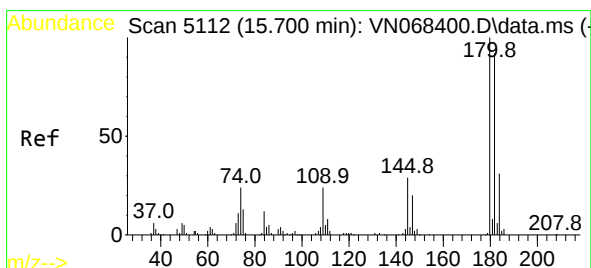
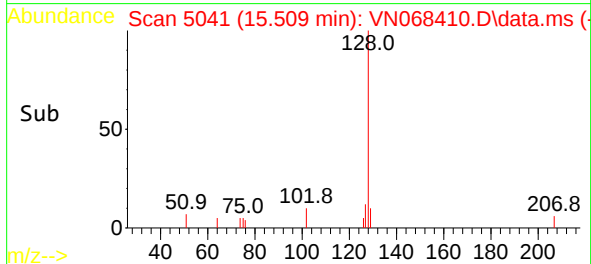
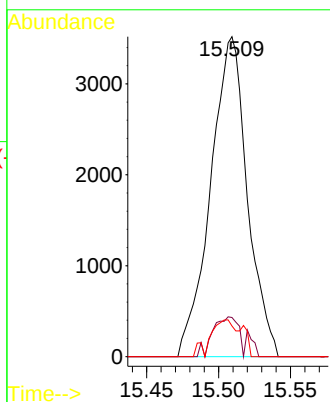
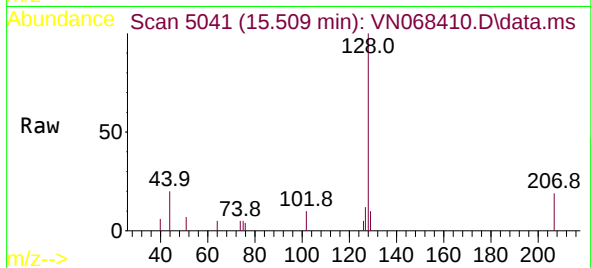




#91  
Naphthalene  
Concen: 0.500 ug/l  
RT: 15.509 min Scan# 5041  
Delta R.T. 0.003 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Instrument :  
MSVOA\_N  
ClientSampled :

Tgt Ion:128 Resp: 6247  
Ion Ratio Lower Upper  
128 100  
127 4.2 10.1 15.1#  
129 6.8 8.9 13.3#



#92  
1,2,3-Trichlorobenzene  
Concen: 0.223 ug/l  
RT: 15.700 min Scan# 5112  
Delta R.T. 0.000 min  
Lab File: VN068410.D  
Acq: 3 Sep 2021 16:23

Tgt Ion:180 Resp: 1255  
Ion Ratio Lower Upper  
180 100  
182 30.0 0.0 184.6  
145 41.2 0.0 76.0

