

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN120321\  
 Data File : VN069719.D  
 Acq On : 3 Dec 2021 15:38  
 Operator : JC/MD  
 Sample : M4922-05  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Dec 04 05:32:47 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N120221W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 03 08:46:47 2021  
 Response via : Initial Calibration

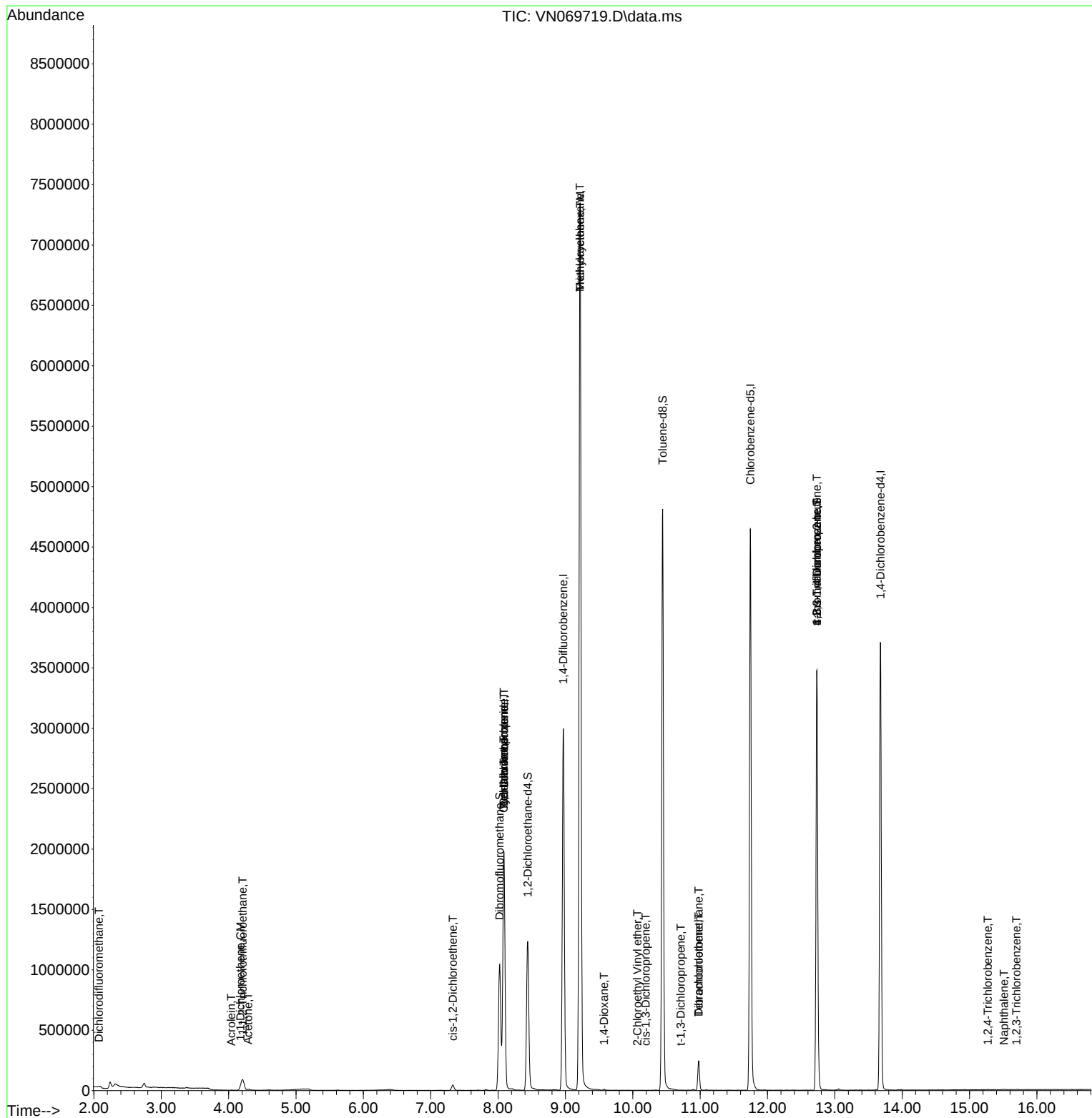
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| Internal Standards            |        |       |          |          |        |          |
| 1) Pentafluorobenzene         | 8.088  | 168   | 1467898  | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.968  | 114   | 2549530  | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.746 | 117   | 2611765  | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.677 | 152   | 997985   | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.440  | 65    | 1085911  | 47.913   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 61 - 141 | Recovery | =      | 95.820%  |
| 35) Dibromofluoromethane      | 8.024  | 113   | 754132   | 47.223   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 69 - 133 | Recovery | =      | 94.440%  |
| 50) Toluene-d8                | 10.443 | 98    | 3236269  | 50.469   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 65 - 126 | Recovery | =      | 100.940% |
| 62) 4-Bromofluorobenzene      | 12.733 | 95    | 1215703  | 52.332   | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 58 - 135 | Recovery | =      | 104.660% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane    | 2.075  | 85    | 5088     | 0.297    | ug/l   | 93       |
| 9) 1,1,2-Trichlorotrifluo...  | 4.207  | 101   | 54362    | 3.747    | ug/l   | 97       |
| 12) 1,1-Dichloroethene        | 4.175  | 96    | 10270    | 0.734    | ug/l # | 82       |
| 13) Acrolein                  | 4.038  | 56    | 1029     | 0.282    | ug/l # | 14       |
| 16) Acetone                   | 4.291  | 43    | 4416     | 0.324    | ug/l   | 92       |
| 27) cis-1,2-Dichloroethene    | 7.329  | 96    | 24408    | 1.330    | ug/l   | 98       |
| 31) Cyclohexane               | 8.083  | 56    | 37629    | 1.193    | ug/l # | 8        |
| 36) 1,1-Dichloropropene       | 8.086  | 75    | 126624   | 5.217    | ug/l # | 50       |
| 38) Carbon Tetrachloride      | 8.086  | 117   | 151981   | 6.386    | ug/l # | 16       |
| 39) Methylcyclohexane         | 9.215  | 83    | 34555    | 1.197    | ug/l # | 1        |
| 44) Trichloroethene           | 9.217  | 130   | 2574683  | 145.407  | ug/l   | 90       |
| 49) 1,4-Dioxane               | 9.574  | 88    | 5075     | 11.337   | ug/l # | 70       |
| 53) t-1,3-Dichloropropene     | 10.711 | 75    | 227      | 2.801    | ug/l # | 6        |
| 54) cis-1,3-Dichloropropene   | 10.194 | 75    | 121      | 2.002    | ug/l # | 52       |
| 58) 2-Chloroethyl Vinyl ether | 10.068 | 63    | 167      | 18.405   | ug/l # | 45       |
| 60) Dibromochloromethane      | 10.979 | 129   | 52359    | 4.923    | ug/l # | 11       |
| 64) Tetrachloroethene         | 10.977 | 164   | 53343    | 3.012    | ug/l   | 94       |
| 76) 1,2,3-Trichloropropane    | 12.733 | 75    | 680384   | 23.773   | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.733 | 75    | 680384   | 75.548   | ug/l # | 5        |
| 93) 1,2,4-Trichlorobenzene    | 15.271 | 180   | 979      | 2.934    | ug/l # | 37       |
| 95) Naphthalene               | 15.509 | 128   | 4848     | 4.077    | ug/l # | 82       |
| 96) 1,2,3-Trichlorobenzene    | 15.694 | 180   | 582      | 2.470    | ug/l # | 14       |

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

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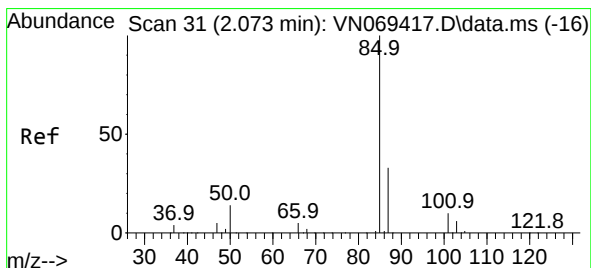
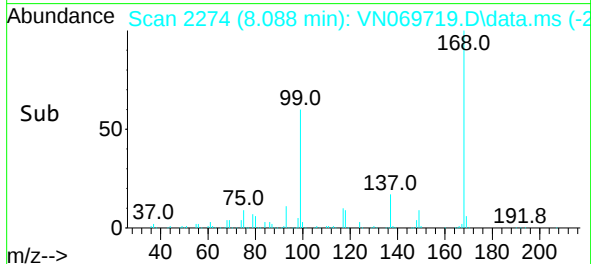
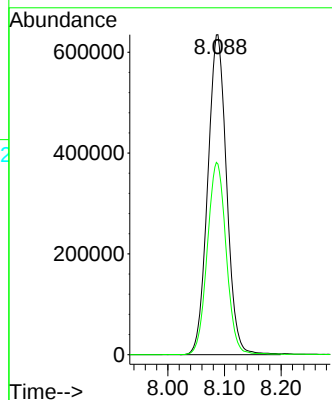
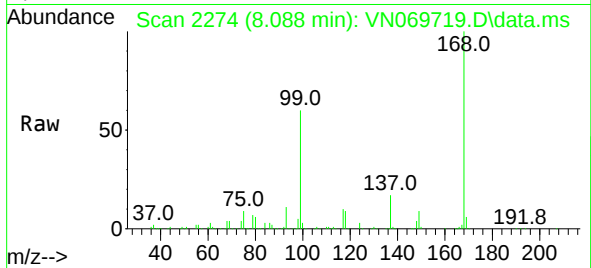




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.088 min Scan# 21  
Delta R.T. 0.002 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

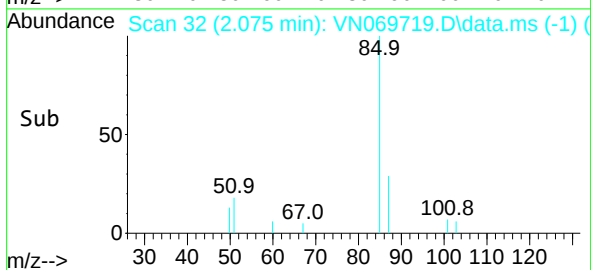
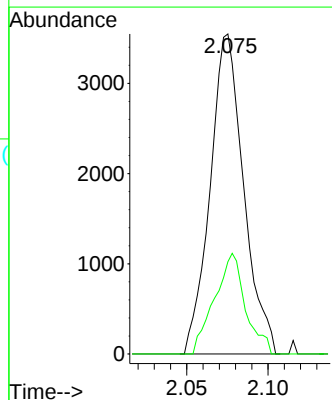
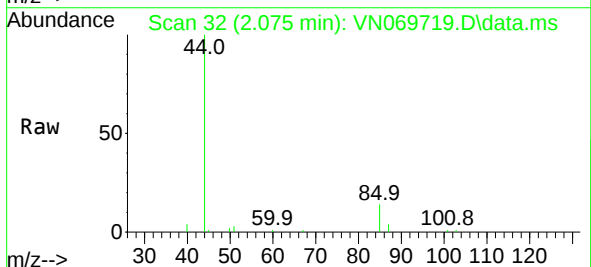
Instrument :  
MSVOA\_N  
ClientSampleId :

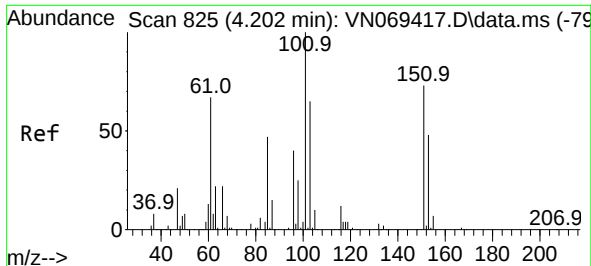
Tgt Ion:168 Resp: 1467898  
Ion Ratio Lower Upper  
168 100  
99 59.5 41.3 61.9



#2  
Dichlorodifluoromethane  
Concen: 0.297 ug/l  
RT: 2.075 min Scan# 32  
Delta R.T. 0.003 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Tgt Ion: 85 Resp: 5088  
Ion Ratio Lower Upper  
85 100  
87 28.8 16.3 48.9

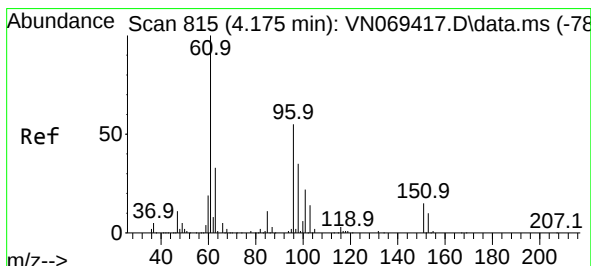
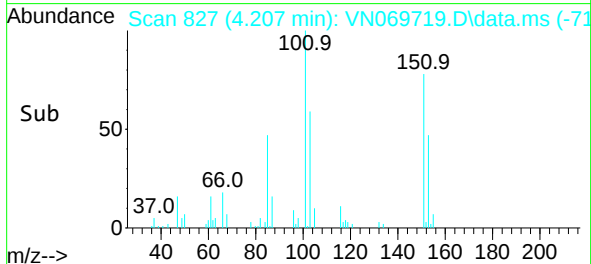
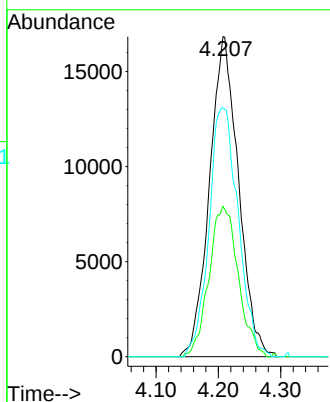
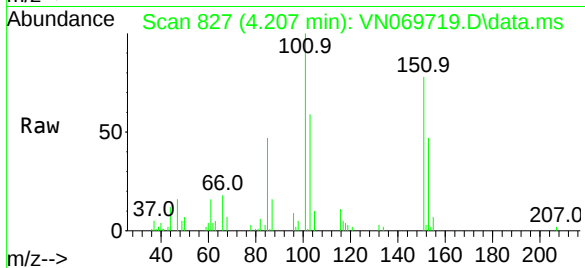




#9  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 3.747 ug/l  
 RT: 4.207 min Scan# 81  
 Delta R.T. 0.005 min  
 Lab File: VN069719.D  
 Acq: 3 Dec 2021 15:38

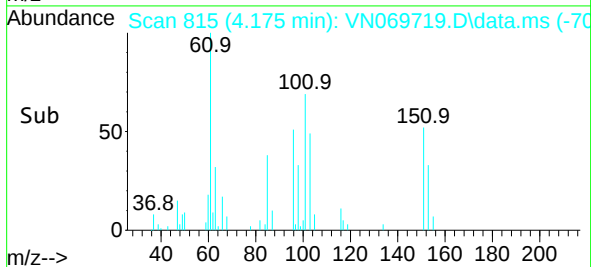
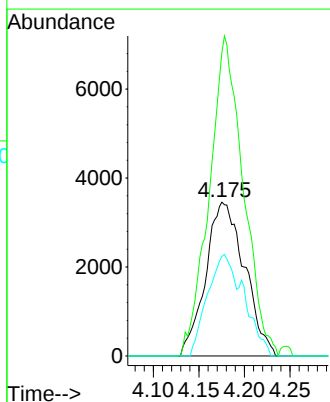
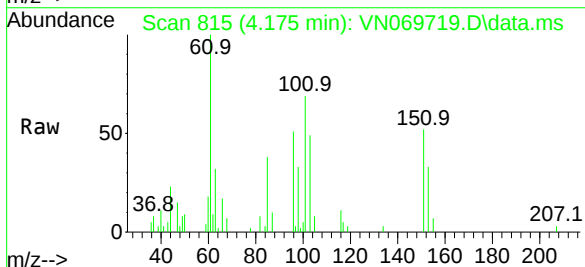
Instrument :  
 MSVOA\_N  
 ClientSampleId :

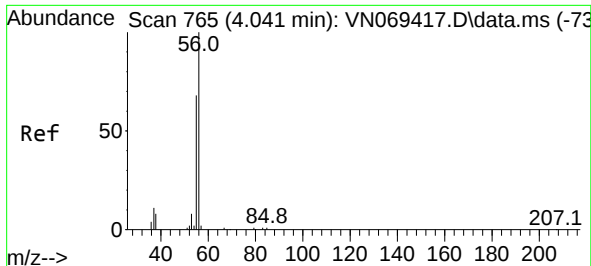
Tgt Ion:101 Resp: 54362  
 Ion Ratio Lower Upper  
 101 100  
 85 47.5 37.2 55.8  
 151 78.6 65.9 98.9



#12  
 1,1-Dichloroethene  
 Concen: 0.734 ug/l  
 RT: 4.175 min Scan# 815  
 Delta R.T. 0.000 min  
 Lab File: VN069719.D  
 Acq: 3 Dec 2021 15:38

Tgt Ion: 96 Resp: 10270  
 Ion Ratio Lower Upper  
 96 100  
 61 197.4 131.0 196.6#  
 98 64.8 52.4 78.6

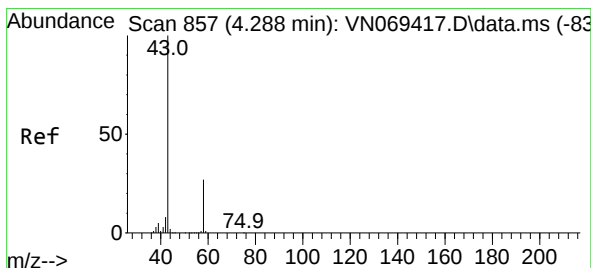
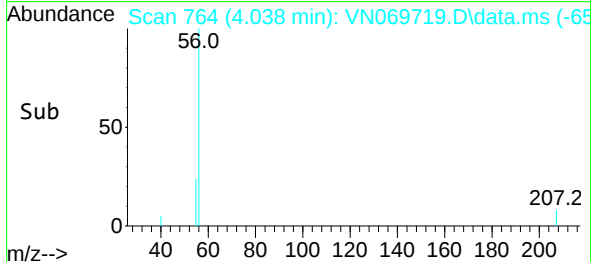
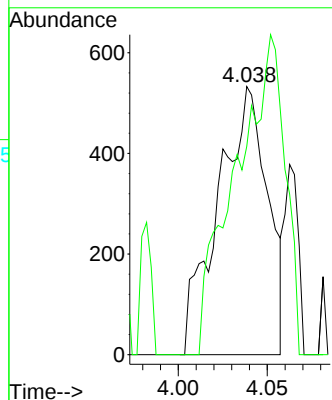
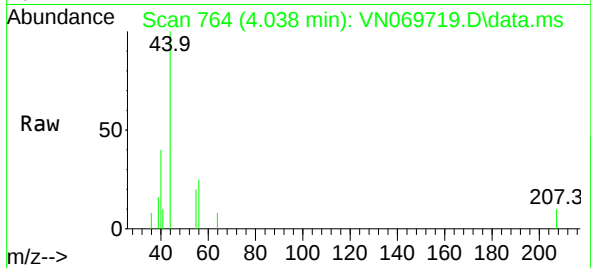




#13  
Acrolein  
Concen: 0.282 ug/l  
RT: 4.038 min Scan# 764  
Delta R.T. 0.000 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

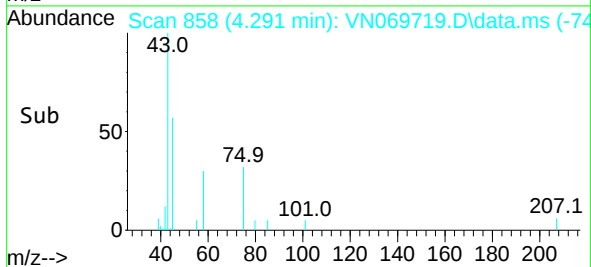
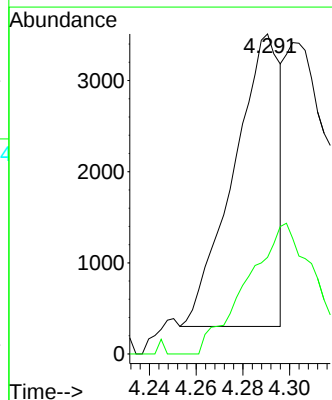
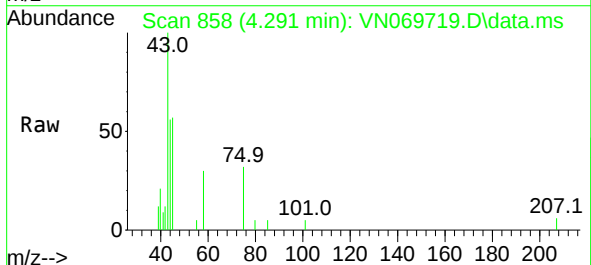
Instrument :  
MSVOA\_N  
ClientSampleId :

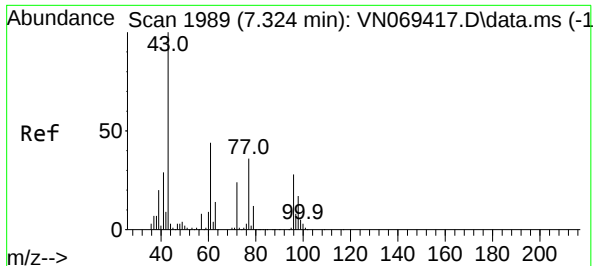
Tgt Ion: 56 Resp: 1029  
Ion Ratio Lower Upper  
56 100  
55 0.0 56.6 85.0#



#16  
Acetone  
Concen: 0.324 ug/l  
RT: 4.291 min Scan# 858  
Delta R.T. 0.000 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Tgt Ion: 43 Resp: 4416  
Ion Ratio Lower Upper  
43 100  
58 33.1 23.1 34.7





#27

cis-1,2-Dichloroethene

Concen: 1.330 ug/l

RT: 7.329 min Scan# 1989

Delta R.T. 0.003 min

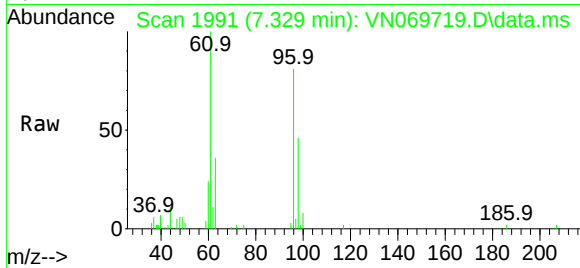
Lab File: VN069719.D

Acq: 3 Dec 2021 15:38

Instrument :

MSVOA\_N

ClientSampleId :



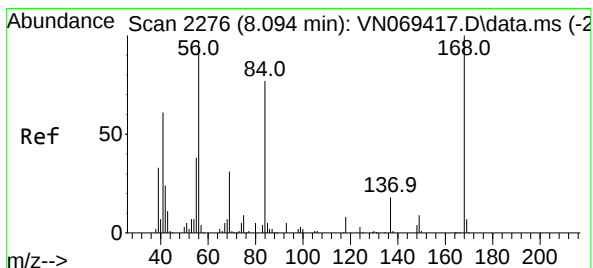
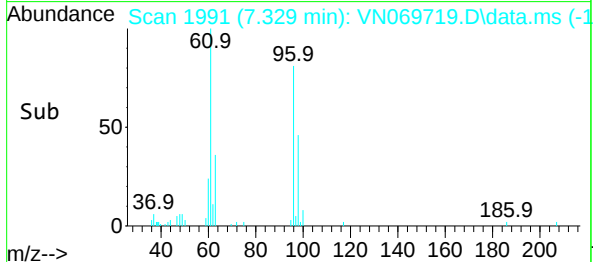
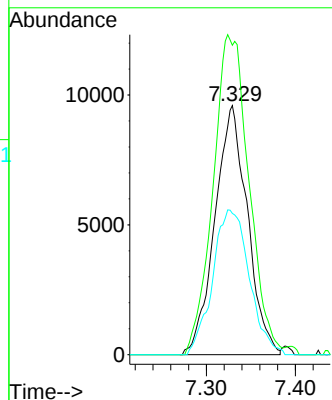
Tgt Ion: 96 Resp: 24408

Ion Ratio Lower Upper

96 100

61 141.1 0.0 275.0

98 65.3 0.0 129.6



#31

Cyclohexane

Concen: 1.193 ug/l

RT: 8.083 min Scan# 2272

Delta R.T. -0.011 min

Lab File: VN069719.D

Acq: 3 Dec 2021 15:38

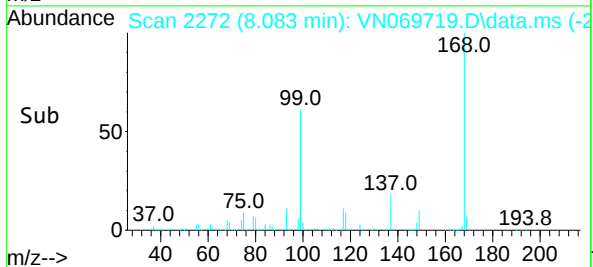
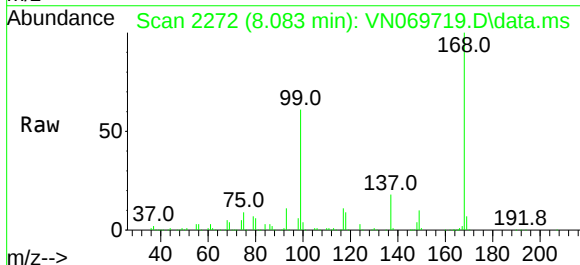
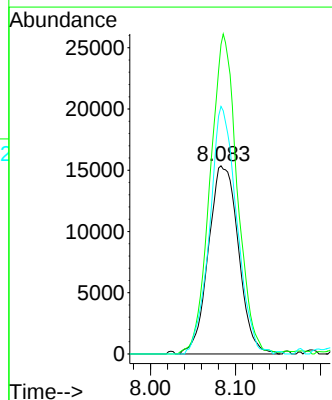
Tgt Ion: 56 Resp: 37629

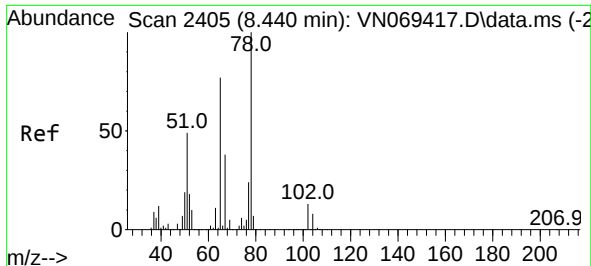
Ion Ratio Lower Upper

56 100

69 163.5 27.1 40.7#

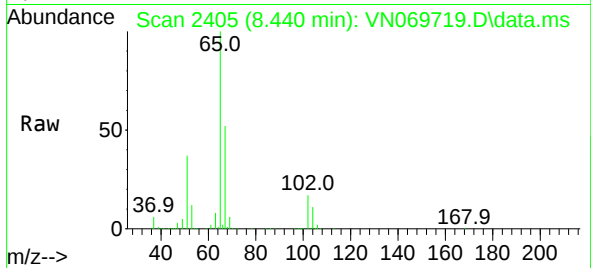
84 131.5 73.4 110.0#





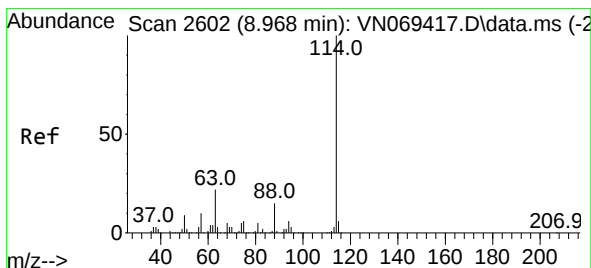
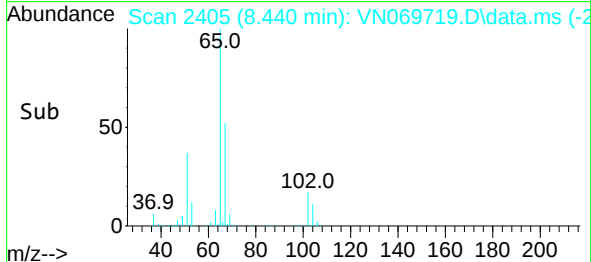
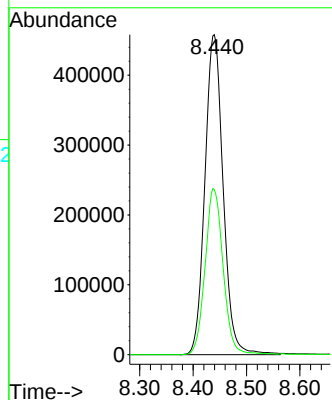
#33  
 1,2-Dichloroethane-d4  
 Concen: 47.913 ug/l  
 RT: 8.440 min Scan# 2405  
 Delta R.T. 0.003 min  
 Lab File: VN069719.D  
 Acq: 3 Dec 2021 15:38

Instrument :  
 MSVOA\_N  
 ClientSampleId :



Tgt Ion: 65 Resp: 1085911  

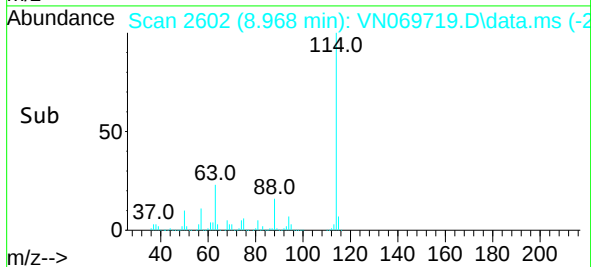
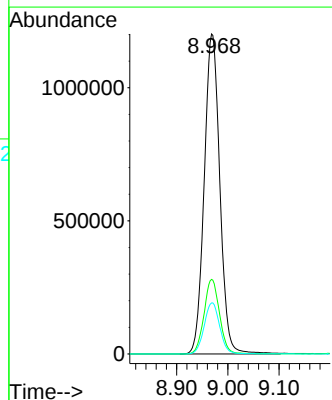
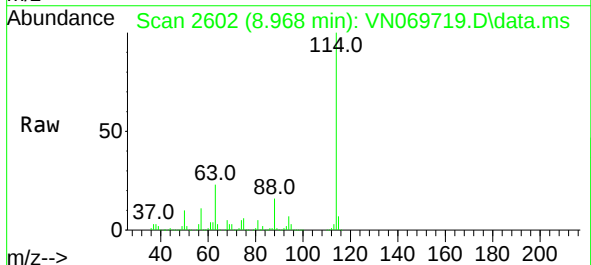
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 65  | 100   |       |       |
| 67  | 50.8  | 0.0   | 103.0 |

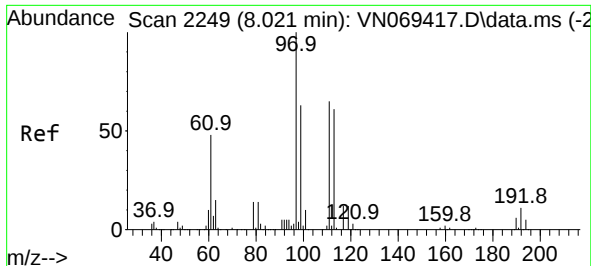


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.968 min Scan# 2602  
 Delta R.T. -0.000 min  
 Lab File: VN069719.D  
 Acq: 3 Dec 2021 15:38

Tgt Ion: 114 Resp: 2549530  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 23.3  | 0.0   | 37.8  |
| 88  | 15.9  | 0.0   | 27.4  |





#35

Dibromofluoromethane

Concen: 47.223 ug/l

RT: 8.024 min Scan# 21

Delta R.T. 0.000 min

Lab File: VN069719.D

Acq: 3 Dec 2021 15:38

Instrument :

MSVOA\_N

ClientSampleId :

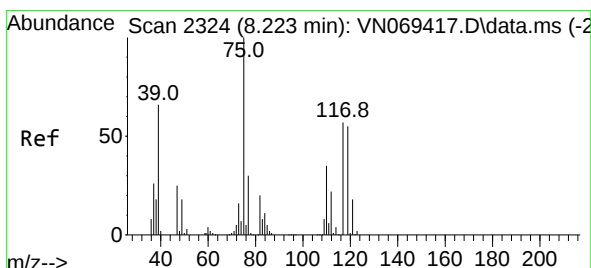
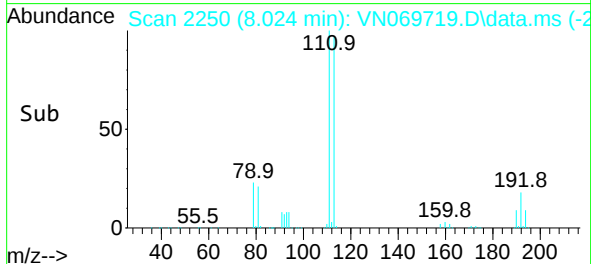
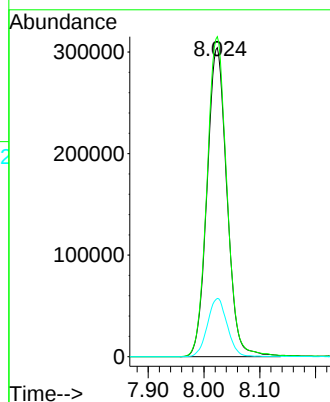
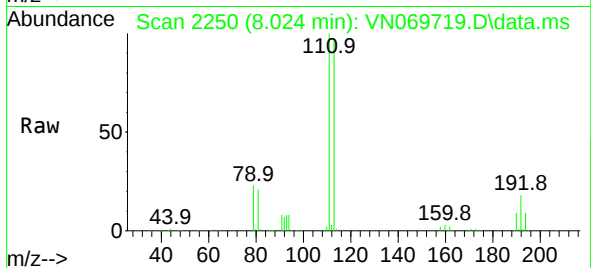
Tgt Ion:113 Resp: 754132

Ion Ratio Lower Upper

113 100

111 103.9 82.2 123.2

192 18.7 16.9 25.3



#36

1,1-Dichloropropene

Concen: 5.217 ug/l

RT: 8.086 min Scan# 2273

Delta R.T. -0.137 min

Lab File: VN069719.D

Acq: 3 Dec 2021 15:38

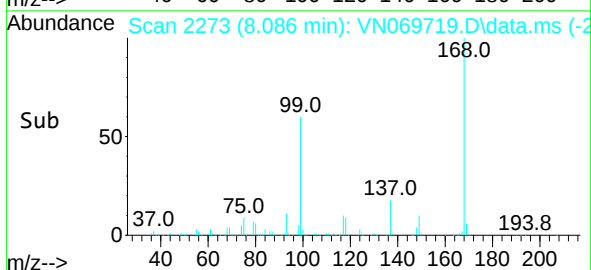
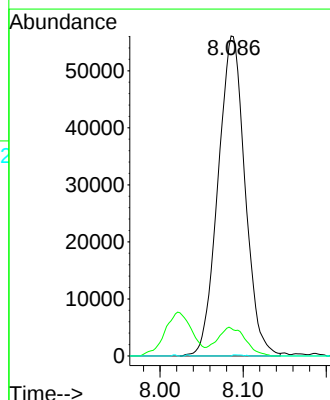
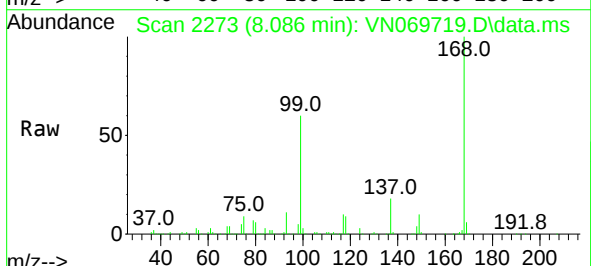
Tgt Ion: 75 Resp: 126624

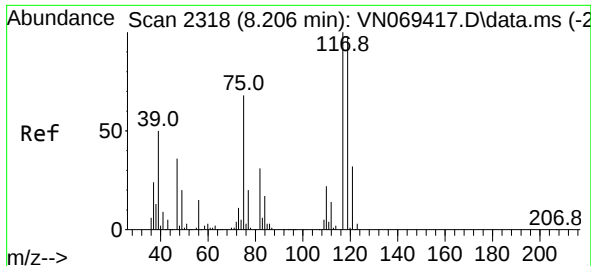
Ion Ratio Lower Upper

75 100

110 9.4 18.4 55.2#

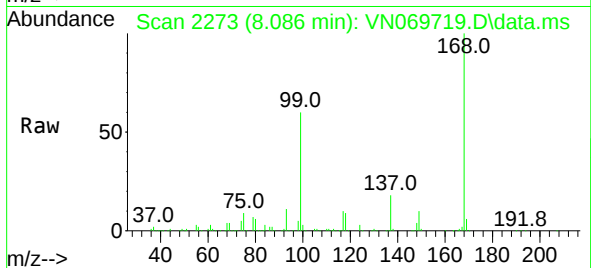
77 0.1 24.4 36.6#



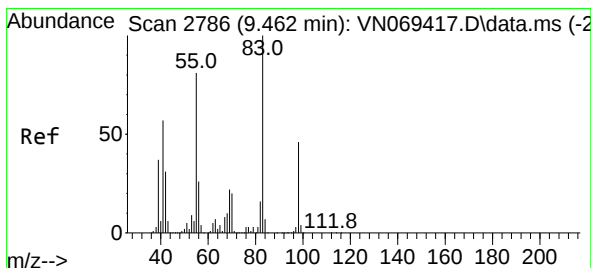
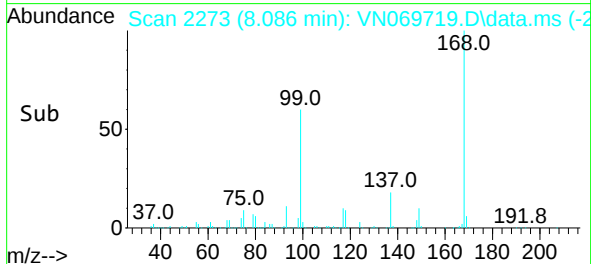
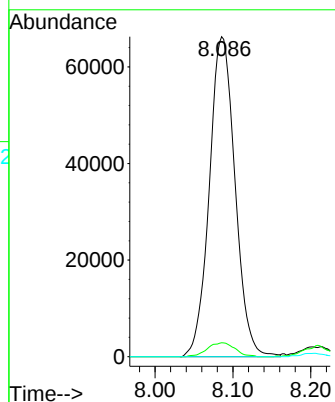


#38  
Carbon Tetrachloride  
Concen: 6.386 ug/l  
RT: 8.086 min Scan# 21  
Delta R.T. -0.121 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Instrument :  
MSVOA\_N  
ClientSampleId :

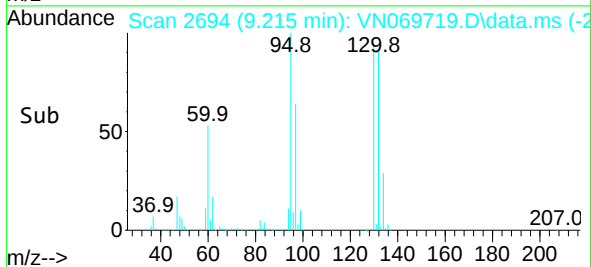
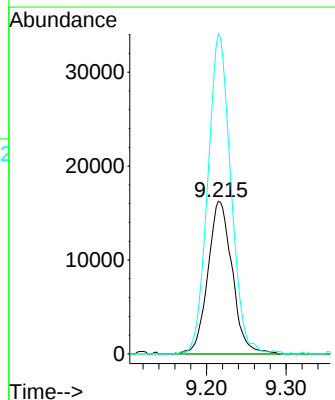
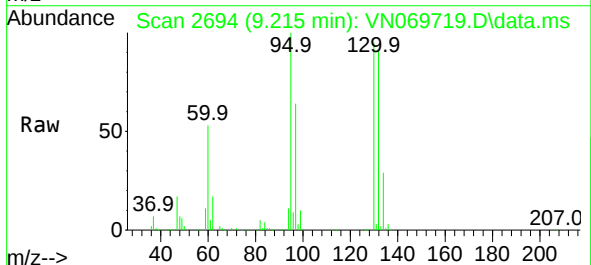


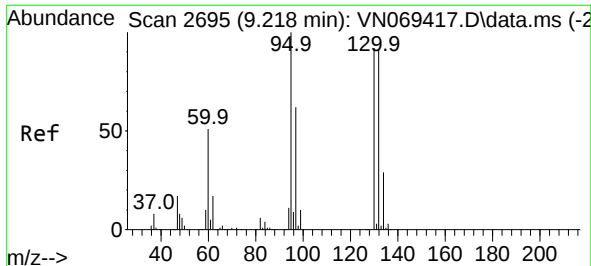
Tgt Ion:117 Resp: 151981  
Ion Ratio Lower Upper  
117 100  
119 4.3 76.1 114.1#  
121 0.0 24.2 36.2#



#39  
Methylcyclohexane  
Concen: 1.197 ug/l  
RT: 9.215 min Scan# 2694  
Delta R.T. -0.247 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Tgt Ion: 83 Resp: 34555  
Ion Ratio Lower Upper  
83 100  
55 0.0 58.1 87.1#  
98 208.7 38.4 57.6#

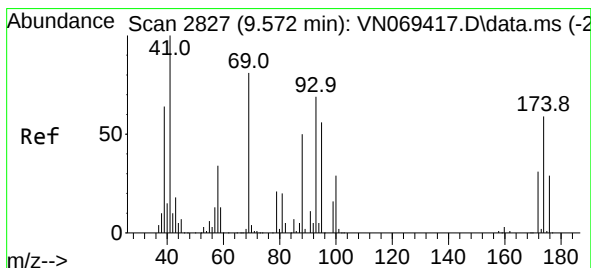
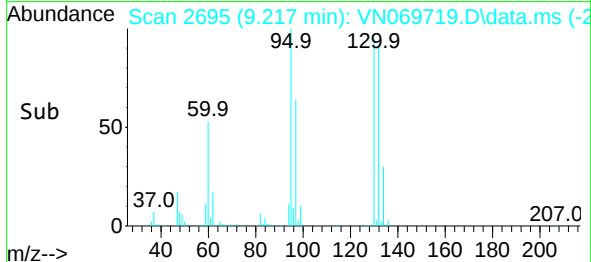
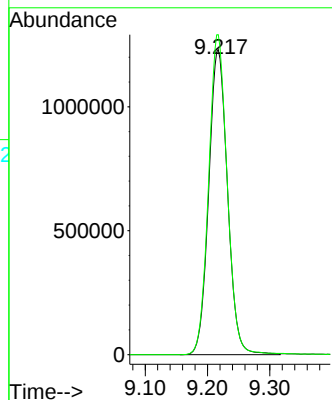
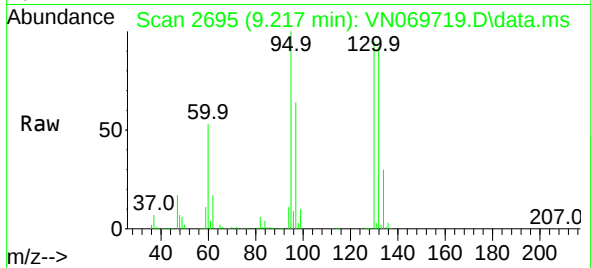




#44  
Trichloroethene  
Concen: 145.407 ug/l  
RT: 9.217 min Scan# 20  
Delta R.T. 0.000 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

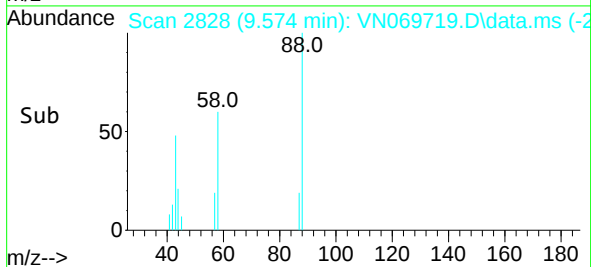
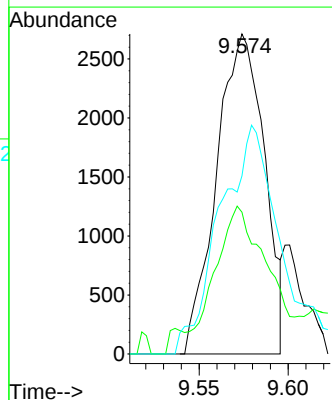
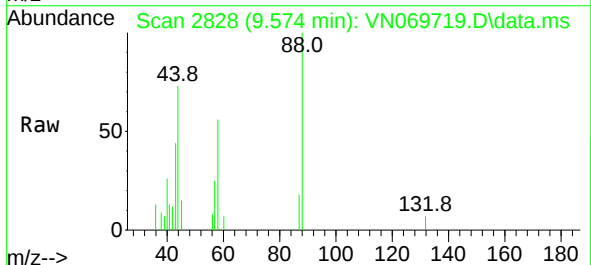
Instrument :  
MSVOA\_N  
ClientSampleId :

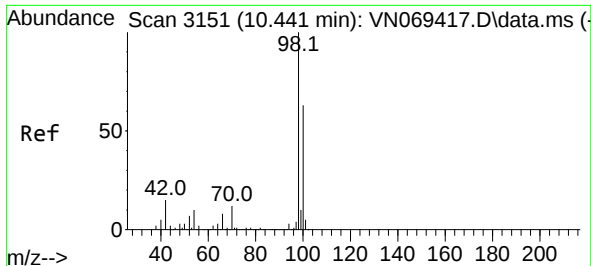
Tgt Ion:130 Resp: 2574683  
Ion Ratio Lower Upper  
130 100  
95 105.0 0.0 191.2



#49  
1,4-Dioxane  
Concen: 11.337 ug/l  
RT: 9.574 min Scan# 2828  
Delta R.T. 0.003 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Tgt Ion: 88 Resp: 5075  
Ion Ratio Lower Upper  
88 100  
43 37.3 23.4 35.2#  
58 92.5 50.6 75.8#

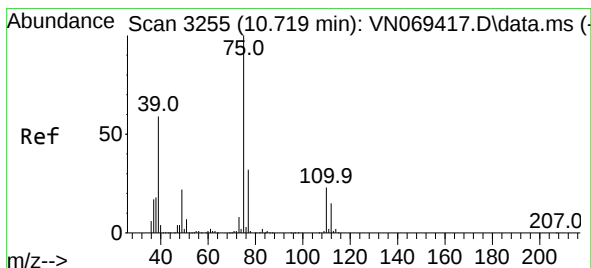
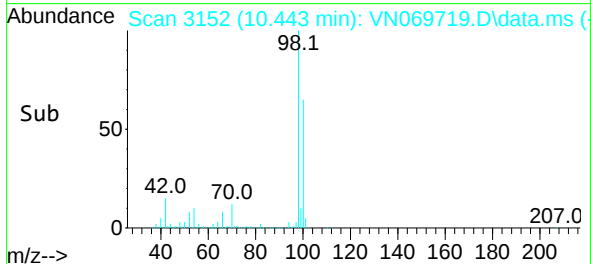
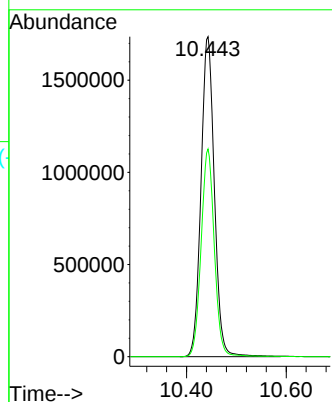
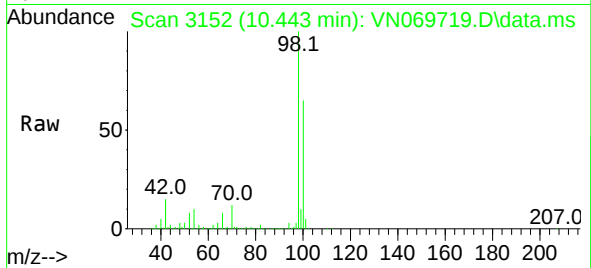




#50  
Toluene-d8  
Concen: 50.469 ug/l  
RT: 10.443 min Scan# 3151  
Delta R.T. 0.000 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

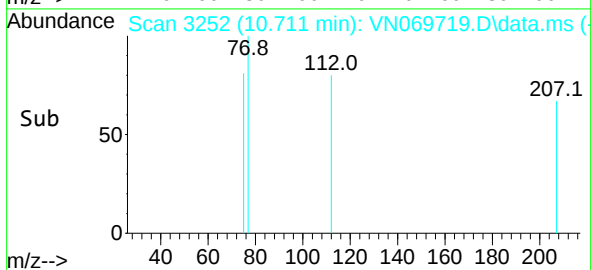
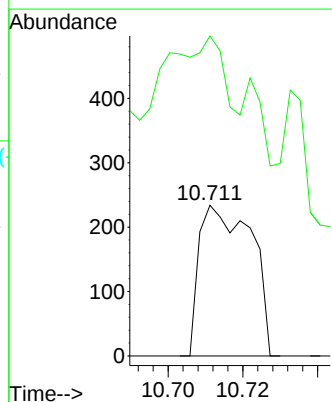
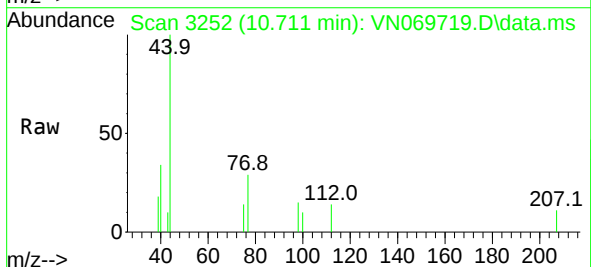
Instrument :  
MSVOA\_N  
ClientSampleId :

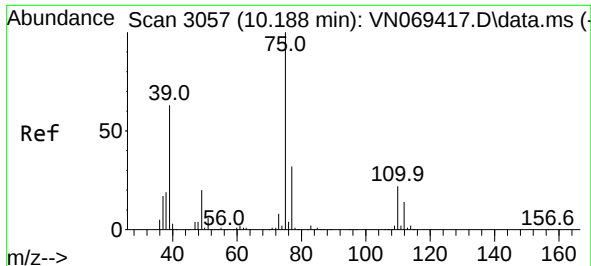
Tgt Ion: 98 Resp: 3236269  
Ion Ratio Lower Upper  
98 100  
100 63.9 50.4 75.6



#53  
t-1,3-Dichloropropene  
Concen: 2.801 ug/l  
RT: 10.711 min Scan# 3252  
Delta R.T. -0.008 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

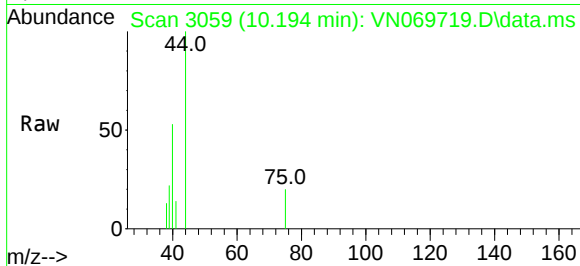
Tgt Ion: 75 Resp: 227  
Ion Ratio Lower Upper  
75 100  
77 84.6 25.6 38.4#



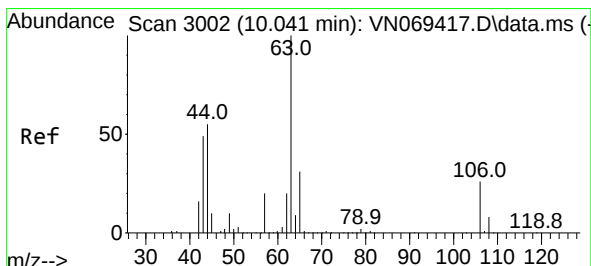
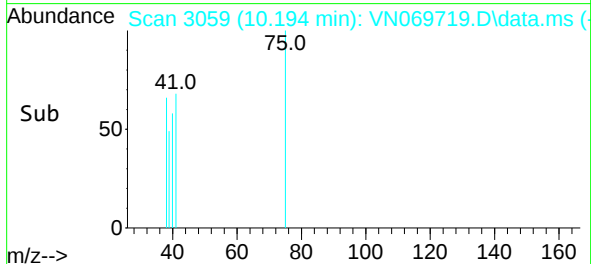
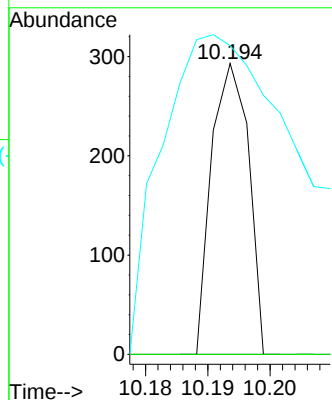


#54  
 cis-1,3-Dichloropropene  
 Concen: 2.002 ug/l  
 RT: 10.194 min Scan# 3059  
 Delta R.T. 0.003 min  
 Lab File: VN069719.D  
 Acq: 3 Dec 2021 15:38

Instrument :  
 MSVOA\_N  
 ClientSampleId :

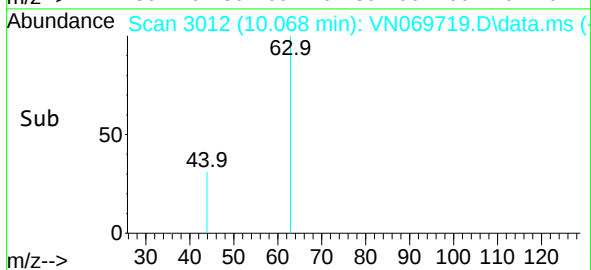
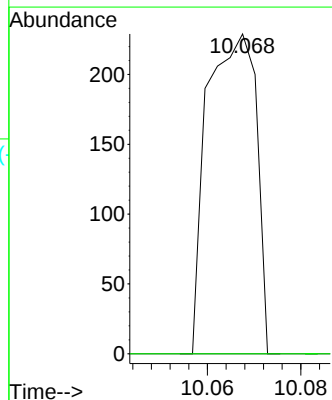
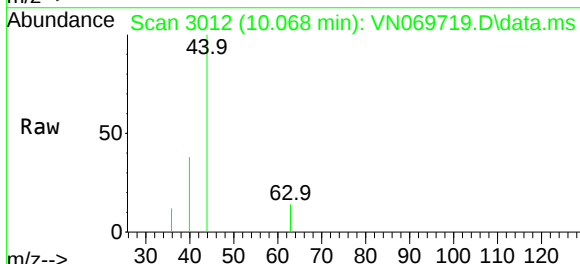


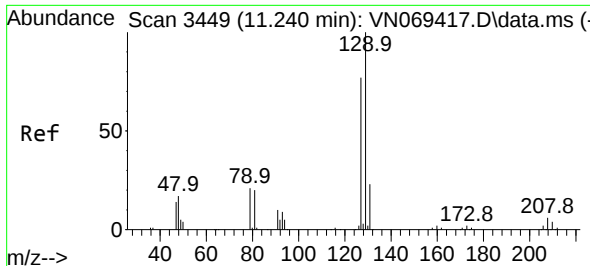
Tgt Ion: 75 Resp: 121  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 26.4 39.6#  
 39 23.2 42.5 63.7#



#58  
 2-Chloroethyl Vinyl ether  
 Concen: 18.405 ug/l  
 RT: 10.068 min Scan# 3012  
 Delta R.T. 0.025 min  
 Lab File: VN069719.D  
 Acq: 3 Dec 2021 15:38

Tgt Ion: 63 Resp: 167  
 Ion Ratio Lower Upper  
 63 100  
 106 0.0 23.9 35.9#

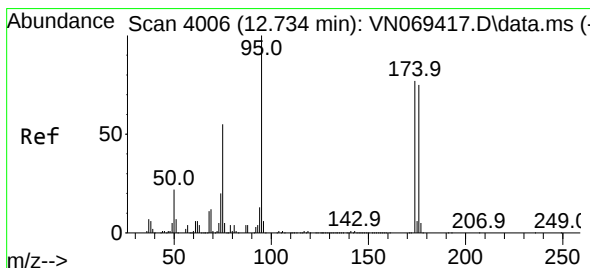
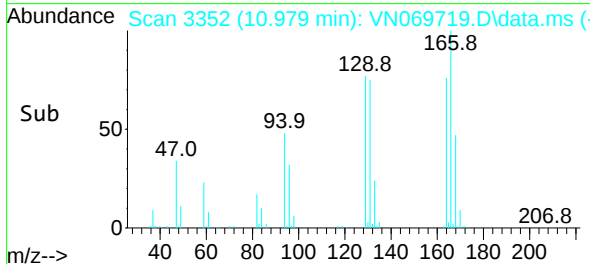
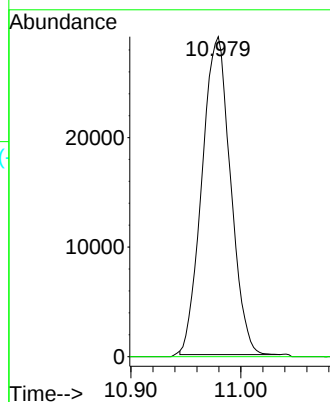
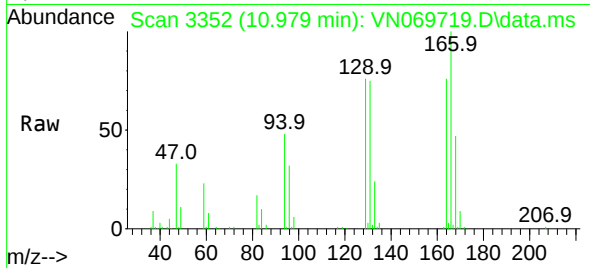




#60  
Dibromochloromethane  
Concen: 4.923 ug/l  
RT: 10.979 min Scan# 31  
Delta R.T. -0.261 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

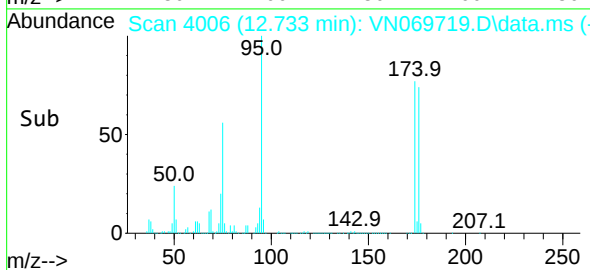
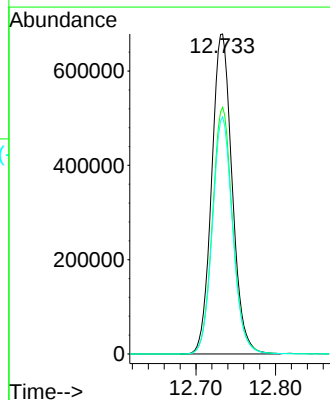
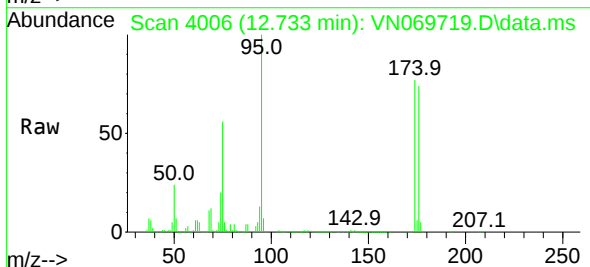
Instrument :  
MSVOA\_N  
ClientSampleId :

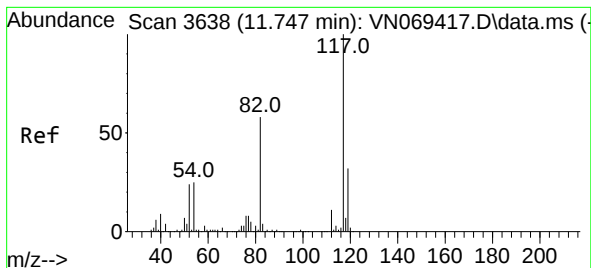
Tgt Ion:129 Resp: 52359  
Ion Ratio Lower Upper  
129 100  
127 0.0 38.6 116.0#



#62  
4-Bromofluorobenzene  
Concen: 52.332 ug/l  
RT: 12.733 min Scan# 4006  
Delta R.T. 0.002 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Tgt Ion: 95 Resp: 1215703  
Ion Ratio Lower Upper  
95 100  
174 76.3 0.0 187.2  
176 73.1 0.0 181.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.746 min Scan# 3638

Delta R.T. 0.000 min

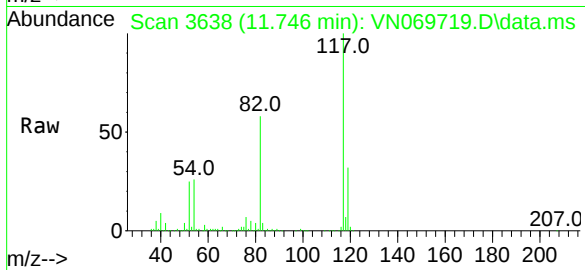
Lab File: VN069719.D

Acq: 3 Dec 2021 15:38

Instrument :

MSVOA\_N

ClientSampleId :



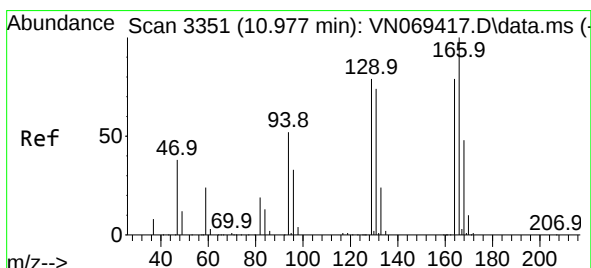
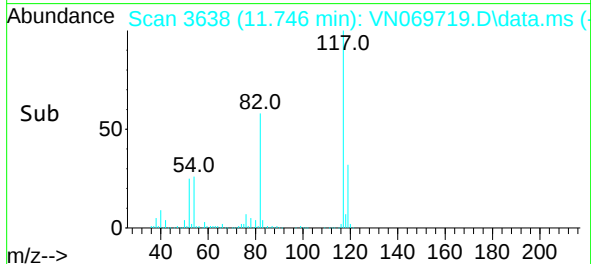
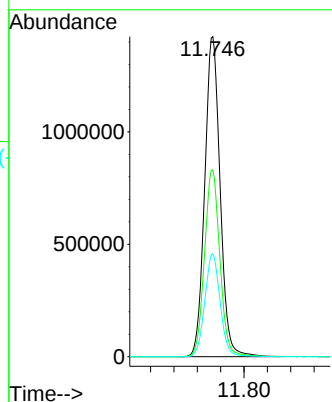
Tgt Ion:117 Resp: 2611765

Ion Ratio Lower Upper

117 100

82 58.4 42.4 63.6

119 32.1 25.4 38.2



#64

Tetrachloroethene

Concen: 3.012 ug/l

RT: 10.977 min Scan# 3351

Delta R.T. -0.002 min

Lab File: VN069719.D

Acq: 3 Dec 2021 15:38

Tgt Ion:164 Resp: 53343

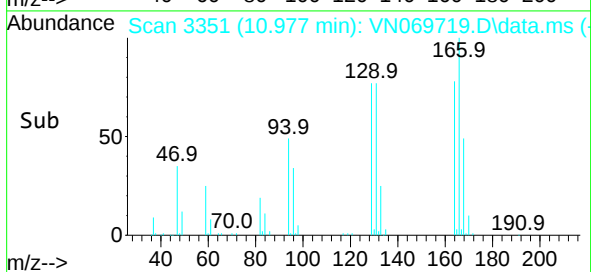
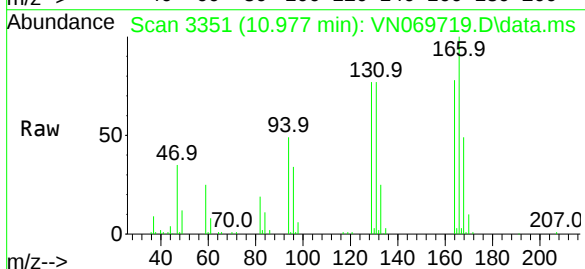
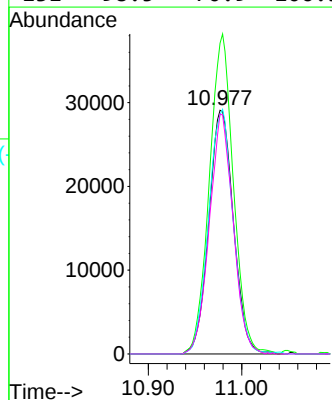
Ion Ratio Lower Upper

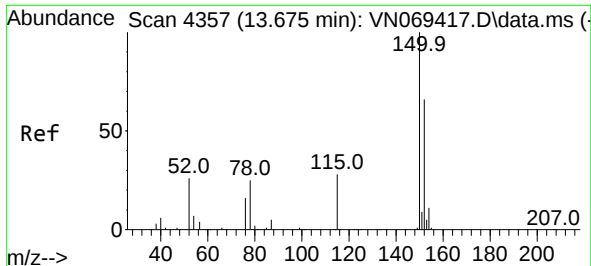
164 100

166 127.5 101.9 152.9

129 98.2 72.0 108.0

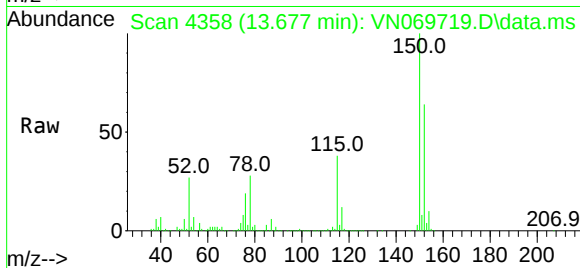
131 98.5 70.9 106.3



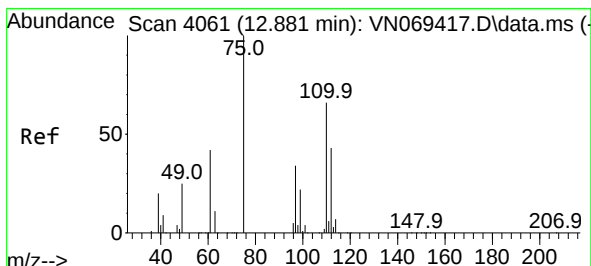
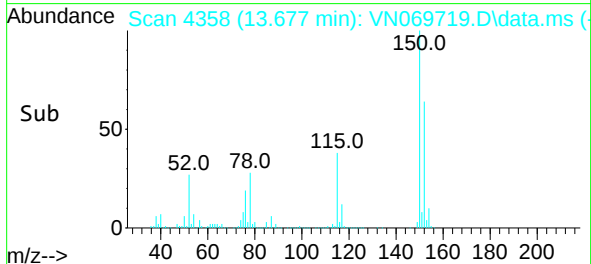
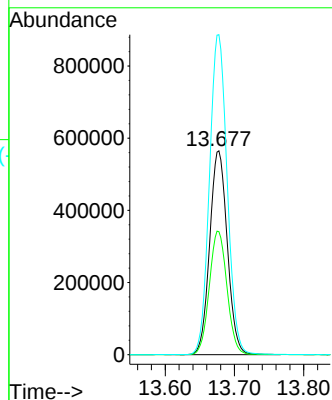


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.677 min Scan# 41  
Delta R.T. 0.000 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Instrument :  
MSVOA\_N  
ClientSampleId :

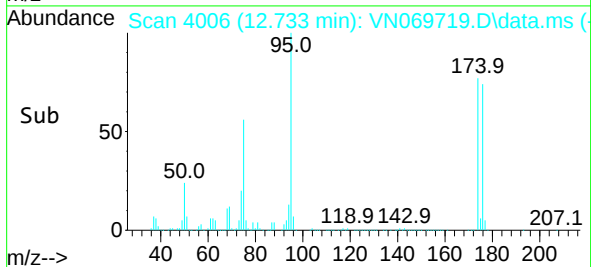
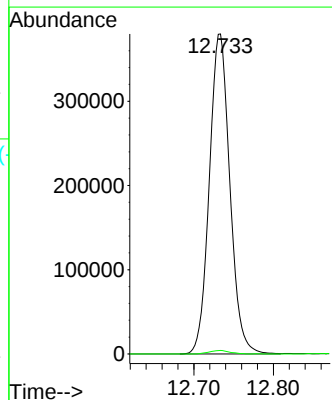
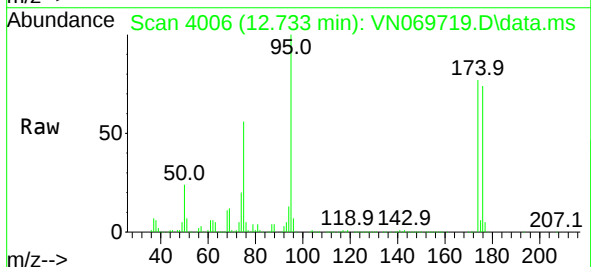


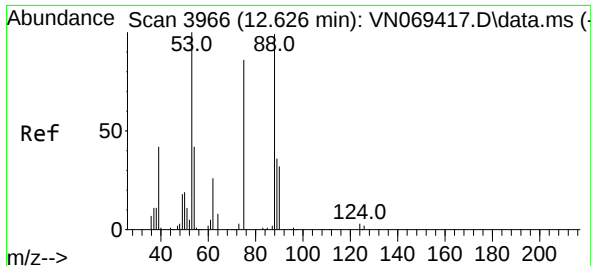
Tgt Ion:152 Resp: 997985  
Ion Ratio Lower Upper  
152 100  
115 60.9 27.5 82.5  
150 157.8 0.0 344.4



#76  
1,2,3-Trichloropropane  
Concen: 23.773 ug/l  
RT: 12.733 min Scan# 4006  
Delta R.T. -0.147 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

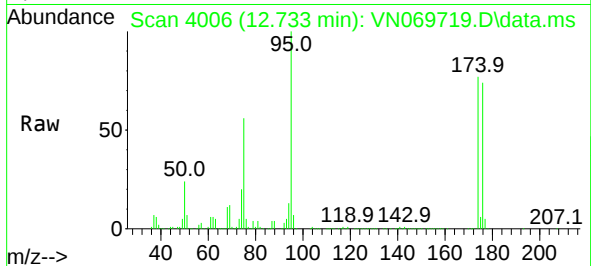
Tgt Ion: 75 Resp: 680384  
Ion Ratio Lower Upper  
75 100  
77 1.1 82.6 247.8#



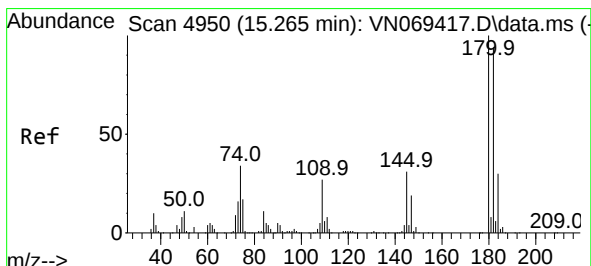
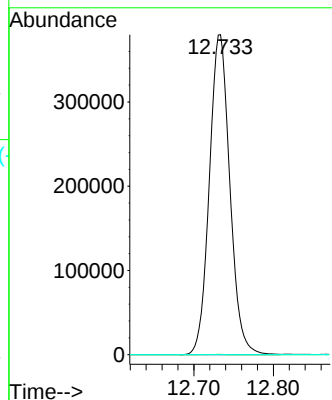
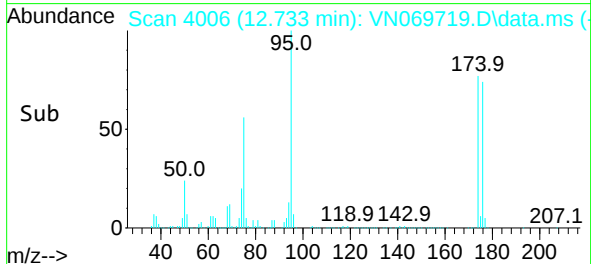


#81  
trans-1,4-Dichloro-2-butene  
Concen: 75.548 ug/l  
RT: 12.733 min Scan# 4006  
Delta R.T. 0.107 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

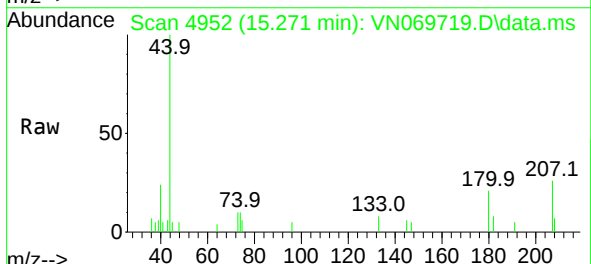
Instrument :  
MSVOA\_N  
ClientSampleId :



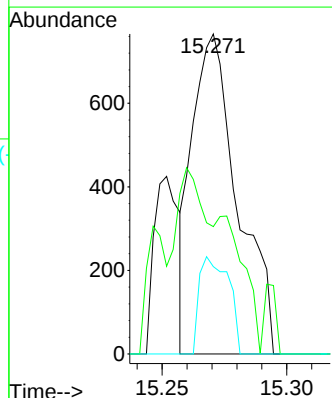
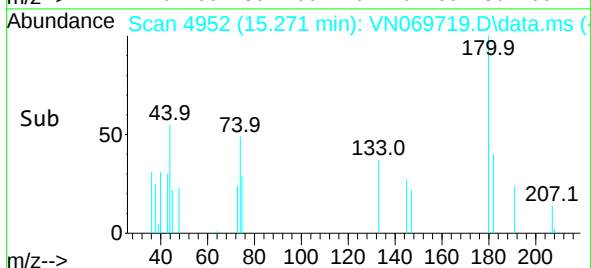
Tgt Ion: 75 Resp: 680384  
Ion Ratio Lower Upper  
75 100  
53 0.1 90.5 135.7#  
89 0.0 38.2 57.4#

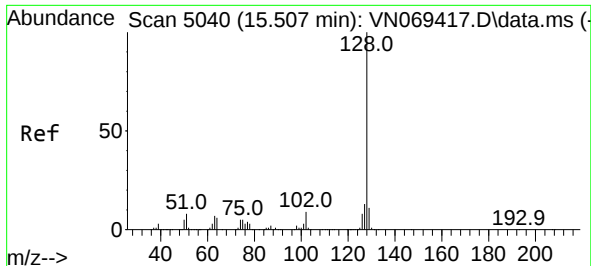


#93  
1,2,4-Trichlorobenzene  
Concen: 2.934 ug/l  
RT: 15.271 min Scan# 4952  
Delta R.T. 0.006 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38



Tgt Ion: 180 Resp: 979  
Ion Ratio Lower Upper  
180 100  
182 21.3 48.3 144.9#  
145 19.4 14.5 43.5

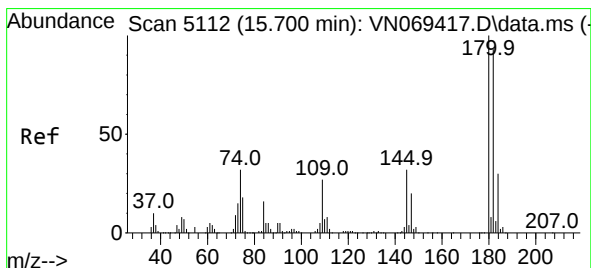
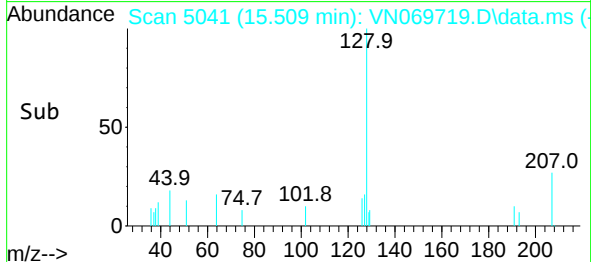
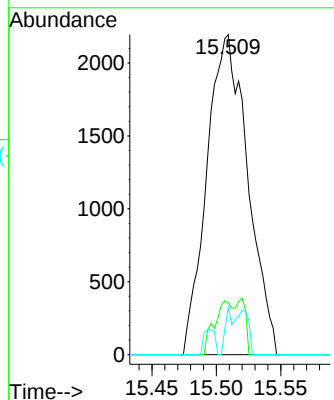
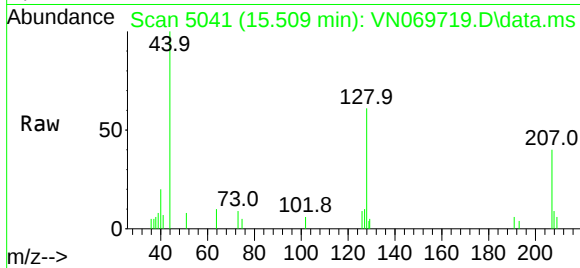




#95  
Naphthalene  
Concen: 4.077 ug/l  
RT: 15.509 min Scan# 5040  
Delta R.T. 0.002 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion:128 Resp: 4848  
Ion Ratio Lower Upper  
128 100  
127 7.3 10.5 15.7#  
129 2.4 8.7 13.1#



#96  
1,2,3-Trichlorobenzene  
Concen: 2.470 ug/l  
RT: 15.694 min Scan# 5110  
Delta R.T. -0.008 min  
Lab File: VN069719.D  
Acq: 3 Dec 2021 15:38

Tgt Ion:180 Resp: 582  
Ion Ratio Lower Upper  
180 100  
182 0.0 47.4 142.2#  
145 4.3 15.0 45.1#

