

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN121923\  
 Data File : VN080529.D  
 Acq On : 19 Dec 2023 18:43  
 Operator : JC\MD  
 Sample : 05827-11  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Dec 20 04:06:19 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N121223W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 13 01:57:14 2023  
 Response via : Initial Calibration

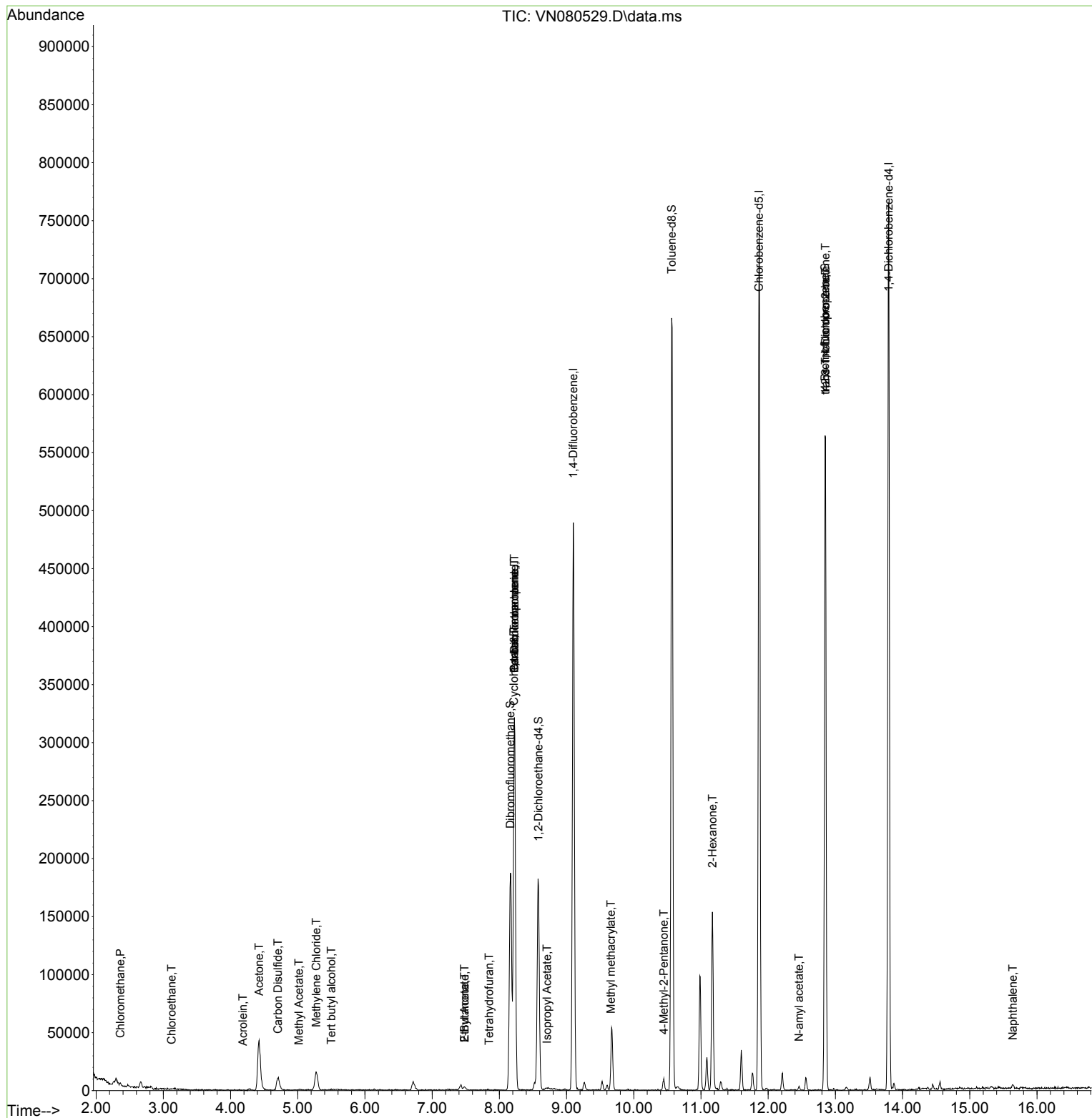
| Compound                      | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|-------------------------------|----------------|------|---------------------|---------|--------|----------|
| Internal Standards            |                |      |                     |         |        |          |
| 1) Pentafluorobenzene         | 8.224          | 168  | 228561              | 50.000  | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100          | 114  | 423148              | 50.000  | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865         | 117  | 438130              | 50.000  | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794         | 152  | 205834              | 50.000  | ug/l   | 0.00     |
| System Monitoring Compounds   |                |      |                     |         |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.583          | 65   | 160617              | 55.020  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 74 - 125 |      | Recovery = 110.040% |         |        |          |
| 35) Dibromofluoromethane      | 8.165          | 113  | 137843              | 51.378  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 75 - 124 |      | Recovery = 102.760% |         |        |          |
| 50) Toluene-d8                | 10.565         | 98   | 475176              | 47.489  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 86 - 113 |      | Recovery = 94.980%  |         |        |          |
| 62) 4-Bromofluorobenzene      | 12.847         | 95   | 206863              | 54.445  | ug/l   | 0.00     |
| Spiked Amount 50.000          | Range 83 - 123 |      | Recovery = 108.880% |         |        |          |
| Target Compounds              |                |      |                     |         |        |          |
|                               |                |      |                     |         | Qvalue |          |
| 3) Chloromethane              | 2.359          | 50   | 2773                | 0.508   | ug/l   | 93       |
| 6) Chloroethane               | 3.124          | 64   | 361                 | 0.225   | ug/l # | 43       |
| 11) Tert butyl alcohol        | 5.500          | 59   | 120                 | 0.349   | ug/l # | 72       |
| 13) Acrolein                  | 4.183          | 56   | 134                 | 0.356   | ug/l # | 16       |
| 16) Acetone                   | 4.424          | 43   | 80242               | 155.022 | ug/l # | 88       |
| 17) Carbon Disulfide          | 4.706          | 76   | 2664                | 0.383   | ug/l # | 75       |
| 18) Methyl Acetate            | 5.018          | 43   | 884                 | 0.265   | ug/l # | 54       |
| 20) Methylene Chloride        | 5.277          | 84   | 13393               | 4.835   | ug/l   | 93       |
| 25) 2-Butanone                | 7.483          | 43   | 4272                | 4.284   | ug/l   | 93       |
| 29) Tetrahydrofuran           | 7.847          | 42   | 338                 | 0.473   | ug/l # | 42       |
| 31) Cyclohexane               | 8.218          | 56   | 4519                | 1.138   | ug/l # | 29       |
| 36) 1,1-Dichloropropene       | 8.224          | 75   | 19193               | 4.375   | ug/l # | 42       |
| 37) Ethyl Acetate             | 7.483          | 43   | 4272                | 1.555   | ug/l # | 63       |
| 38) Carbon Tetrachloride      | 8.224          | 117  | 25622               | 4.888   | ug/l # | 15       |
| 43) Isopropyl Acetate         | 8.712          | 43   | 1235                | 0.250   | ug/l # | 49       |
| 48) Methyl methacrylate       | 9.659          | 41   | 3154                | 1.070   | ug/l # | 31       |
| 51) 4-Methyl-2-Pentanone      | 10.447         | 43   | 6292                | 2.313   | ug/l # | 84       |
| 59) 2-Hexanone                | 11.171         | 43   | 111749              | 55.647  | ug/l # | 19       |
| 74) N-amyl acetate            | 12.459         | 43   | 2057                | 0.426   | ug/l # | 39       |
| 76) 1,2,3-Trichloropropane    | 12.853         | 75   | 111077              | 27.050  | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853         | 75   | 111077              | 71.023  | ug/l # | 15       |
| 95) Naphthalene               | 15.641         | 128  | 3450                | 0.301   | ug/l # | 87       |

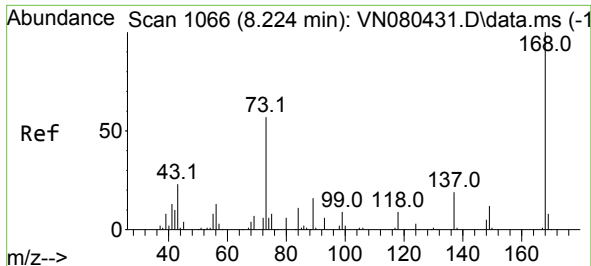
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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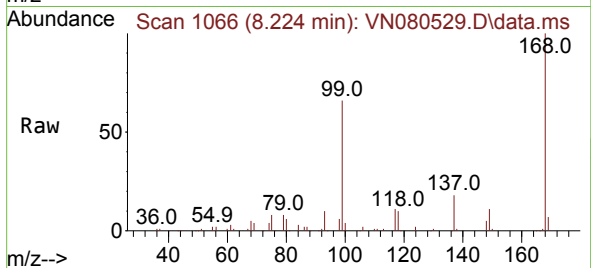
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N121223W.M  
Quant Title : SW846 8260  
QLast Update : Wed Dec 13 01:57:14 2023  
Response via : Initial Calibration



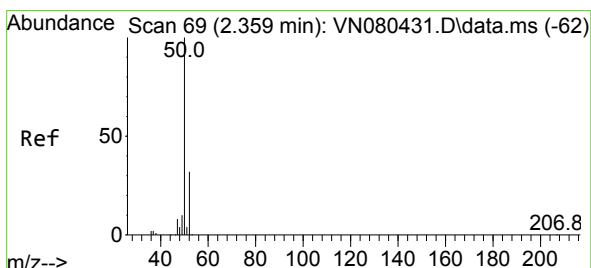
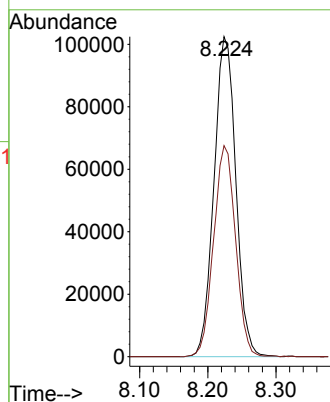
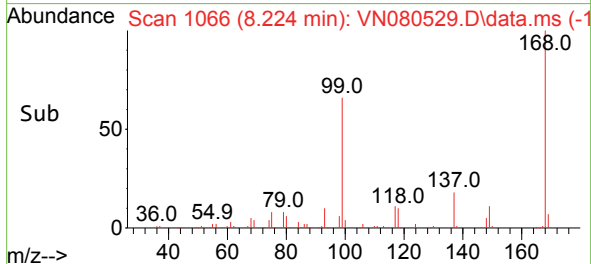


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Instrument :  
MSVOA\_N  
ClientSampleId :

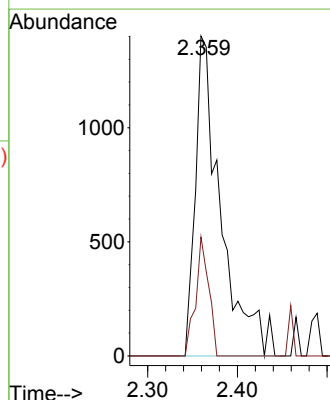
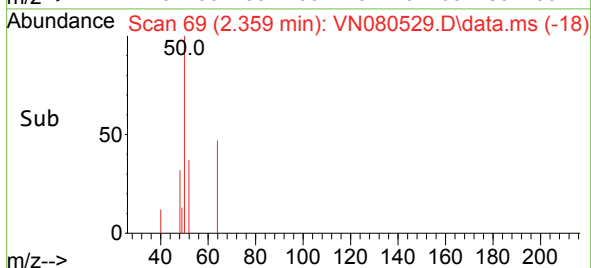
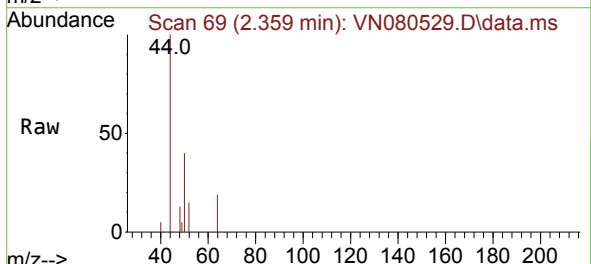


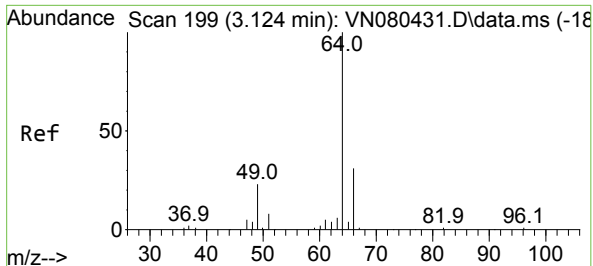
Tgt Ion:168 Resp: 228561  
Ion Ratio Lower Upper  
168 100  
99 66.0 53.0 79.6



#3  
Chloromethane  
Concen: 0.508 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 50 Resp: 2773  
Ion Ratio Lower Upper  
50 100  
52 37.2 26.5 39.7

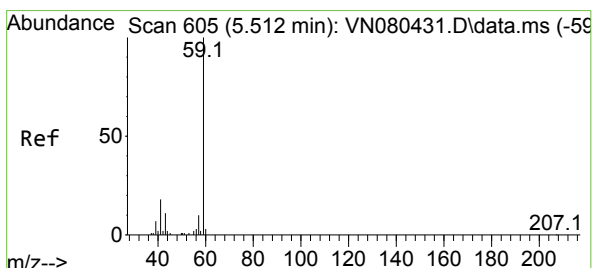
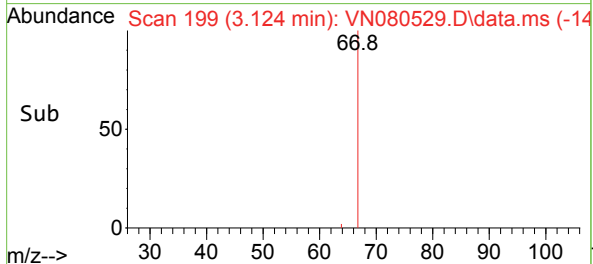
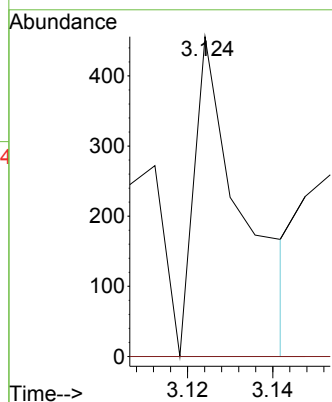
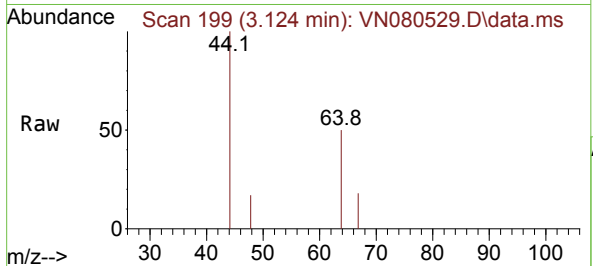




#6  
Chloroethane  
Concen: 0.225 ug/l  
RT: 3.124 min Scan# 199  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

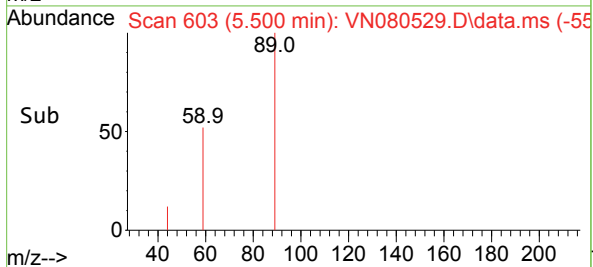
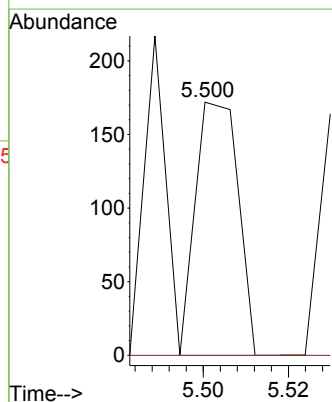
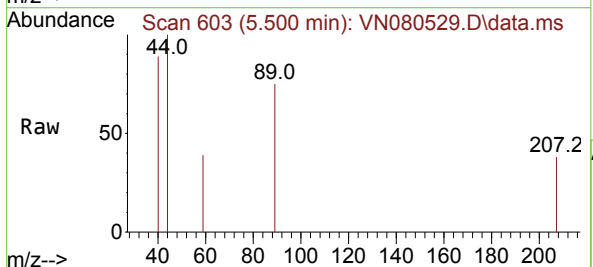
Instrument :  
MSVOA\_N  
ClientSampleId :

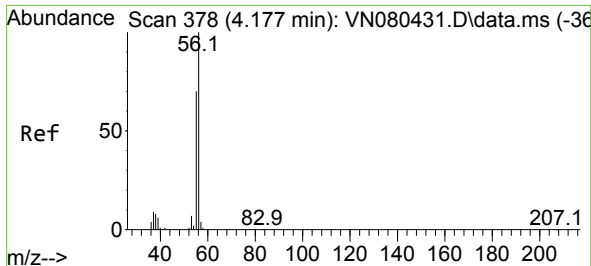
Tgt Ion: 64 Resp: 361  
Ion Ratio Lower Upper  
64 100  
66 0.0 25.4 38.2#



#11  
Tert butyl alcohol  
Concen: 0.349 ug/l  
RT: 5.500 min Scan# 603  
Delta R.T. -0.012 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 59 Resp: 120  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.2 12.4#

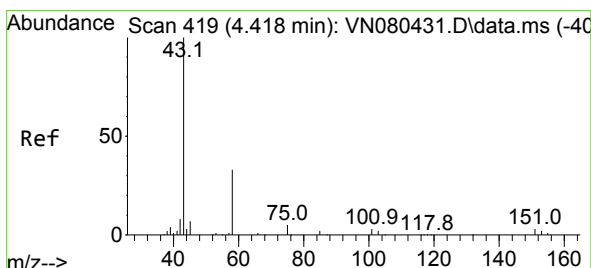
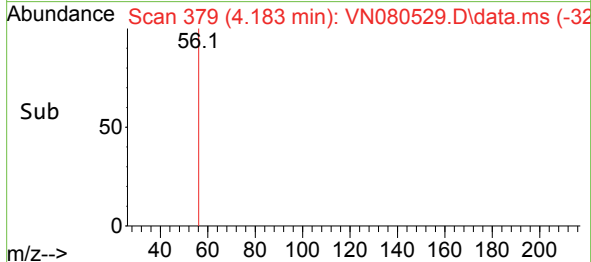
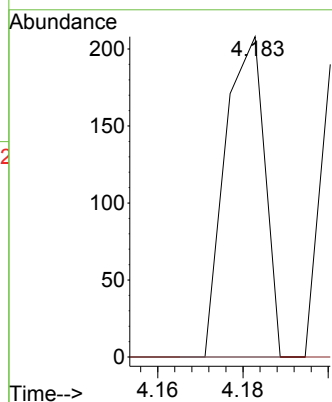
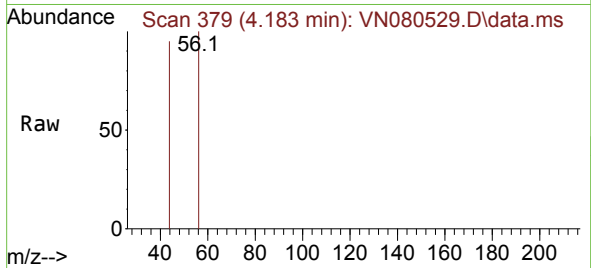




#13  
Acrolein  
Concen: 0.356 ug/l  
RT: 4.183 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

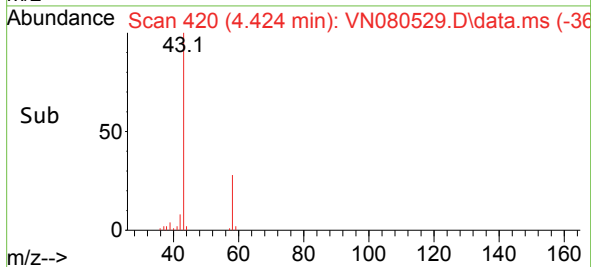
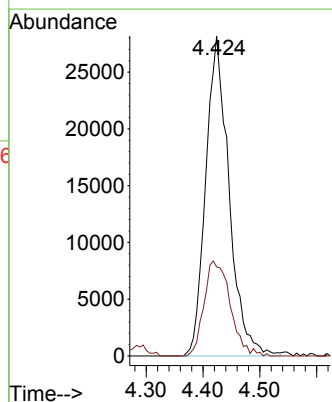
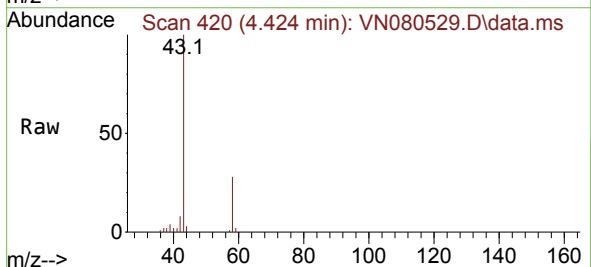
Instrument :  
MSVOA\_N  
ClientSampleId :

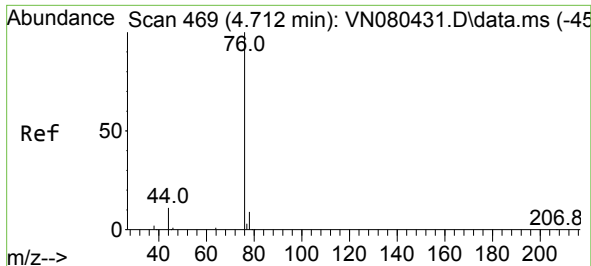
Tgt Ion: 56 Resp: 134  
Ion Ratio Lower Upper  
56 100  
55 0.0 54.5 81.7#



#16  
Acetone  
Concen: 155.022 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. 0.006 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 43 Resp: 80242  
Ion Ratio Lower Upper  
43 100  
58 27.8 28.0 42.0#

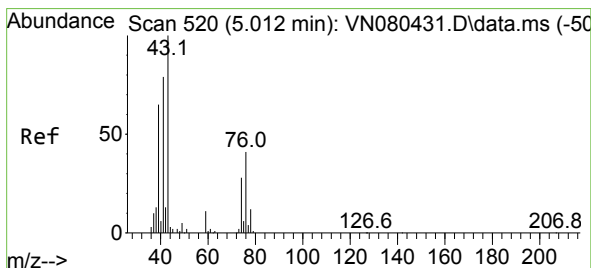
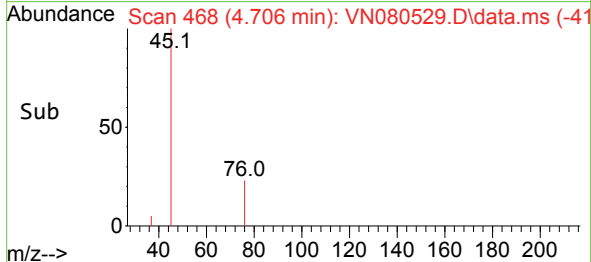
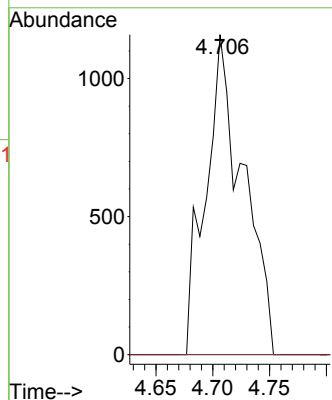
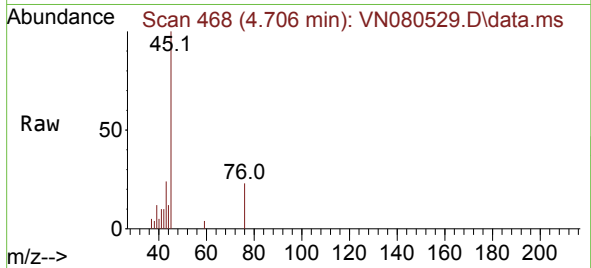




#17  
Carbon Disulfide  
Concen: 0.383 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. -0.006 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

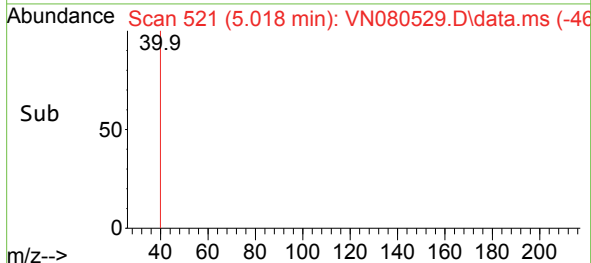
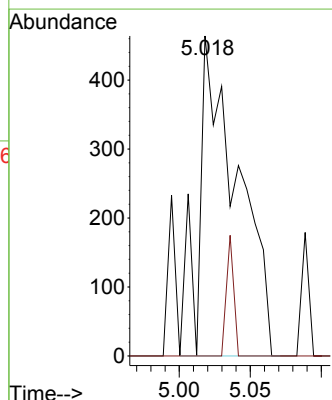
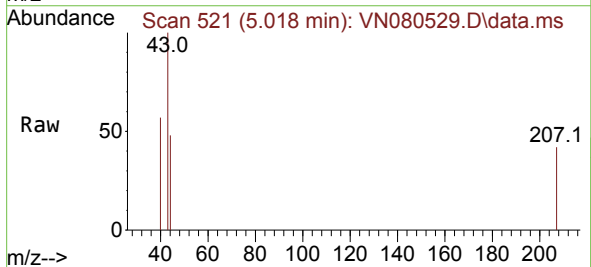
Instrument :  
MSVOA\_N  
ClientSampleId :

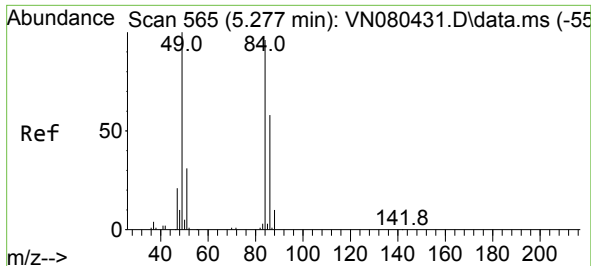
Tgt Ion: 76 Resp: 2664  
Ion Ratio Lower Upper  
76 100  
78 0.0 7.4 11.0#



#18  
Methyl Acetate  
Concen: 0.265 ug/l  
RT: 5.018 min Scan# 521  
Delta R.T. 0.006 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

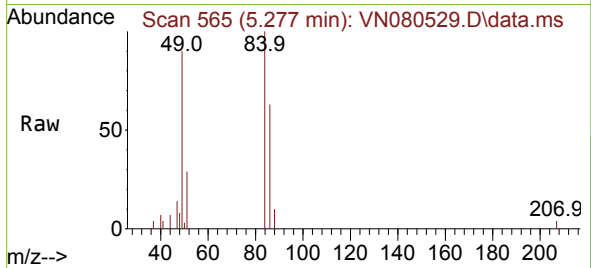
Tgt Ion: 43 Resp: 884  
Ion Ratio Lower Upper  
43 100  
74 7.0 26.2 39.4#



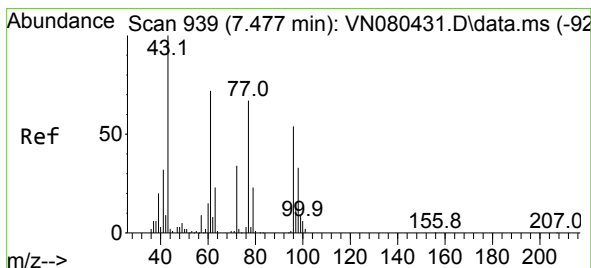
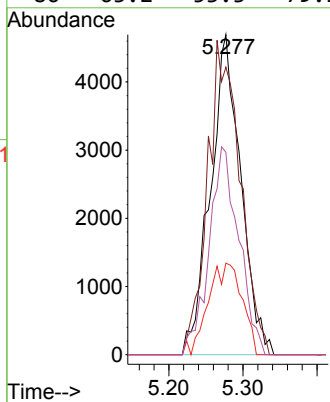
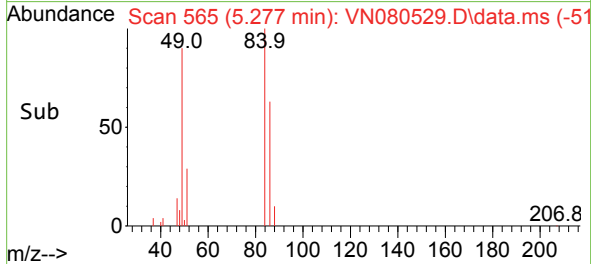


#20  
Methylene Chloride  
Concen: 4.835 ug/l  
RT: 5.277 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Instrument :  
MSVOA\_N  
ClientSampleId :

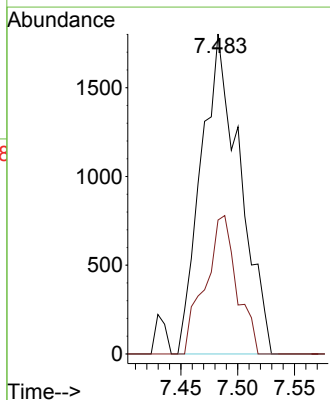
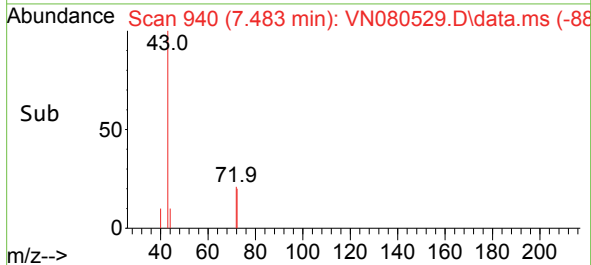
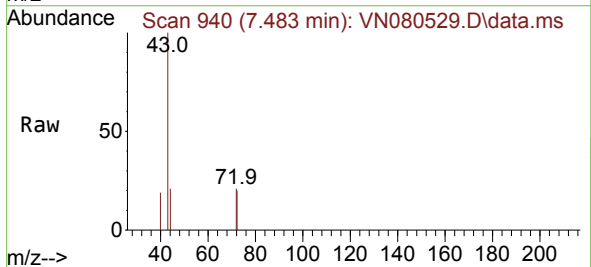


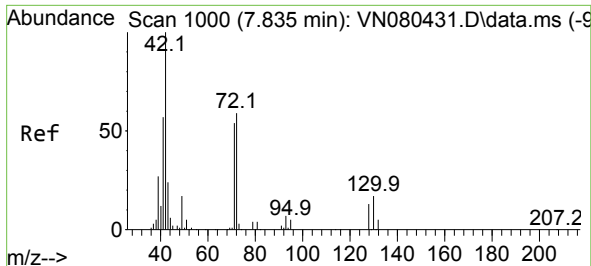
Tgt Ion: 84 Resp: 13393  
Ion Ratio Lower Upper  
84 100  
49 89.8 79.7 119.5  
51 28.6 25.2 37.8  
86 63.2 53.3 79.9



#25  
2-Butanone  
Concen: 4.284 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. 0.006 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 43 Resp: 4272  
Ion Ratio Lower Upper  
43 100  
72 41.9 30.2 45.2





#29

Tetrahydrofuran

Concen: 0.473 ug/l

RT: 7.847 min Scan# 1065

Delta R.T. 0.012 min

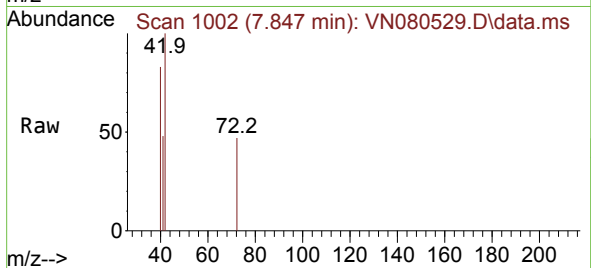
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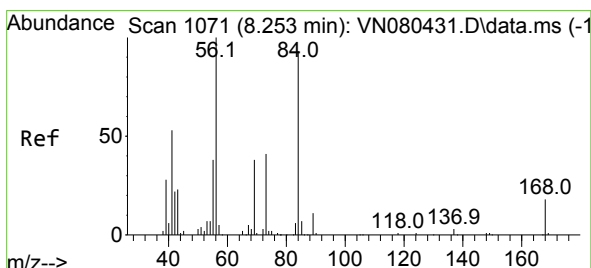
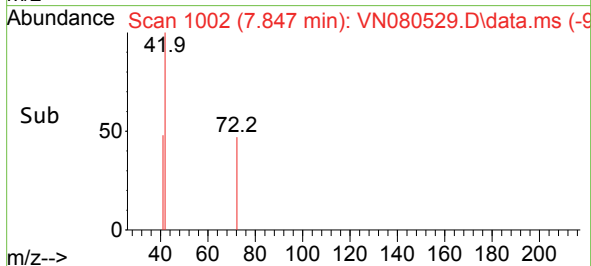
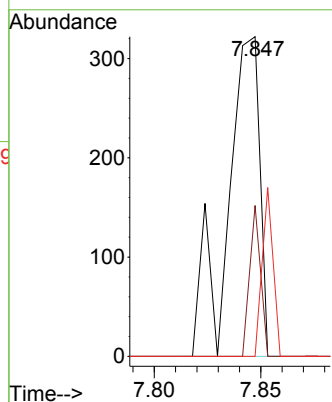
Instrument :

MSVOA\_N

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 338   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 16.0  | 49.8  | 74.6# |
| 71       | 17.8  | 47.4  | 71.2# |



#31

Cyclohexane

Concen: 1.138 ug/l

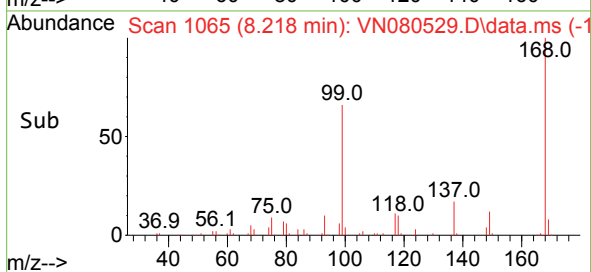
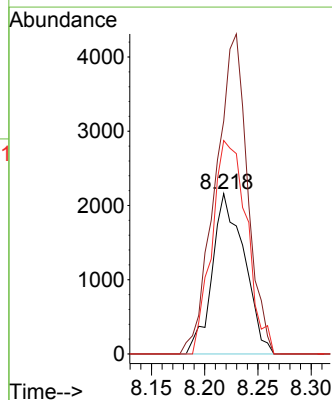
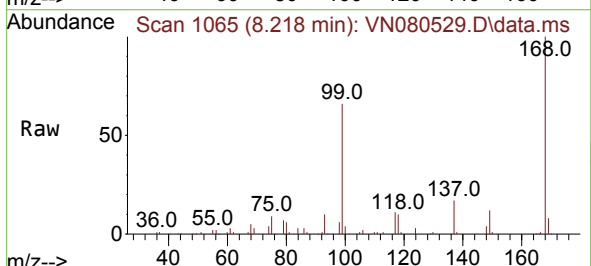
RT: 8.218 min Scan# 1065

Delta R.T. -0.035 min

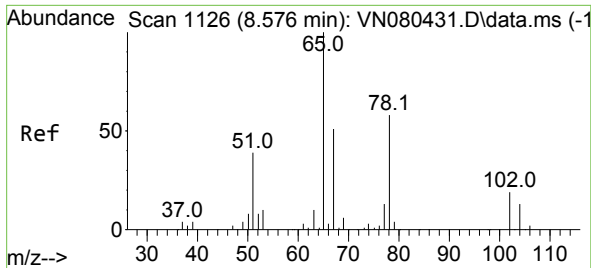
Lab File: VN080529.D

Acq: 19 Dec 2023 18:43

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 4519   |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 145.2 | 26.8  | 40.2#  |
| 84       | 133.1 | 81.8  | 122.6# |



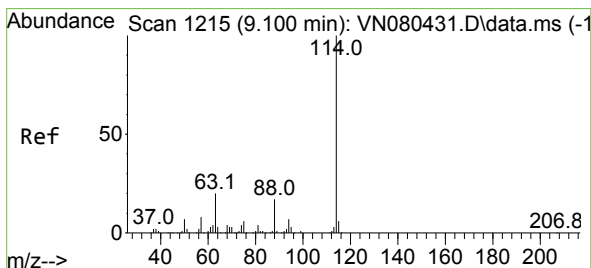
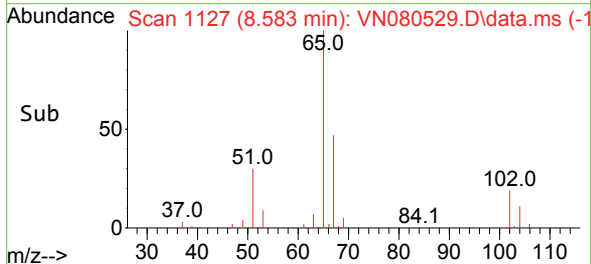
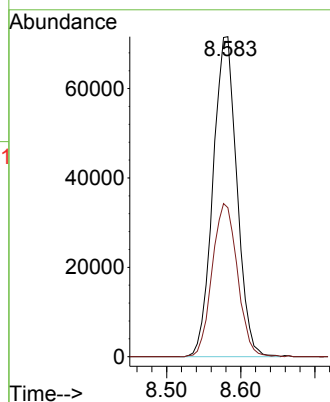
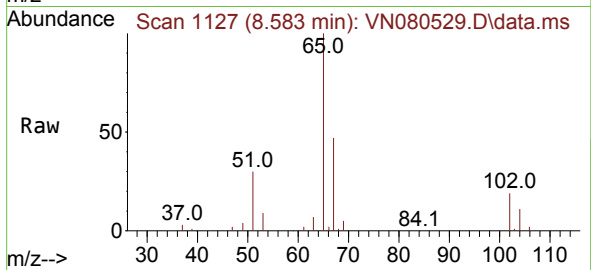




#33  
 1,2-Dichloroethane-d4  
 Concen: 55.020 ug/l  
 RT: 8.583 min Scan# 1126  
 Delta R.T. 0.006 min  
 Lab File: VN080529.D  
 Acq: 19 Dec 2023 18:43

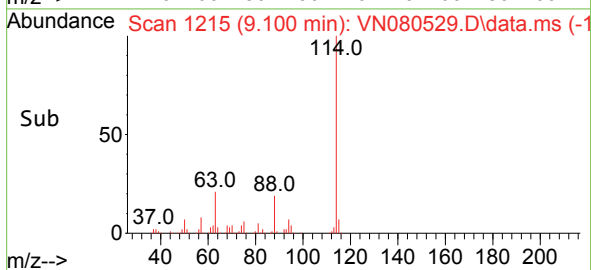
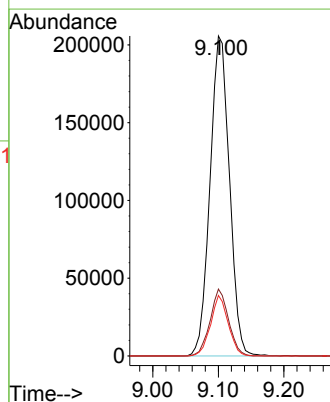
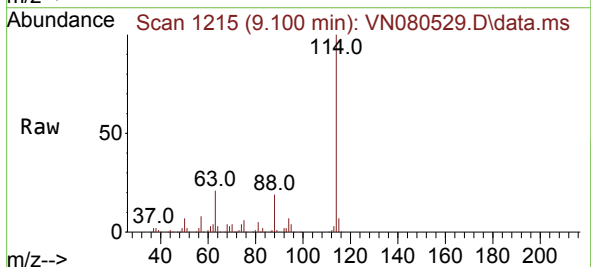
Instrument :  
 MSVOA\_N  
 ClientSampleId :

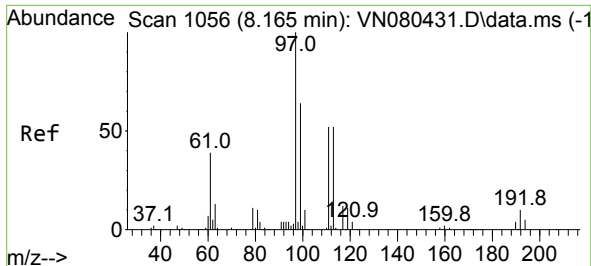
Tgt Ion: 65 Resp: 160617  
 Ion Ratio Lower Upper  
 65 100  
 67 50.4 0.0 106.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.000 min  
 Lab File: VN080529.D  
 Acq: 19 Dec 2023 18:43

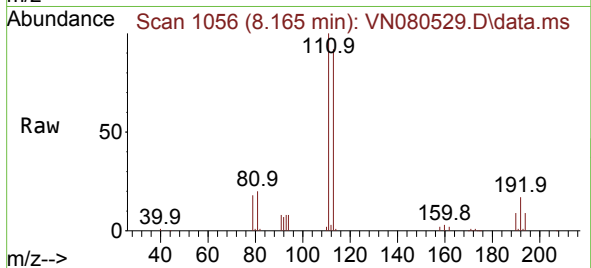
Tgt Ion: 114 Resp: 423148  
 Ion Ratio Lower Upper  
 114 100  
 63 20.9 0.0 36.4  
 88 18.9 0.0 30.6



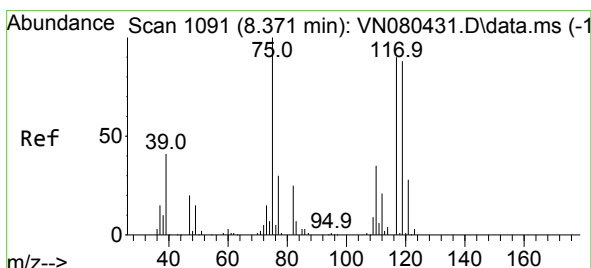
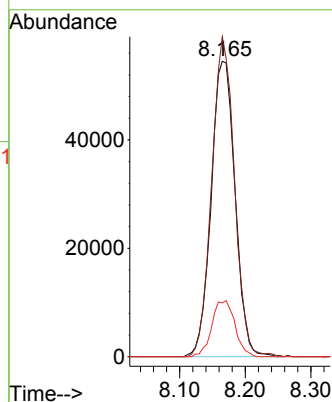
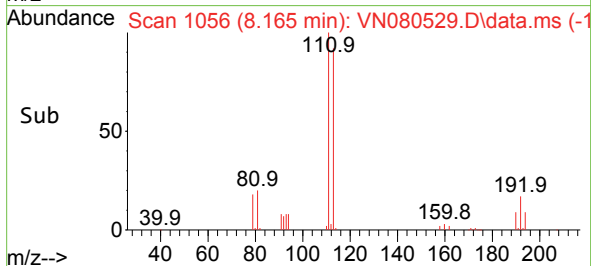


#35  
Dibromofluoromethane  
Concen: 51.378 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Instrument :  
MSVOA\_N  
ClientSampleId :

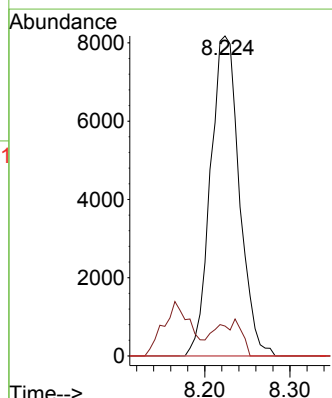
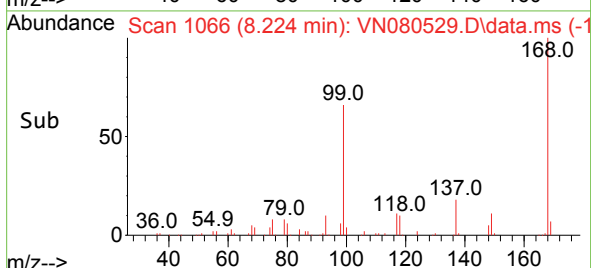
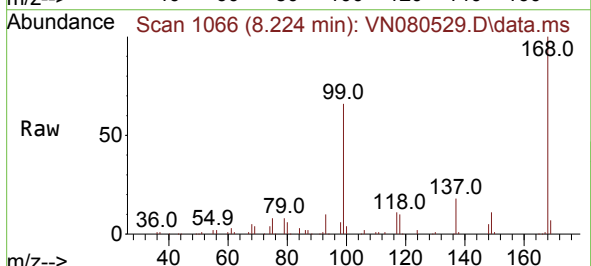


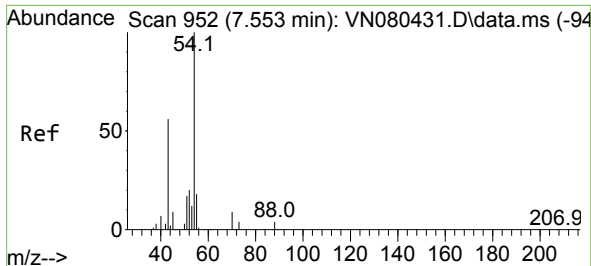
Tgt Ion:113 Resp: 137843  
Ion Ratio Lower Upper  
113 100  
111 102.9 82.6 123.8  
192 18.4 12.7 19.1



#36  
1,1-Dichloropropene  
Concen: 4.375 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.147 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 75 Resp: 19193  
Ion Ratio Lower Upper  
75 100  
110 2.6 19.1 57.3#  
77 0.0 25.0 37.4#





#37

Ethyl Acetate

Concen: 1.555 ug/l

RT: 7.483 min Scan# 94

Delta R.T. -0.070 min

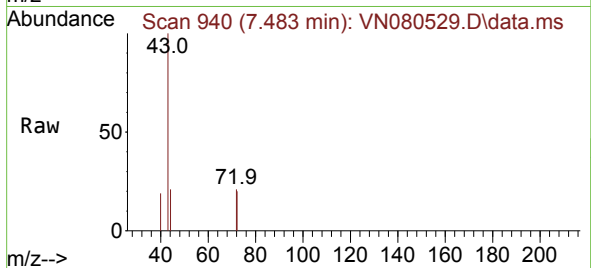
Lab File: VN080529.D

Acq: 19 Dec 2023 18:43

Instrument :

MSVOA\_N

ClientSampleId :



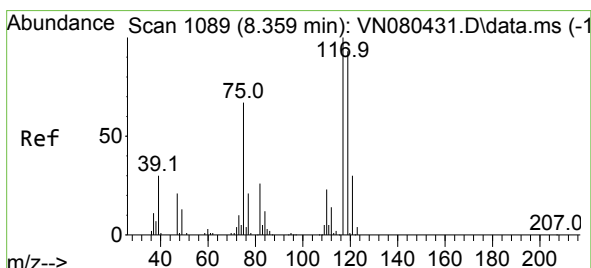
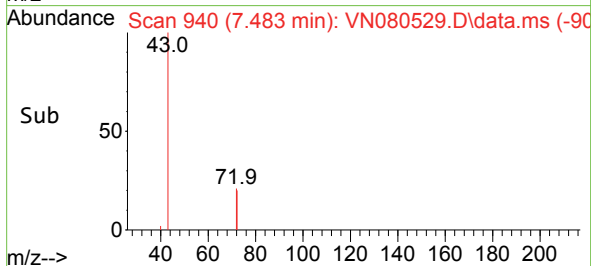
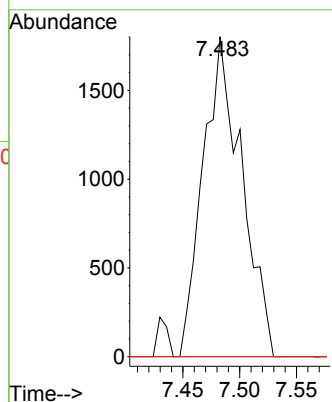
Tgt Ion: 43 Resp: 4272

Ion Ratio Lower Upper

43 100

61 0.0 13.2 19.8#

70 0.0 11.3 16.9#



#38

Carbon Tetrachloride

Concen: 4.888 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.135 min

Lab File: VN080529.D

Acq: 19 Dec 2023 18:43

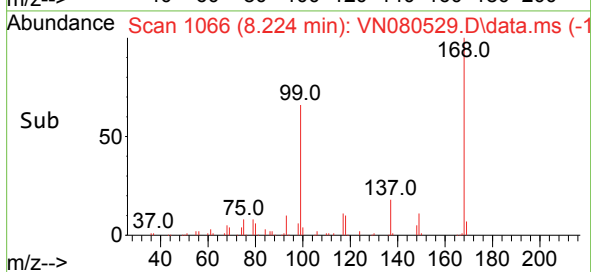
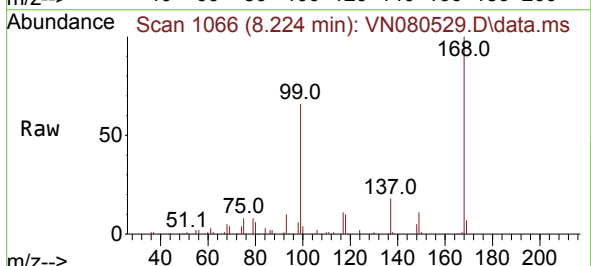
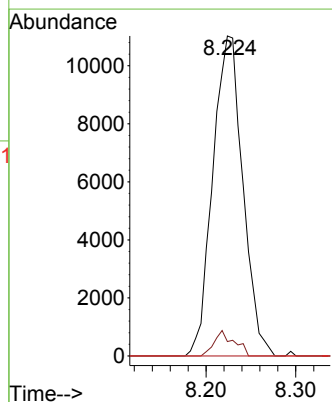
Tgt Ion: 117 Resp: 25622

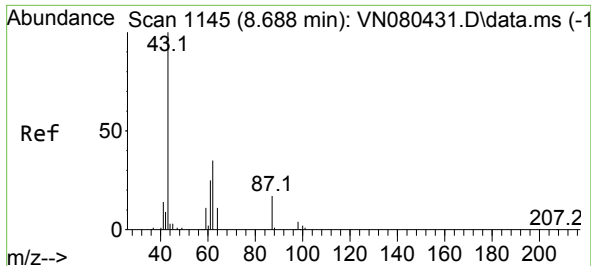
Ion Ratio Lower Upper

117 100

119 4.5 77.3 115.9#

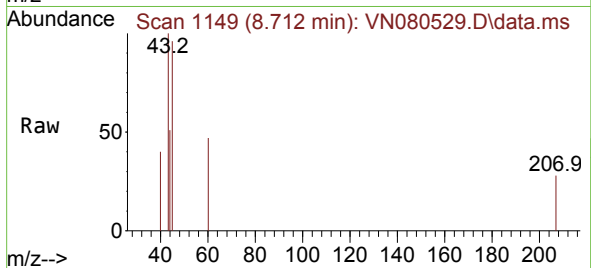
121 0.0 23.3 34.9#



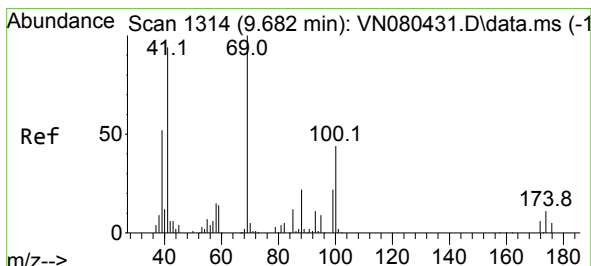
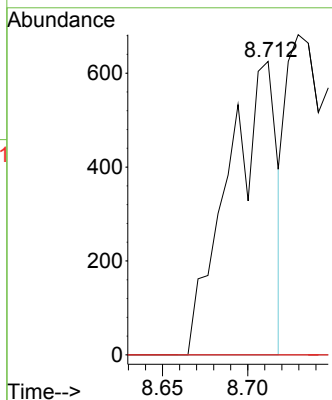
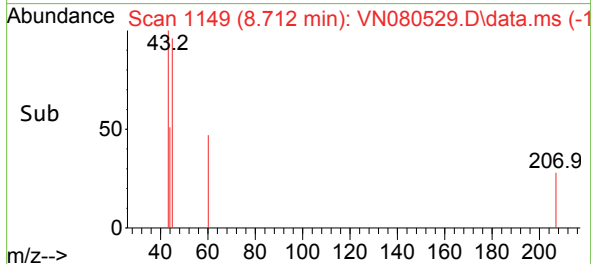


#43  
Isopropyl Acetate  
Concen: 0.250 ug/l  
RT: 8.712 min Scan# 1149  
Delta R.T. 0.024 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Instrument :  
MSVOA\_N  
ClientSampleId :

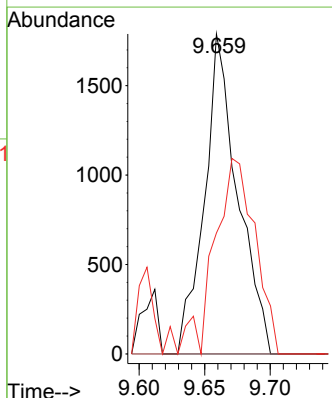
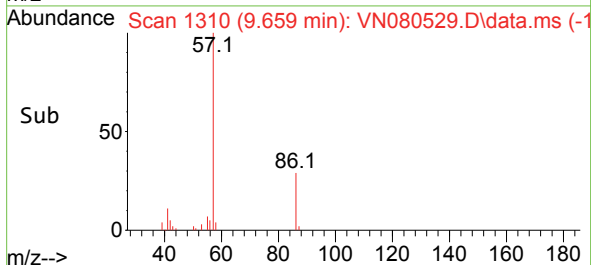
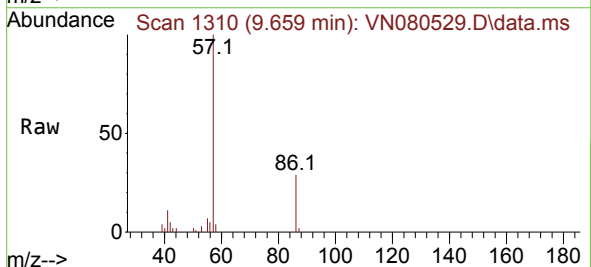


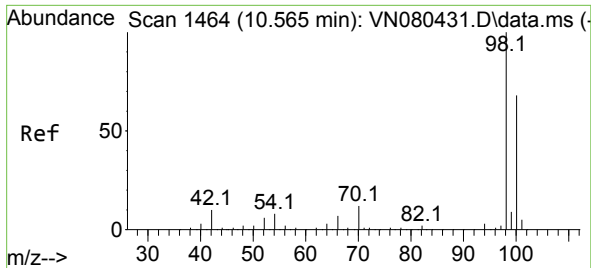
Tgt Ion: 43 Resp: 1235  
Ion Ratio Lower Upper  
43 100  
61 0.0 24.7 37.1#  
87 0.0 14.6 21.8#



#48  
Methyl methacrylate  
Concen: 1.070 ug/l  
RT: 9.659 min Scan# 1310  
Delta R.T. -0.023 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 41 Resp: 3154  
Ion Ratio Lower Upper  
41 100  
69 0.0 90.4 135.6#  
39 74.6 54.6 81.8

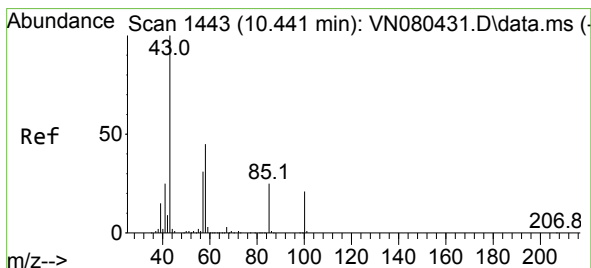
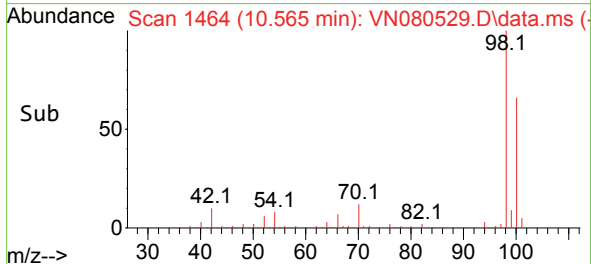
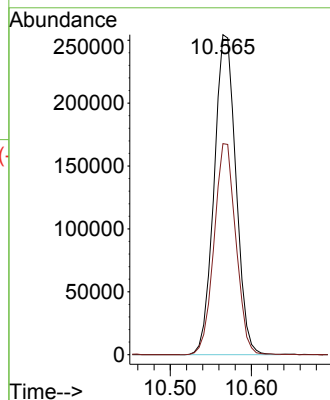
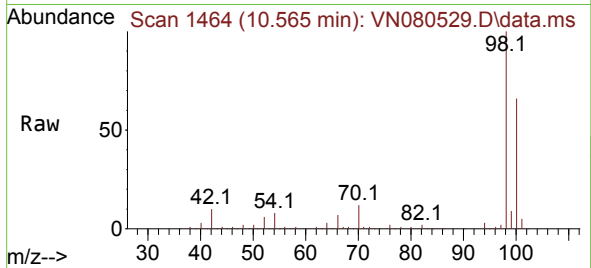




#50  
Toluene-d8  
Concen: 47.489 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

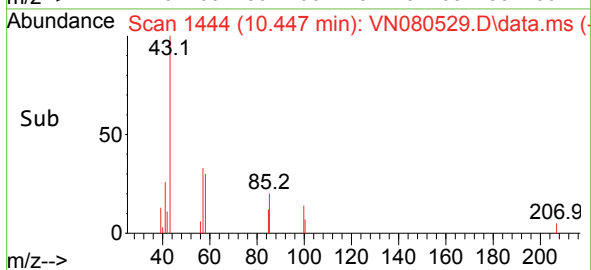
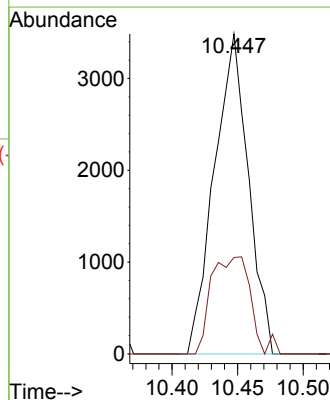
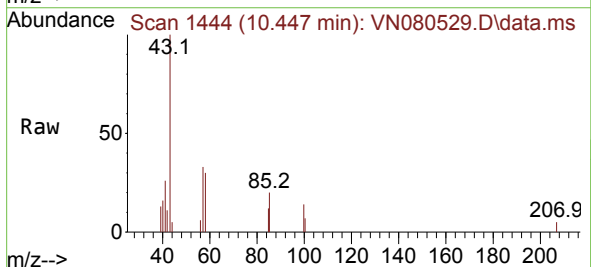
Instrument :  
MSVOA\_N  
ClientSampleId :

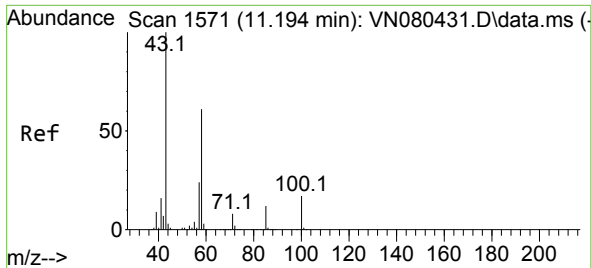
Tgt Ion: 98 Resp: 475176  
Ion Ratio Lower Upper  
98 100  
100 65.9 52.0 78.0



#51  
4-Methyl-2-Pentanone  
Concen: 2.313 ug/l  
RT: 10.447 min Scan# 1444  
Delta R.T. 0.006 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion: 43 Resp: 6292  
Ion Ratio Lower Upper  
43 100  
58 35.2 36.6 54.8#

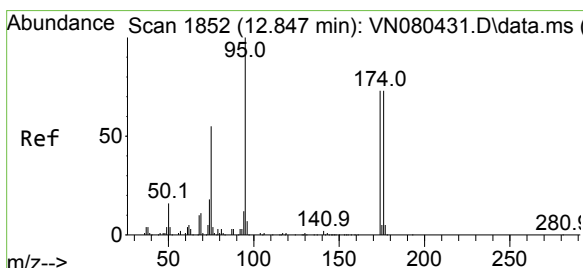
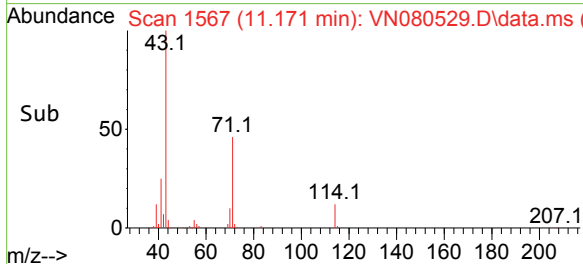
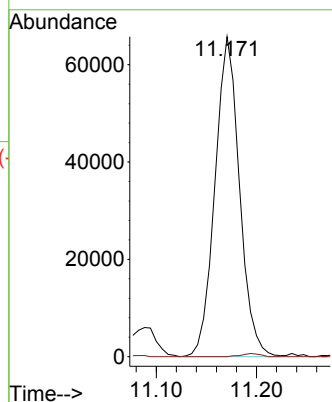
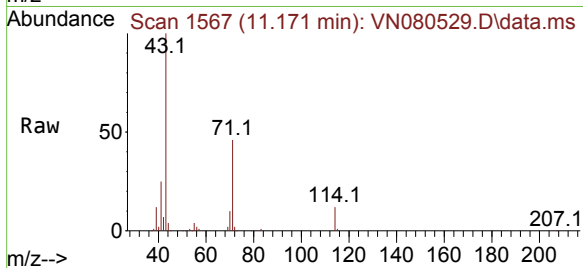




#59  
2-Hexanone  
Concen: 55.647 ug/l  
RT: 11.171 min Scan# 111749  
Delta R.T. -0.023 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

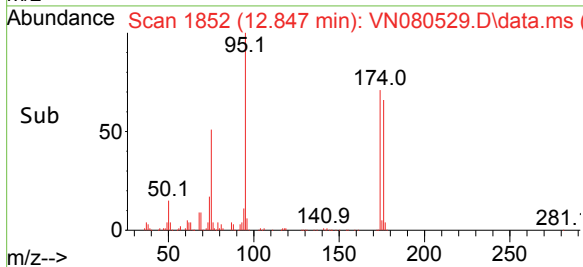
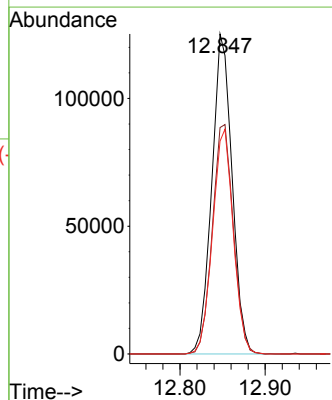
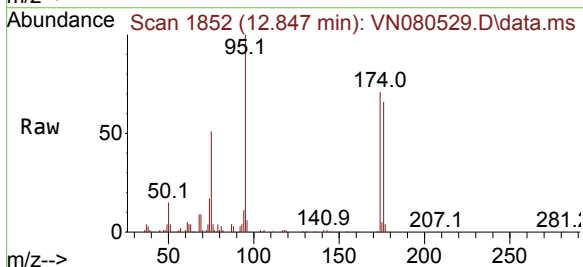
Instrument :  
MSVOA\_N  
ClientSampleId :

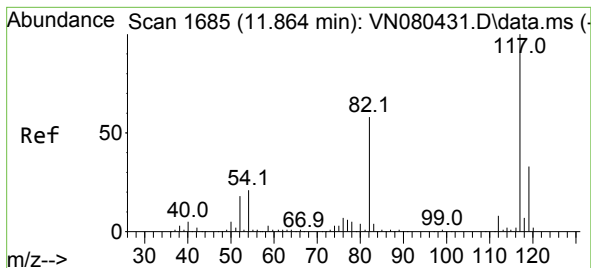
Tgt Ion: 43 Resp: 111749  
Ion Ratio Lower Upper  
43 100  
58 0.0 31.7 95.1#



#62  
4-Bromofluorobenzene  
Concen: 54.445 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

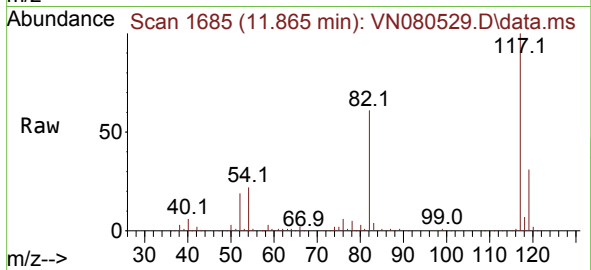
Tgt Ion: 95 Resp: 206863  
Ion Ratio Lower Upper  
95 100  
174 74.4 0.0 143.8  
176 71.5 0.0 135.8



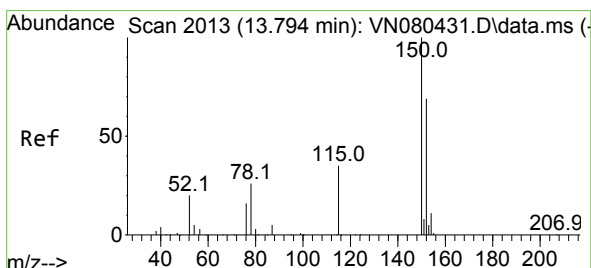
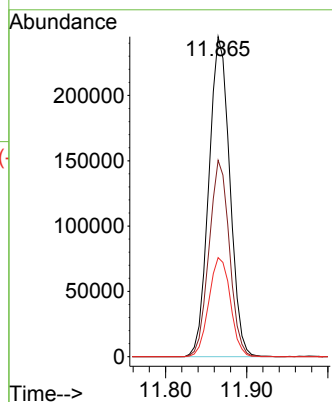
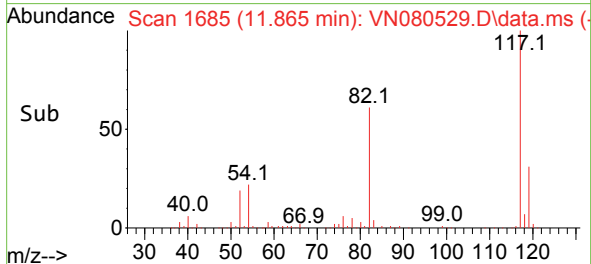


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

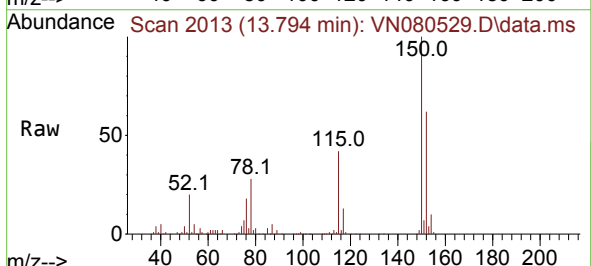
Instrument :  
MSVOA\_N  
ClientSampleId :



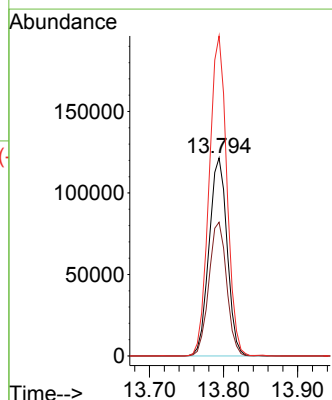
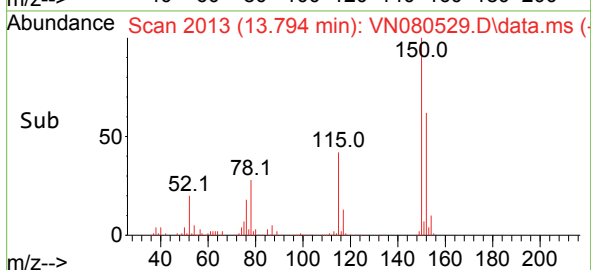
Tgt Ion:117 Resp: 438130  
Ion Ratio Lower Upper  
117 100  
82 61.3 44.0 66.0  
119 30.9 25.6 38.4

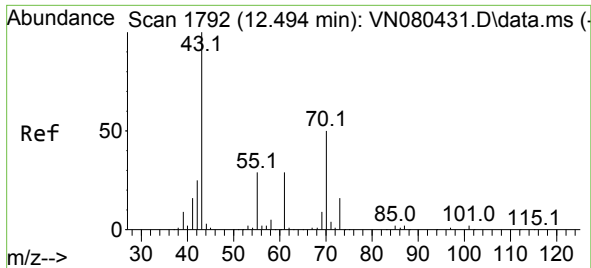


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.794 min Scan# 2013  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43



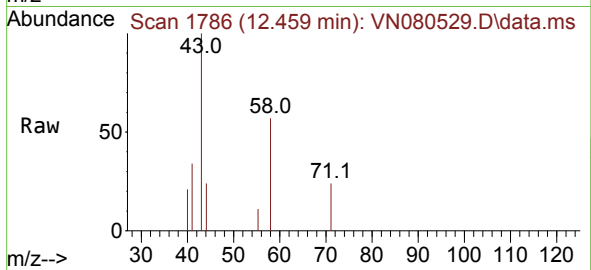
Tgt Ion:152 Resp: 205834  
Ion Ratio Lower Upper  
152 100  
115 66.4 32.3 96.8  
150 158.2 0.0 355.8



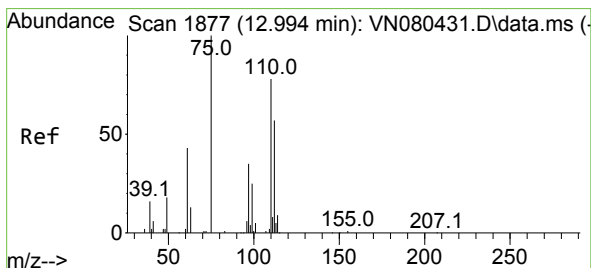
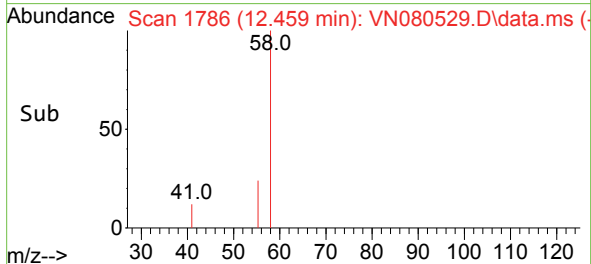
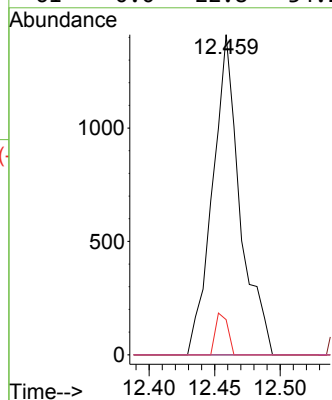


#74  
N-amy1 acetate  
Concen: 0.426 ug/l  
RT: 12.459 min Scan# 1  
Delta R.T. -0.035 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Instrument :  
MSVOA\_N  
ClientSampleId :

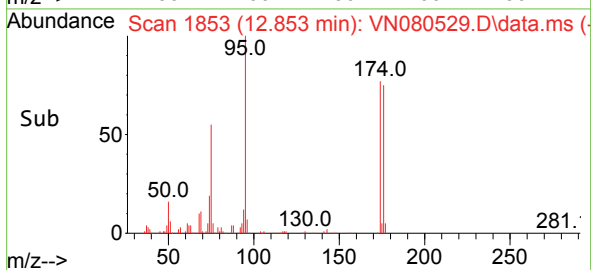
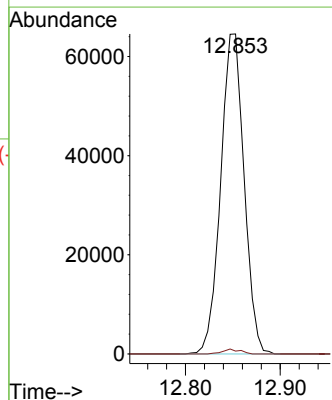
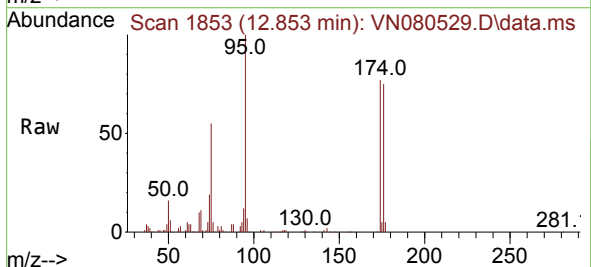


| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 70      | 0.0   | 43.4  | 65.2# |
| 55      | 5.8   | 21.4  | 32.0# |
| 61      | 0.0   | 22.8  | 34.2# |

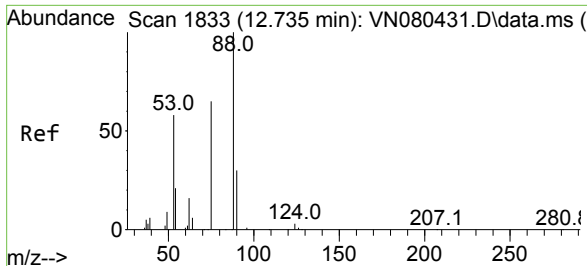


#76  
1,2,3-Trichloropropane  
Concen: 27.050 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.141 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 75      | 100   |       |        |
| 77      | 1.1   | 84.5  | 253.5# |



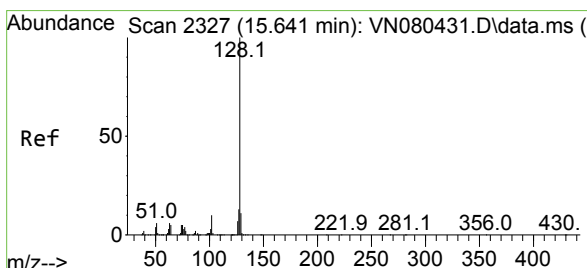
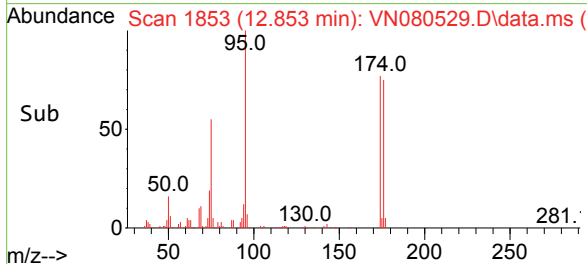
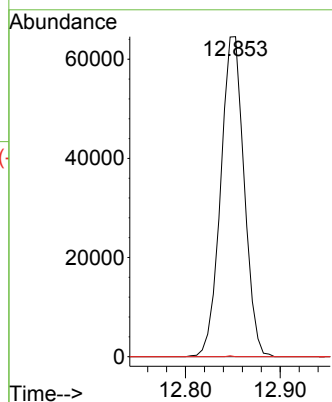
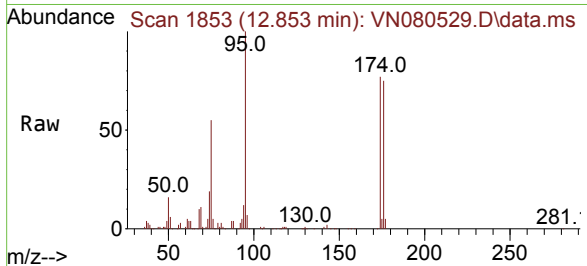




#81  
trans-1,4-Dichloro-2-butene  
Concen: 71.023 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.118 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion: 75 Resp: 111077  
Ion Ratio Lower Upper  
75 100  
53 0.0 67.4 101.2#  
89 0.1 38.8 58.2#



#95  
Naphthalene  
Concen: 0.301 ug/l  
RT: 15.641 min Scan# 2327  
Delta R.T. 0.000 min  
Lab File: VN080529.D  
Acq: 19 Dec 2023 18:43

Tgt Ion:128 Resp: 3450  
Ion Ratio Lower Upper  
128 100  
127 9.7 10.0 15.0#  
129 18.2 8.7 13.1#

