

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN022224\  
 Data File : VN081140.D  
 Acq On : 22 Feb 2024 17:11  
 Operator : JC\MD  
 Sample : P1539-03  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Feb 23 04:28:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N021624W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Feb 16 23:45:20 2024  
 Response via : Initial Calibration

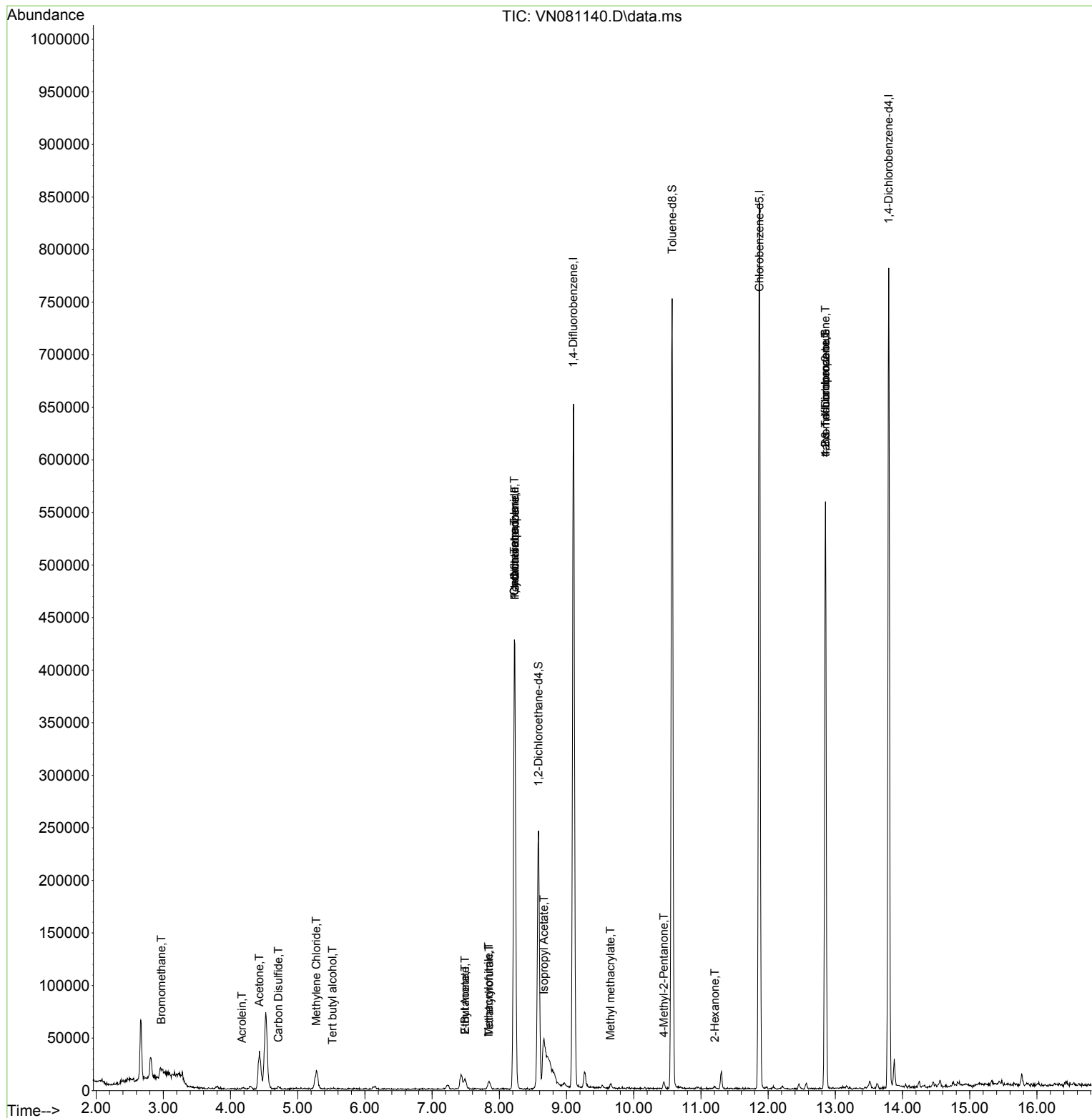
| Compound                      | R.T. QIon |       | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|-----------|-------|----------|-----------|--------|----------|
| -----                         |           |       |          |           |        |          |
| Internal Standards            |           |       |          |           |        |          |
| 1) Pentafluorobenzene         | 8.230     | 168   | 304531   | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100     | 114   | 572171   | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.871    | 117   | 488516   | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794    | 152   | 198290   | 50.000    | ug/l   | 0.00     |
| System Monitoring Compounds   |           |       |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.583     | 65    | 194013   | 51.977    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000    | Range | 74 - 125 | Recovery  | =      | 103.960% |
| 35) Dibromofluoromethane      | 8.171     | 113   | 134      | 0.041     | ug/l   | 0.00     |
| Spiked Amount                 | 50.000    | Range | 75 - 124 | Recovery  | =      | 0.080%#  |
| 50) Toluene-d8                | 10.571    | 98    | 517378   | 45.023    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000    | Range | 86 - 113 | Recovery  | =      | 90.040%  |
| 62) 4-Bromofluorobenzene      | 12.853    | 95    | 190487   | 44.115    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000    | Range | 83 - 123 | Recovery  | =      | 88.240%  |
| Target Compounds              |           |       |          |           |        |          |
|                               |           |       |          |           | Qvalue |          |
| 3) Chloromethane              | 2.359     | 50    | 1283     | Below Cal | #      | 84       |
| 5) Bromomethane               | 2.971     | 94    | 958      | 0.308     | ug/l # | 48       |
| 6) Chloroethane               | 3.124     | 64    | 565      | Below Cal | #      | 42       |
| 11) Tert butyl alcohol        | 5.518     | 59    | 708      | 1.031     | ug/l # | 72       |
| 13) Acrolein                  | 4.171     | 56    | 753      | 2.047     | ug/l # | 55       |
| 16) Acetone                   | 4.430     | 43    | 67151    | 45.720    | ug/l   | 92       |
| 17) Carbon Disulfide          | 4.712     | 76    | 4039     | 0.420     | ug/l # | 78       |
| 20) Methylene Chloride        | 5.277     | 84    | 12723    | 2.465     | ug/l   | 92       |
| 25) 2-Butanone                | 7.489     | 43    | 15325    | 6.459     | ug/l   | 94       |
| 29) Tetrahydrofuran           | 7.847     | 42    | 6690     | 4.224     | ug/l # | 90       |
| 31) Cyclohexane               | 8.224     | 56    | 7923     | 1.229     | ug/l # | 20       |
| 36) 1,1-Dichloropropene       | 8.230     | 75    | 25480    | 4.597     | ug/l # | 52       |
| 37) Ethyl Acetate             | 7.489     | 43    | 15325    | 3.063     | ug/l # | 70       |
| 38) Carbon Tetrachloride      | 8.224     | 117   | 33139    | 5.909     | ug/l # | 17       |
| 41) Methacrylonitrile         | 7.841     | 41    | 3848     | 1.352     | ug/l # | 35       |
| 43) Isopropyl Acetate         | 8.665     | 43    | 95848    | 10.955    | ug/l # | 58       |
| 48) Methyl methacrylate       | 9.653     | 41    | 1132     | 0.278     | ug/l # | 49       |
| 49) 1,4-Dioxane               | 9.712     | 88    | 58       | Below Cal | #      | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.447    | 43    | 5551     | 1.103     | ug/l   | 99       |
| 59) 2-Hexanone                | 11.206    | 43    | 1913     | 0.479     | ug/l   | 92       |
| 76) 1,2,3-Trichloropropane    | 12.853    | 75    | 104880   | 23.279    | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853    | 75    | 104880   | 59.919    | ug/l # | 14       |
| -----                         |           |       |          |           |        |          |

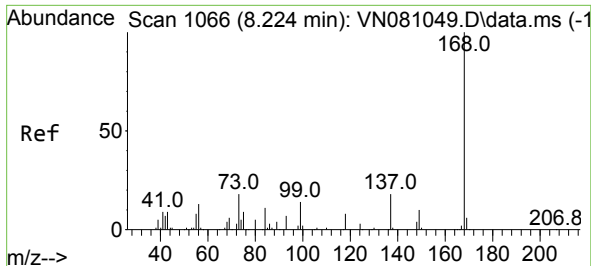
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Fri Feb 16 23:45:20 2024  
Response via : Initial Calibration

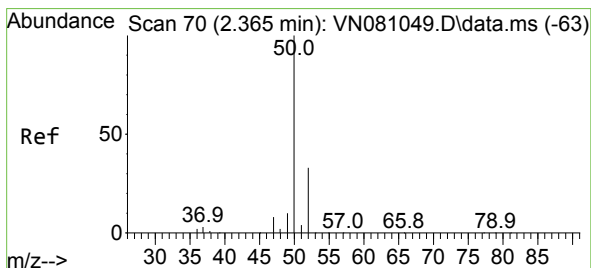
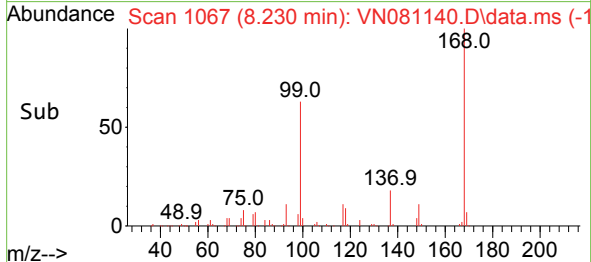
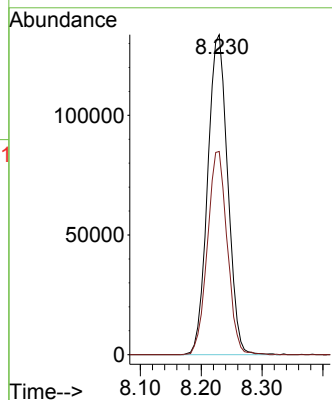
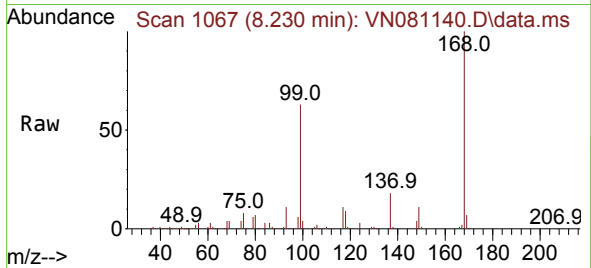




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.230 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

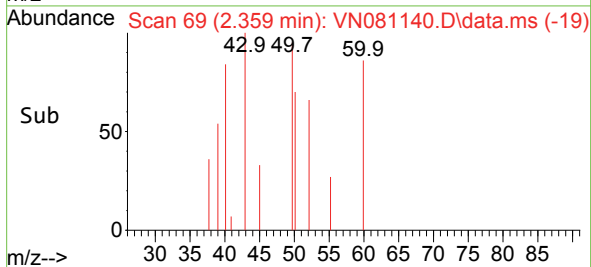
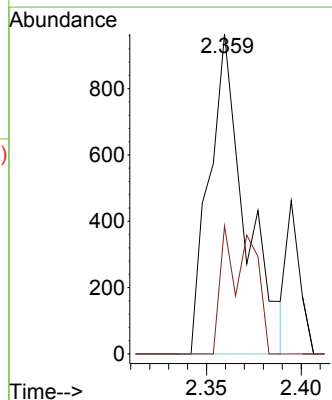
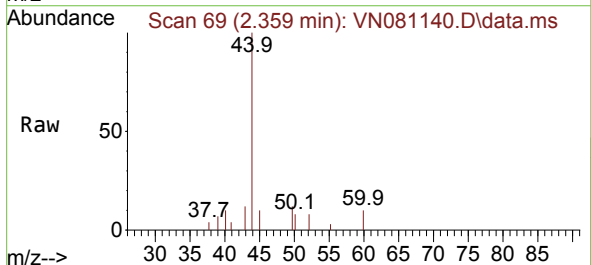
Instrument :  
MSVOA\_N  
ClientSampleId :

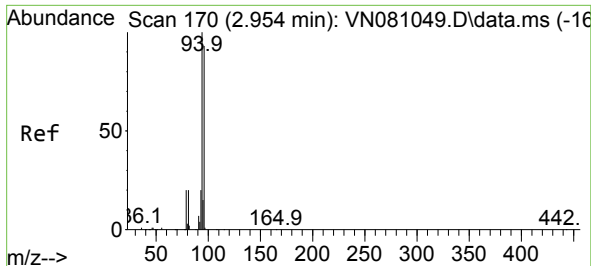
Tgt Ion:168 Resp: 304531  
Ion Ratio Lower Upper  
168 100  
99 63.5 59.9 89.9



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.359 min Scan# 69  
Delta R.T. -0.006 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 50 Resp: 1283  
Ion Ratio Lower Upper  
50 100  
52 40.0 25.0 37.4#

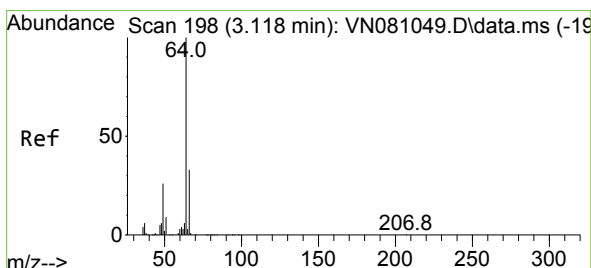
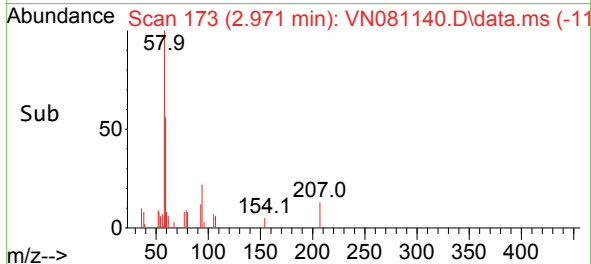
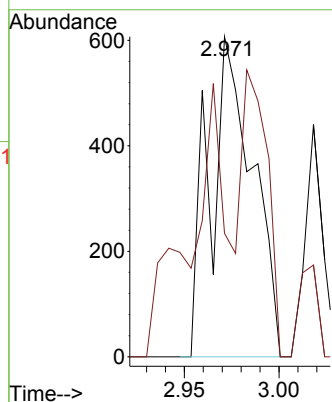
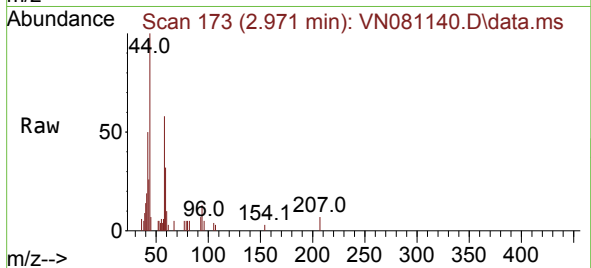




#5  
Bromomethane  
Concen: 0.308 ug/l  
RT: 2.971 min Scan# 11  
Delta R.T. 0.017 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

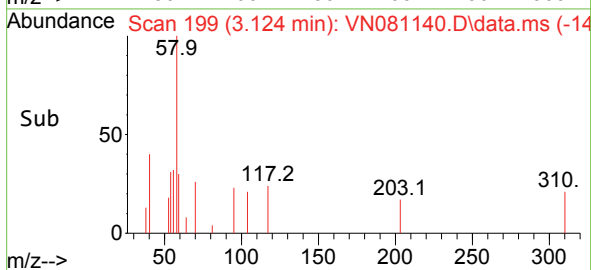
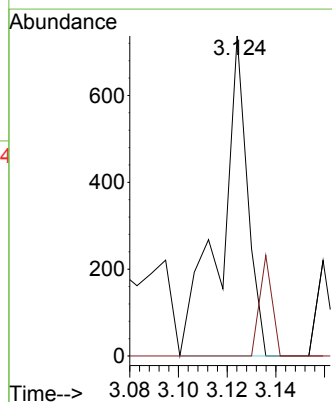
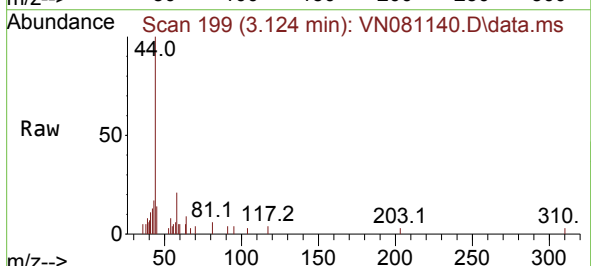
Instrument :  
MSVOA\_N  
ClientSampleId :

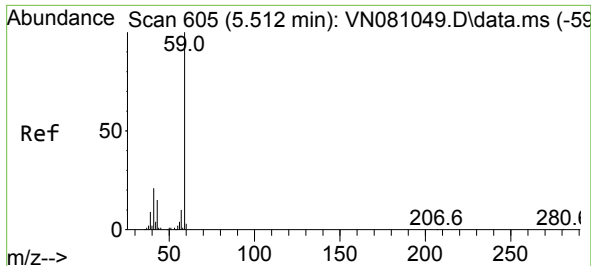
Tgt Ion: 94 Resp: 958  
Ion Ratio Lower Upper  
94 100  
96 38.6 69.2 103.8#



#6  
Chloroethane  
Concen: Below Cal  
RT: 3.124 min Scan# 199  
Delta R.T. 0.006 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 64 Resp: 565  
Ion Ratio Lower Upper  
64 100  
66 0.0 26.4 39.6#





#11

Tert butyl alcohol

Concen: 1.031 ug/l

RT: 5.518 min Scan# 605

Delta R.T. 0.006 min

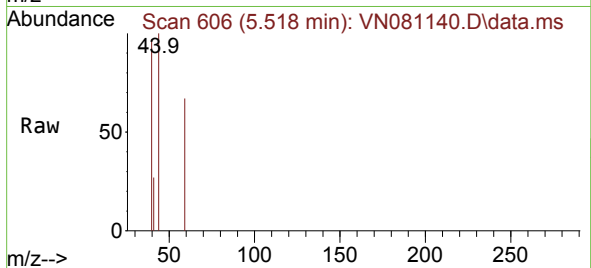
Lab File: VN081140.D

Acq: 22 Feb 2024 17:11

Instrument :

MSVOA\_N

ClientSampleId :

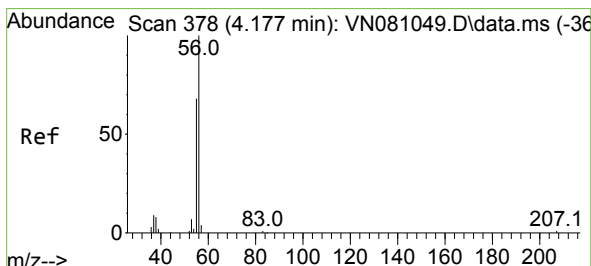
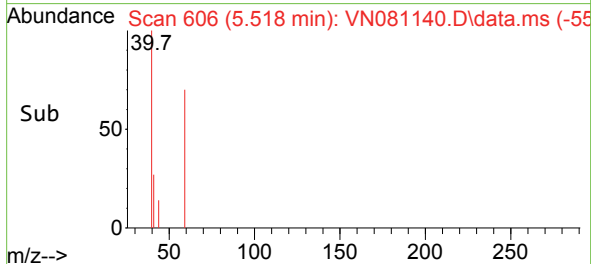
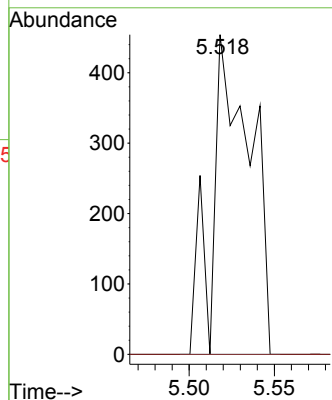


Tgt Ion: 59 Resp: 708

Ion Ratio Lower Upper

59 100

57 0.0 8.6 12.8#



#13

Acrolein

Concen: 2.047 ug/l

RT: 4.171 min Scan# 377

Delta R.T. -0.006 min

Lab File: VN081140.D

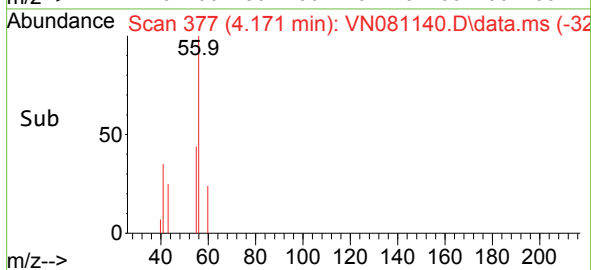
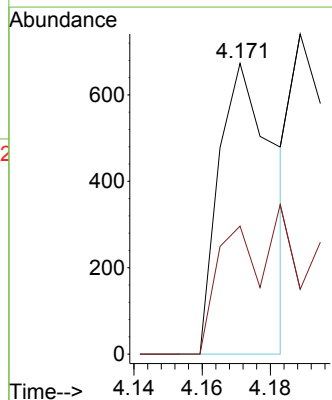
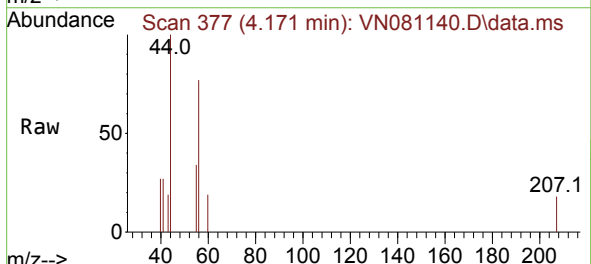
Acq: 22 Feb 2024 17:11

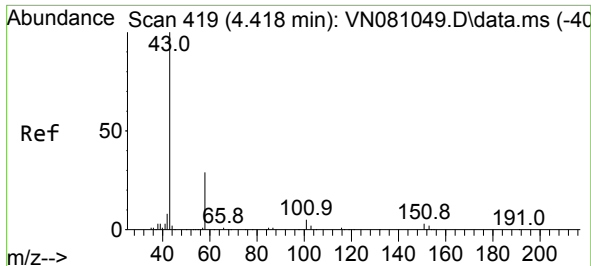
Tgt Ion: 56 Resp: 753

Ion Ratio Lower Upper

56 100

55 32.8 55.3 82.9#

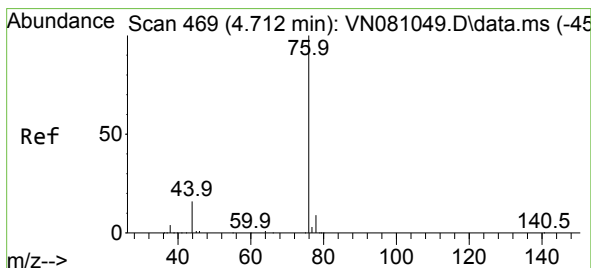
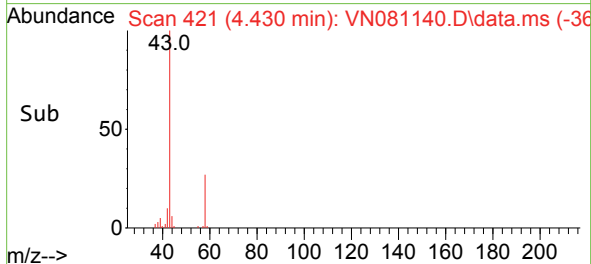
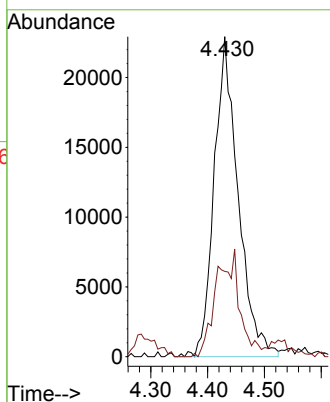
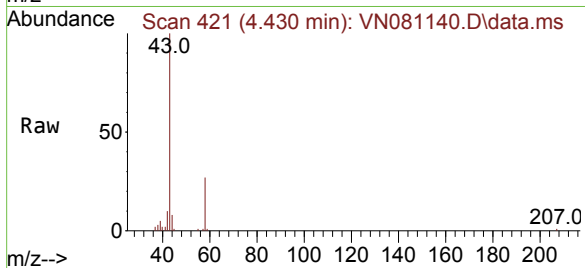




#16  
Acetone  
Concen: 45.720 ug/l  
RT: 4.430 min Scan# 419  
Delta R.T. 0.012 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

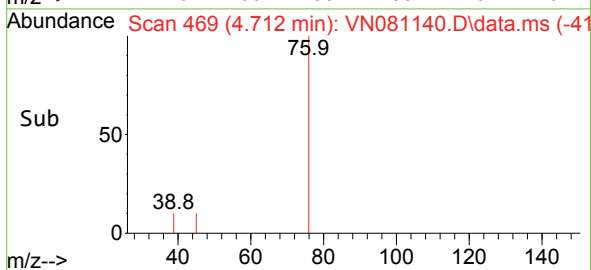
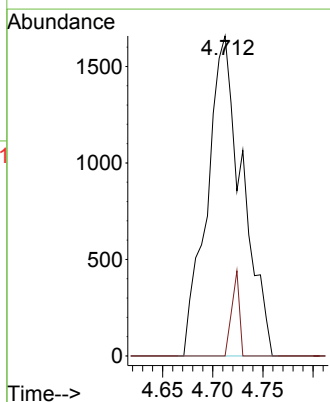
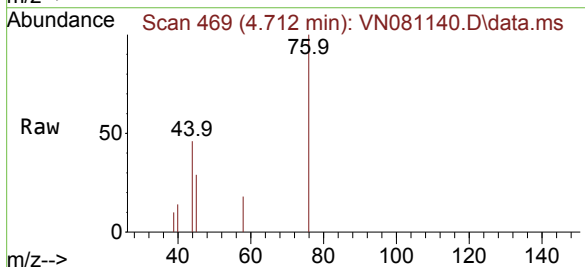
Instrument :  
MSVOA\_N  
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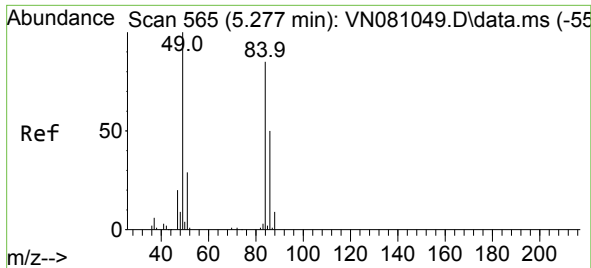
Tgt Ion: 43 Resp: 67151  
Ion Ratio Lower Upper  
43 100  
58 26.7 24.8 37.2



#17  
Carbon Disulfide  
Concen: 0.420 ug/l  
RT: 4.712 min Scan# 469  
Delta R.T. 0.000 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

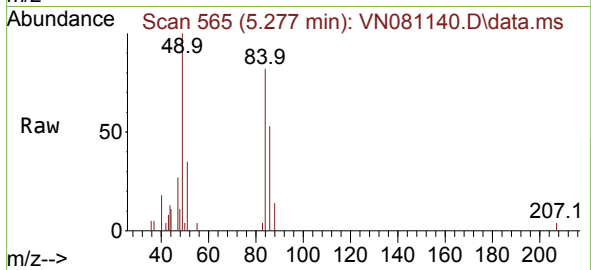
Tgt Ion: 76 Resp: 4039  
Ion Ratio Lower Upper  
76 100  
78 0.0 6.3 9.5#



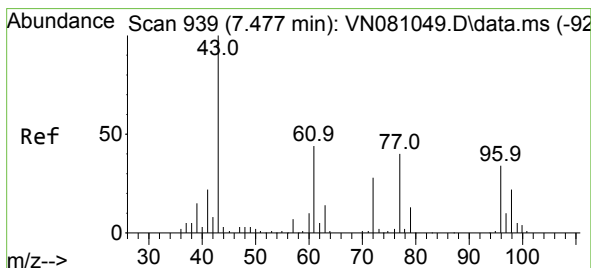
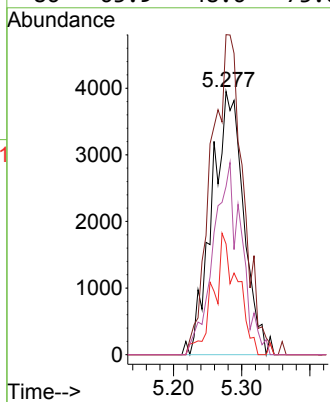
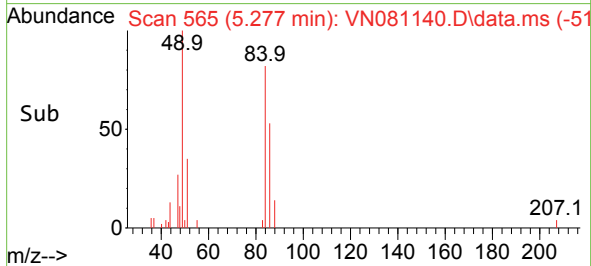


#20  
Methylene Chloride  
Concen: 2.465 ug/l  
RT: 5.277 min Scan# 51  
Delta R.T. -0.000 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

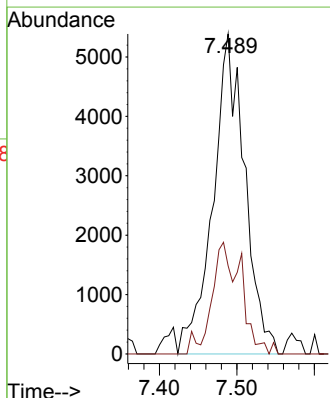
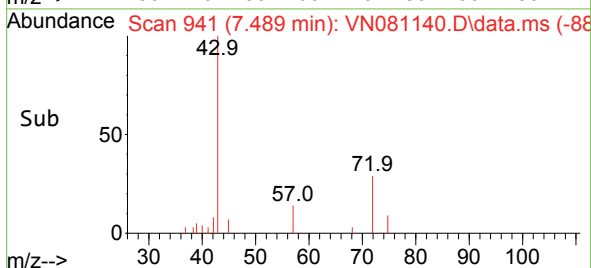
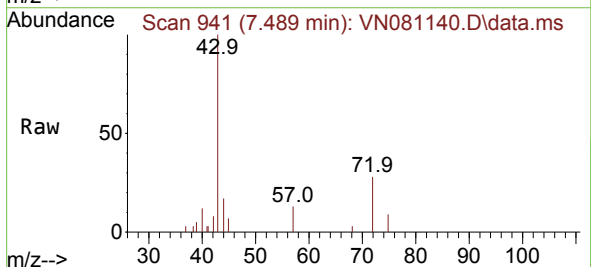


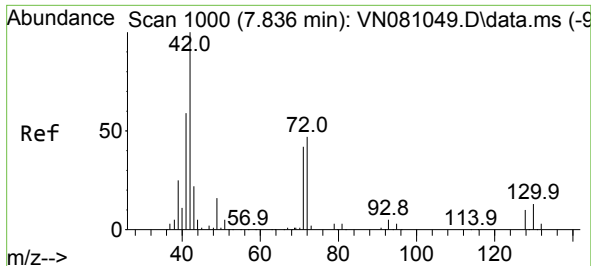
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|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 12723 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 121.6 | 108.1 | 162.1 |
| 51       | 42.1  | 32.9  | 49.3  |
| 86       | 63.9  | 48.6  | 73.0  |



#25  
2-Butanone  
Concen: 6.459 ug/l  
RT: 7.489 min Scan# 941  
Delta R.T. 0.012 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 15325 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 27.5  | 19.5  | 29.3  |

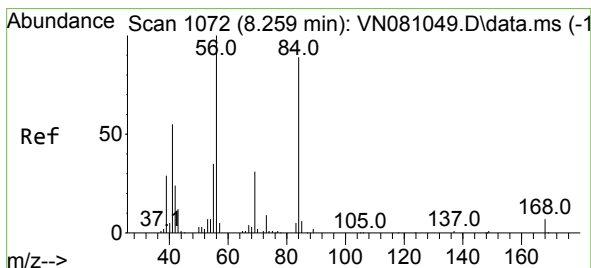
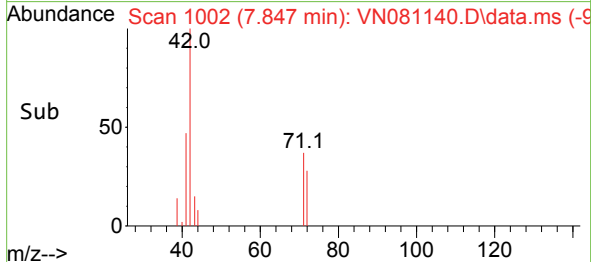
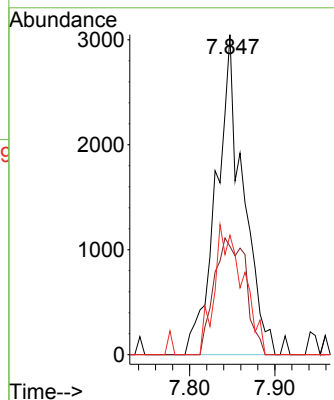
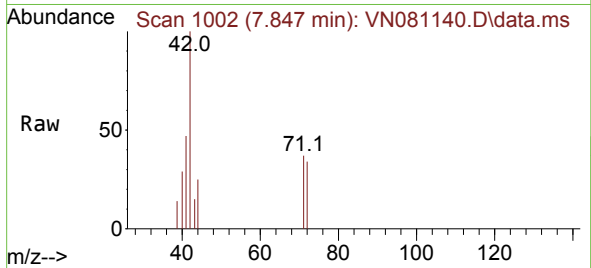




#29  
Tetrahydrofuran  
Concen: 4.224 ug/l  
RT: 7.847 min Scan# 1066  
Delta R.T. 0.012 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

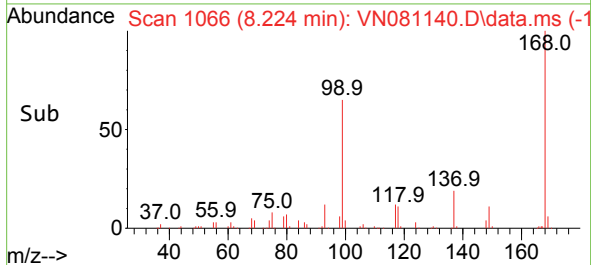
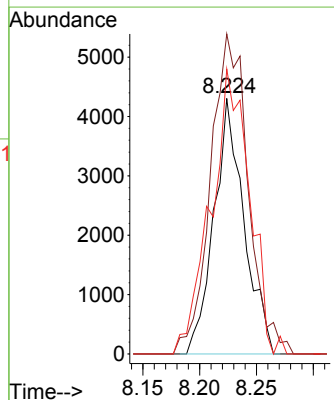
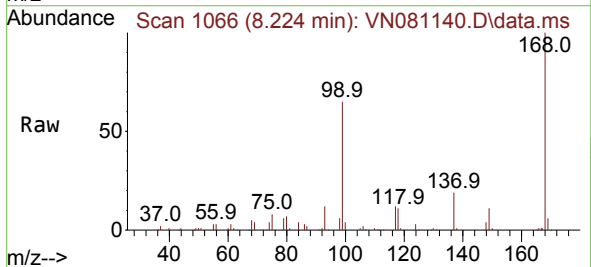
Instrument :  
MSVOA\_N  
ClientSampleId :

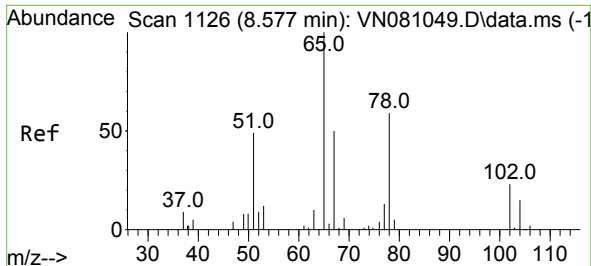
Tgt Ion: 42 Resp: 6690  
Ion Ratio Lower Upper  
42 100  
72 43.1 31.1 46.7  
71 43.2 28.3 42.5#



#31  
Cyclohexane  
Concen: 1.229 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.035 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 56 Resp: 7923  
Ion Ratio Lower Upper  
56 100  
69 120.8 20.1 30.1#  
84 104.6 56.9 85.3#





#33

1,2-Dichloroethane-d4

Concen: 51.977 ug/l

RT: 8.583 min Scan# 1127

Delta R.T. 0.006 min

Lab File: VN081140.D

Acq: 22 Feb 2024 17:11

Instrument :

MSVOA\_N

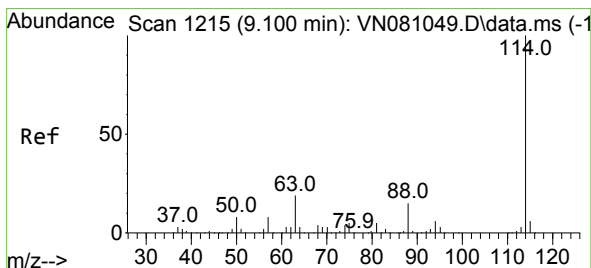
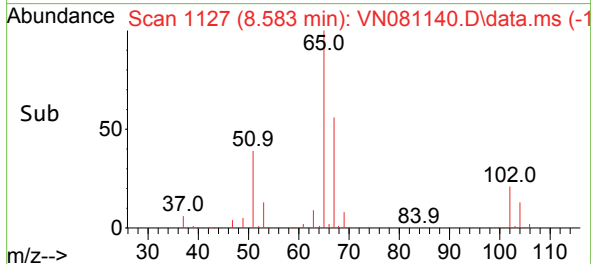
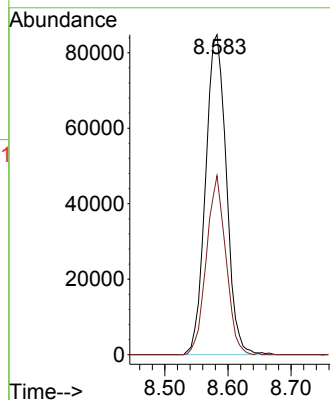
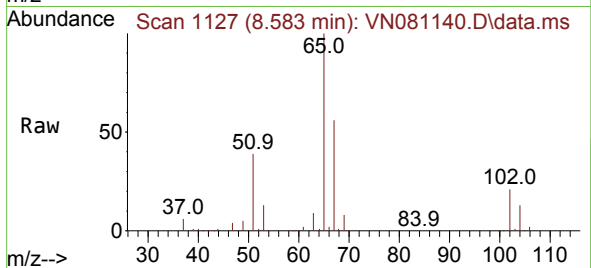
ClientSampleId :

Tgt Ion: 65 Resp: 194013

Ion Ratio Lower Upper

65 100

67 52.3 0.0 102.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN081140.D

Acq: 22 Feb 2024 17:11

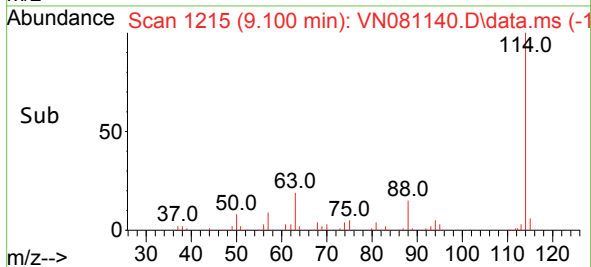
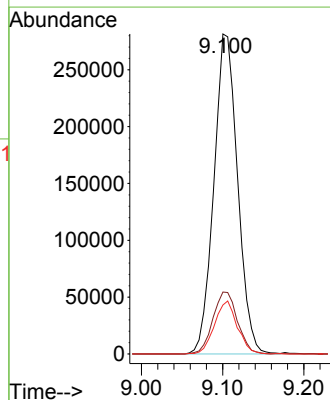
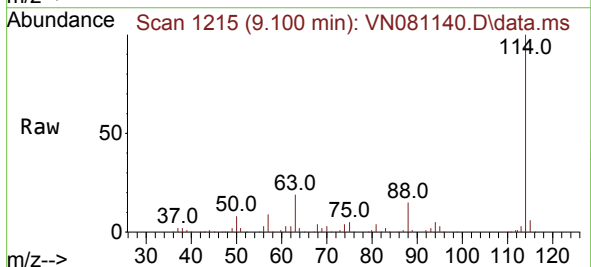
Tgt Ion: 114 Resp: 572171

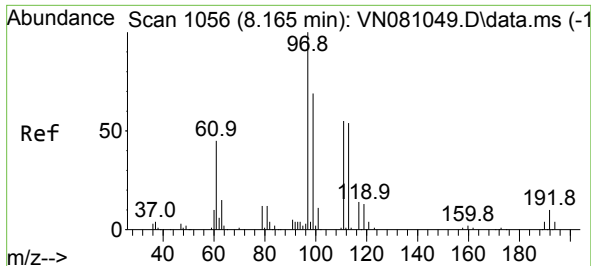
Ion Ratio Lower Upper

114 100

63 19.4 0.0 48.0

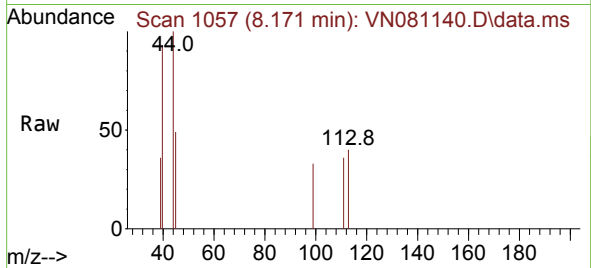
88 15.3 0.0 34.8



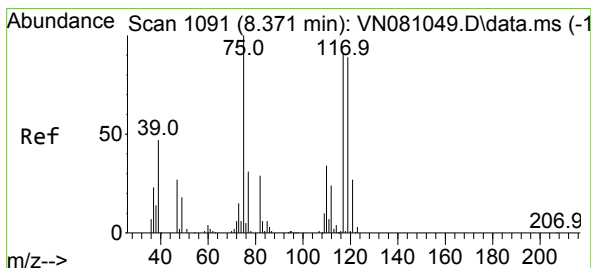
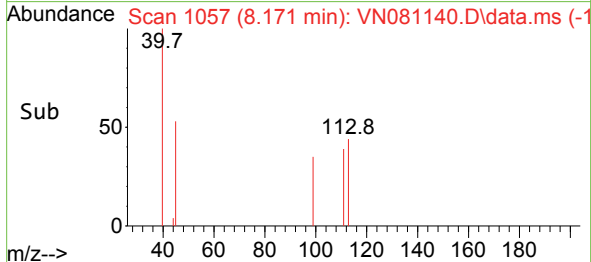
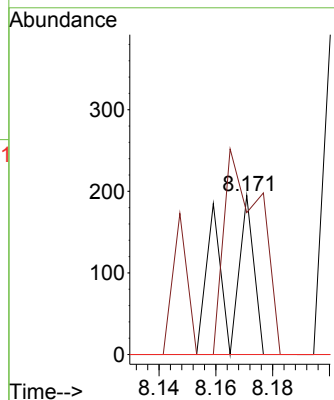


#35  
Dibromofluoromethane  
Concen: 0.041 ug/l  
RT: 8.171 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

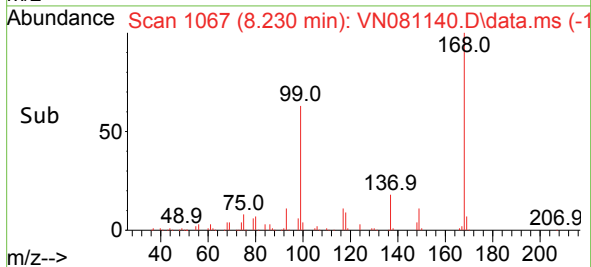
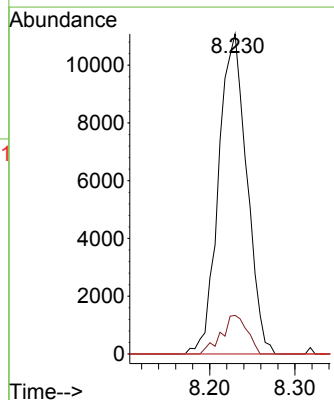
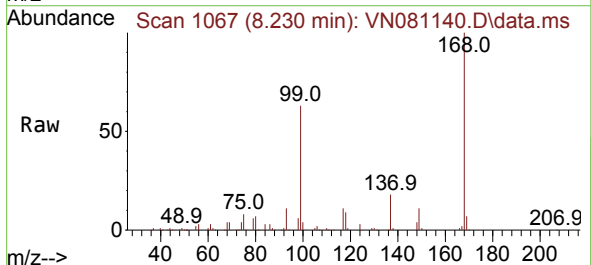


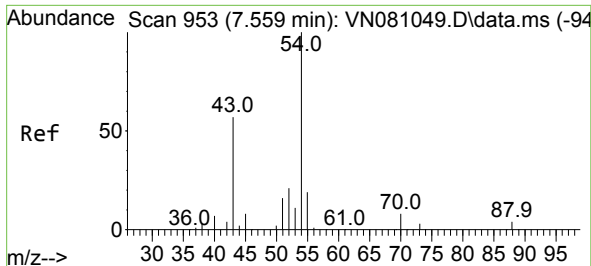
Tgt Ion:113 Resp: 134  
Ion Ratio Lower Upper  
113 100  
111 164.2 82.2 123.4#  
192 0.0 12.5 18.7#



#36  
1,1-Dichloropropene  
Concen: 4.597 ug/l  
RT: 8.230 min Scan# 1067  
Delta R.T. -0.141 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

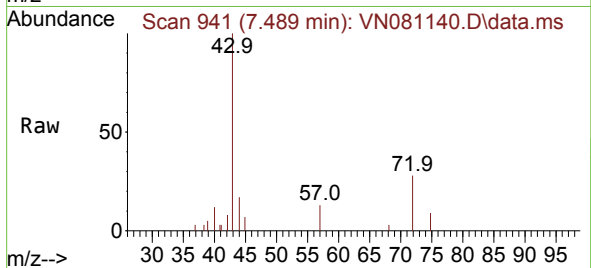
Tgt Ion: 75 Resp: 25480  
Ion Ratio Lower Upper  
75 100  
110 11.0 16.0 48.0#  
77 0.0 25.8 38.6#



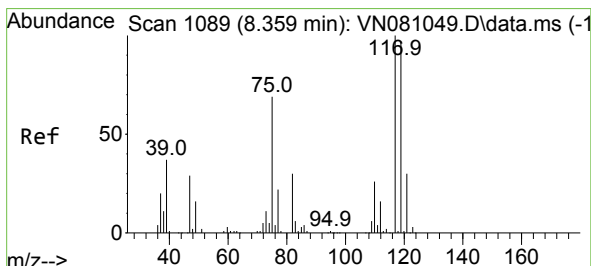
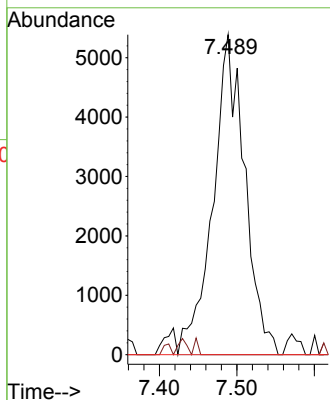
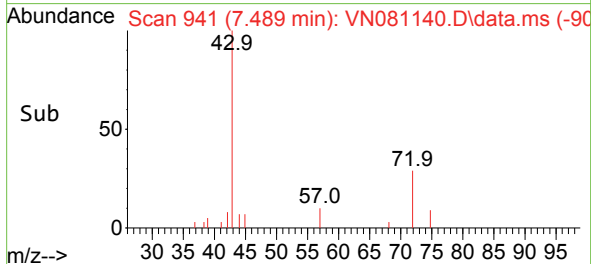


#37  
Ethyl Acetate  
Concen: 3.063 ug/l  
RT: 7.489 min Scan# 941  
Delta R.T. -0.071 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

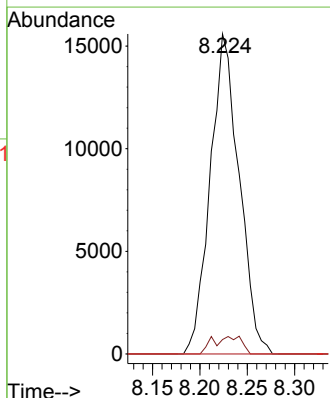
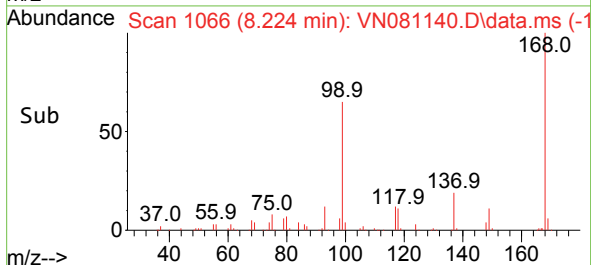
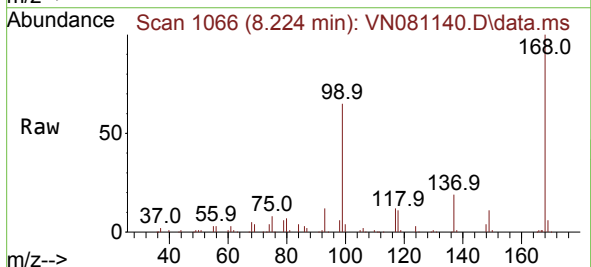


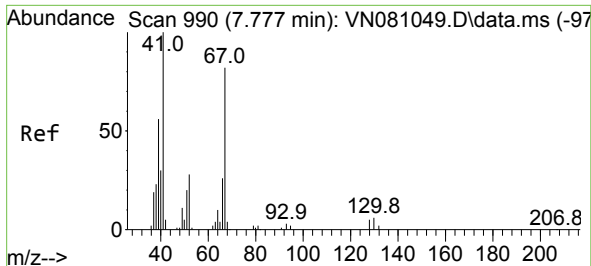
Tgt Ion: 43 Resp: 15325  
Ion Ratio Lower Upper  
43 100  
61 0.0 10.6 15.8#  
70 0.0 8.0 12.0#



#38  
Carbon Tetrachloride  
Concen: 5.909 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.135 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

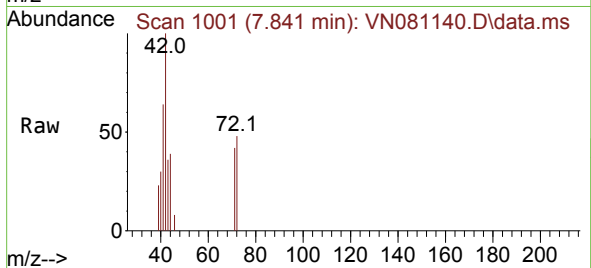
Tgt Ion: 117 Resp: 33139  
Ion Ratio Lower Upper  
117 100  
119 4.5 73.4 110.2#  
121 0.0 24.4 36.6#



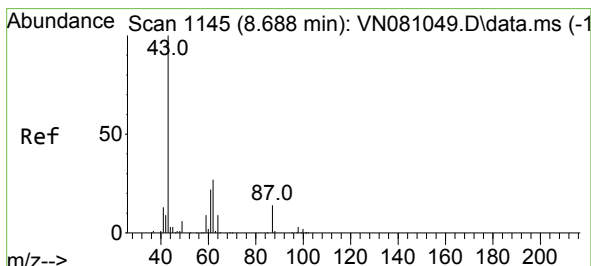
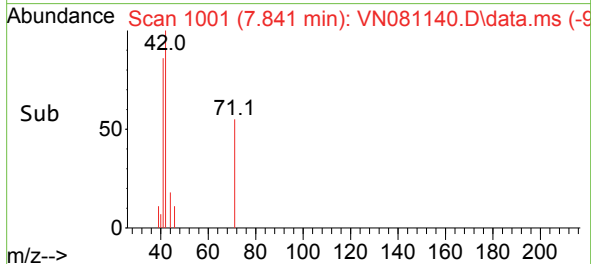
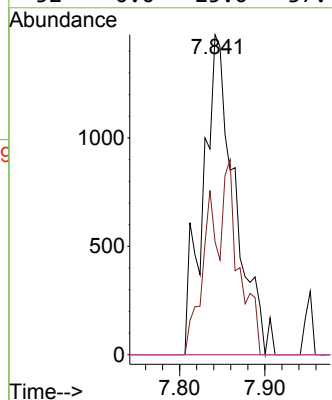


#41  
Methacrylonitrile  
Concen: 1.352 ug/l  
RT: 7.841 min Scan# 1001  
Delta R.T. 0.065 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

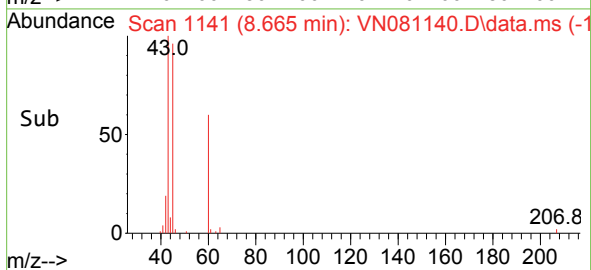
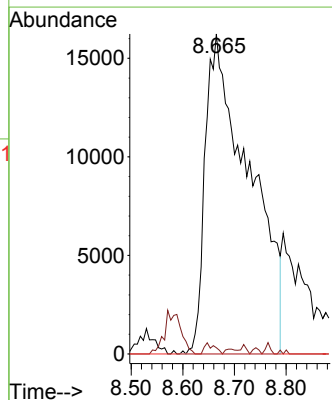
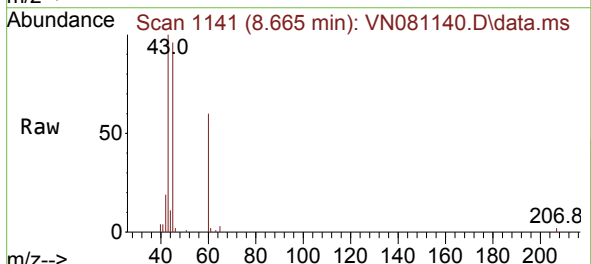


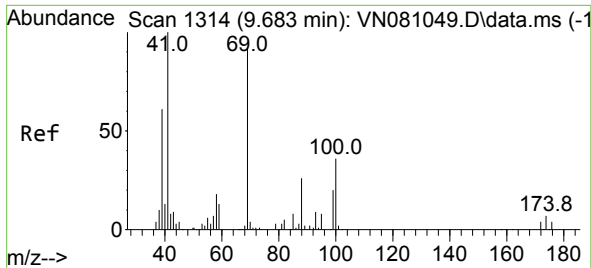
Tgt Ion: 41 Resp: 3848  
Ion Ratio Lower Upper  
41 100  
39 25.9 48.4 72.6#  
67 0.0 56.8 85.2#  
52 0.0 25.0 37.4#



#43  
Isopropyl Acetate  
Concen: 10.955 ug/l  
RT: 8.665 min Scan# 1141  
Delta R.T. -0.024 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 43 Resp: 95848  
Ion Ratio Lower Upper  
43 100  
61 0.8 19.9 29.9#  
87 0.0 9.0 13.6#

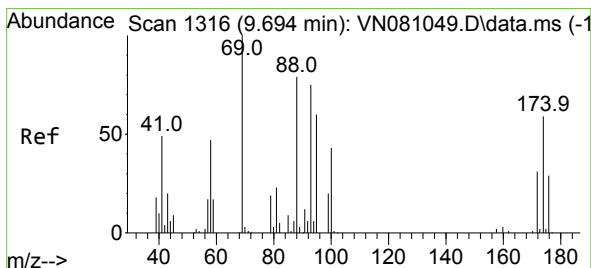
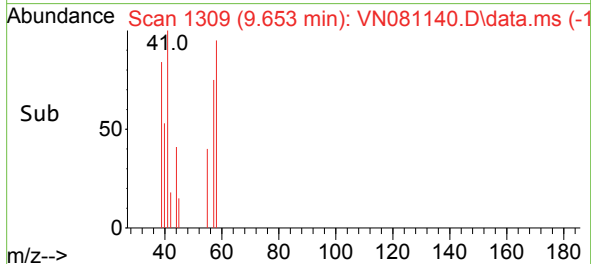
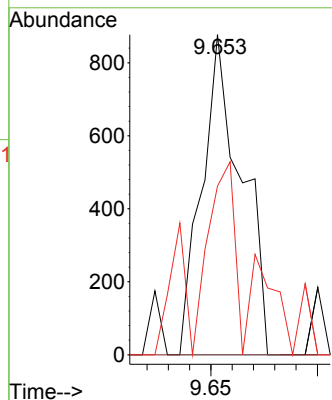
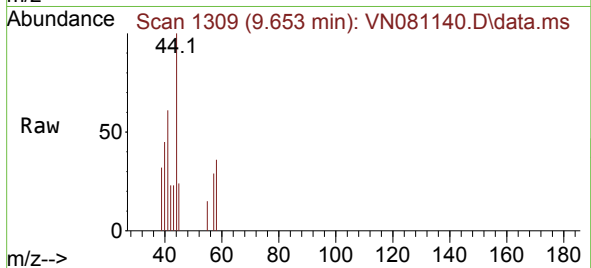




#48  
Methyl methacrylate  
Concen: 0.278 ug/l  
RT: 9.653 min Scan# 1132  
Delta R.T. -0.029 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

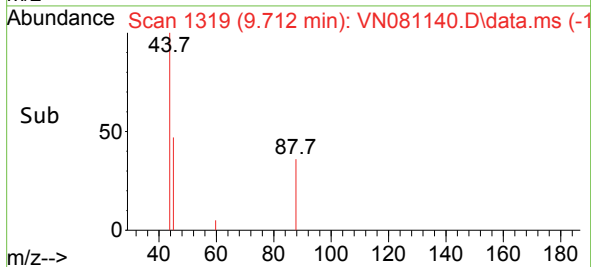
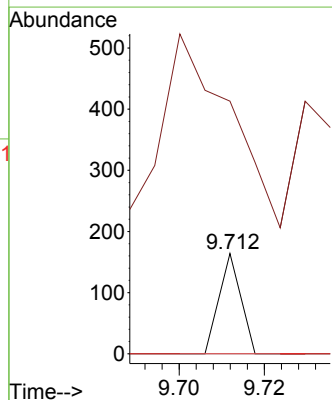
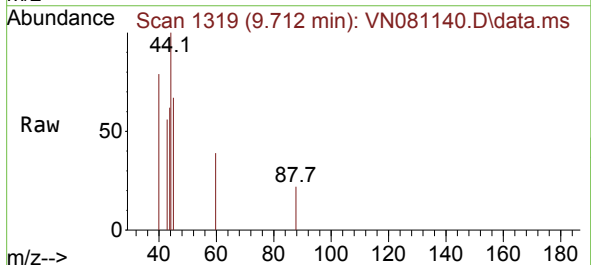
Instrument :  
MSVOA\_N  
ClientSampleId :

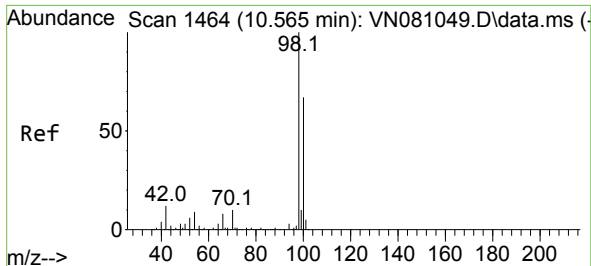
Tgt Ion: 41 Resp: 1132  
Ion Ratio Lower Upper  
41 100  
69 0.0 62.2 93.2#  
39 59.5 47.6 71.4



#49  
1,4-Dioxane  
Concen: Below Cal  
RT: 9.712 min Scan# 1319  
Delta R.T. 0.018 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 88 Resp: 58  
Ion Ratio Lower Upper  
88 100  
43 587.9 30.1 45.1#  
58 0.0 63.9 95.9#

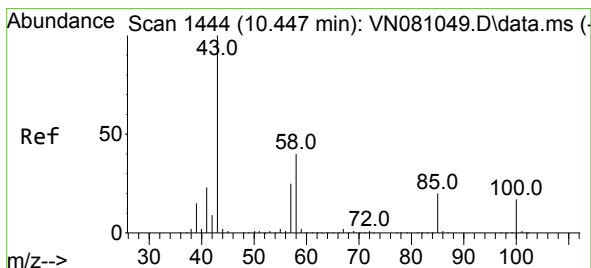
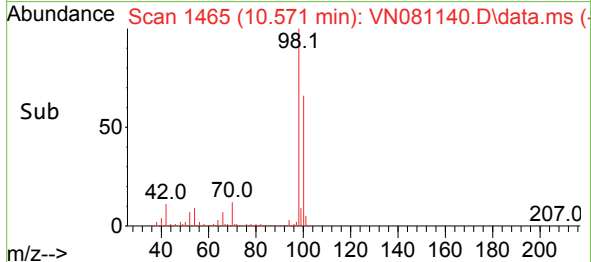
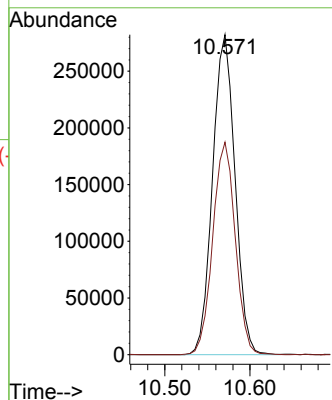
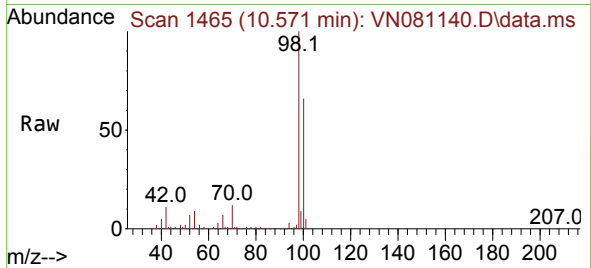




#50  
Toluene-d8  
Concen: 45.023 ug/l  
RT: 10.571 min Scan# 1465  
Delta R.T. 0.006 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

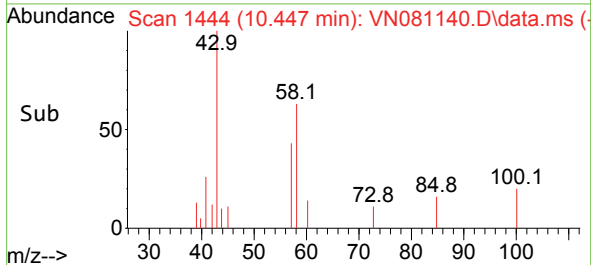
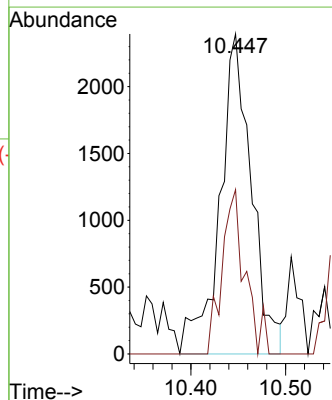
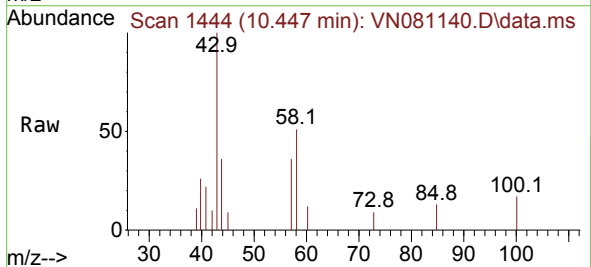
Instrument :  
MSVOA\_N  
ClientSampleId :

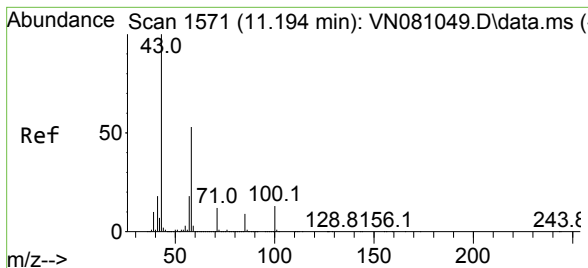
Tgt Ion: 98 Resp: 517378  
Ion Ratio Lower Upper  
98 100  
100 66.6 51.4 77.0



#51  
4-Methyl-2-Pentanone  
Concen: 1.103 ug/l  
RT: 10.447 min Scan# 1444  
Delta R.T. 0.000 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 43 Resp: 5551  
Ion Ratio Lower Upper  
43 100  
58 37.2 29.4 44.0

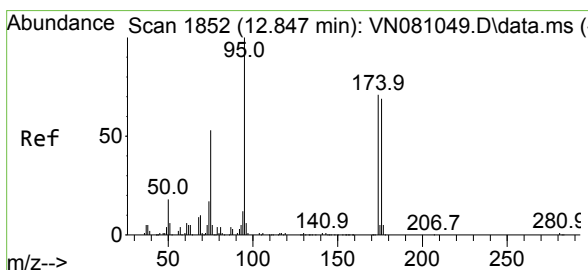
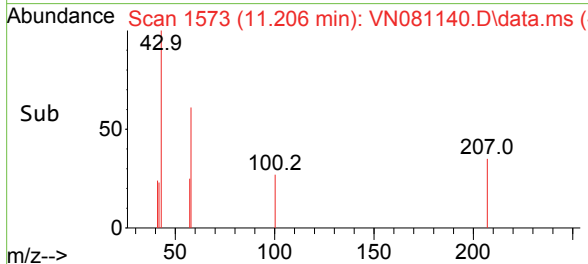
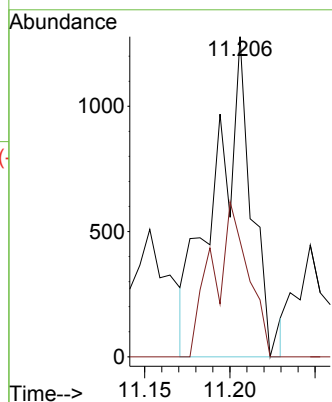
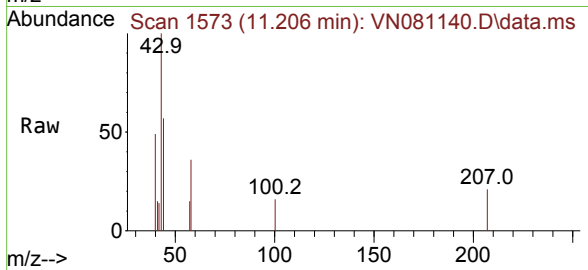




#59  
2-Hexanone  
Concen: 0.479 ug/l  
RT: 11.206 min Scan# 11  
Delta R.T. 0.012 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

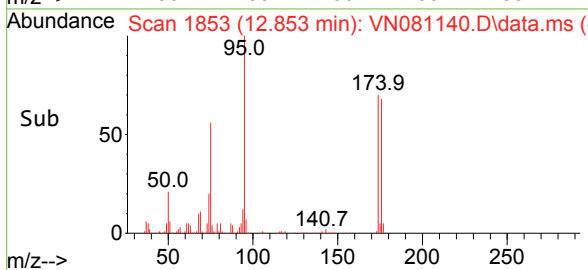
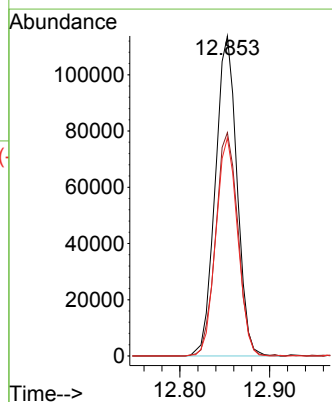
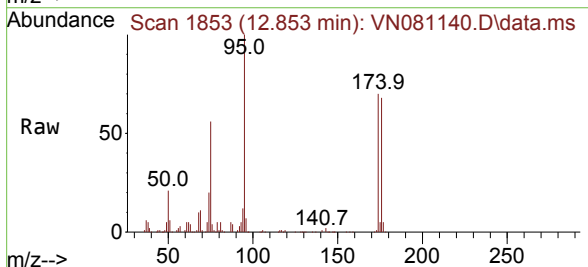
Instrument :  
MSVOA\_N  
ClientSampleId :

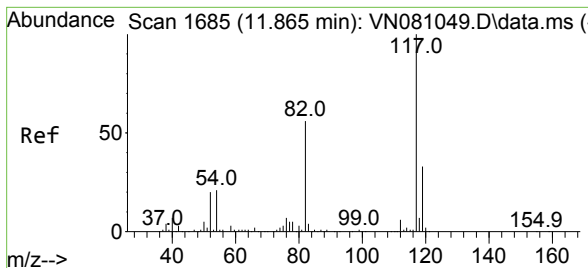
Tgt Ion: 43 Resp: 1913  
Ion Ratio Lower Upper  
43 100  
58 46.5 25.9 77.8



#62  
4-Bromofluorobenzene  
Concen: 44.115 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.006 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 95 Resp: 190487  
Ion Ratio Lower Upper  
95 100  
174 71.9 0.0 120.4  
176 68.6 0.0 121.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.871 min Scan# 1

Delta R.T. 0.006 min

Lab File: VN081140.D

Acq: 22 Feb 2024 17:11

Instrument :

MSVOA\_N

ClientSampleId :

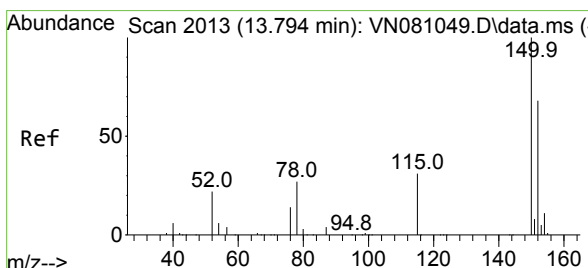
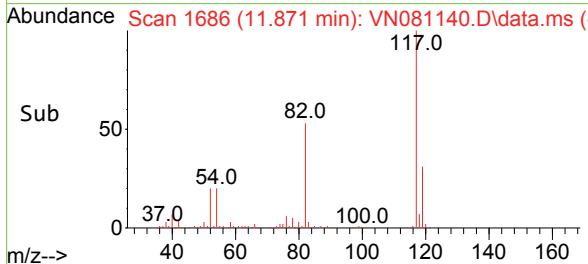
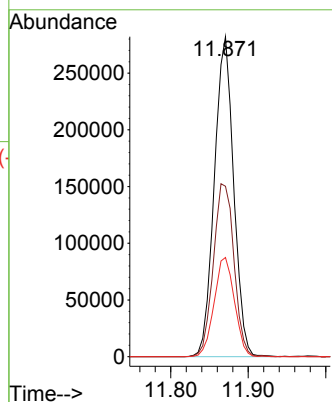
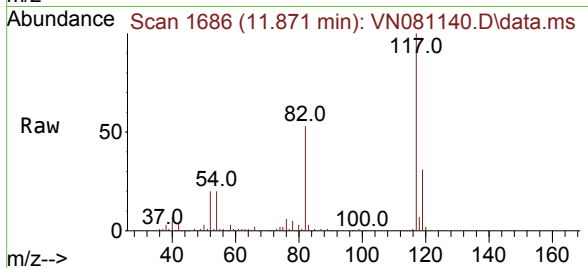
Tgt Ion:117 Resp: 488516

Ion Ratio Lower Upper

117 100

82 53.3 52.7 79.1

119 31.0 25.3 37.9



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 2013

Delta R.T. 0.000 min

Lab File: VN081140.D

Acq: 22 Feb 2024 17:11

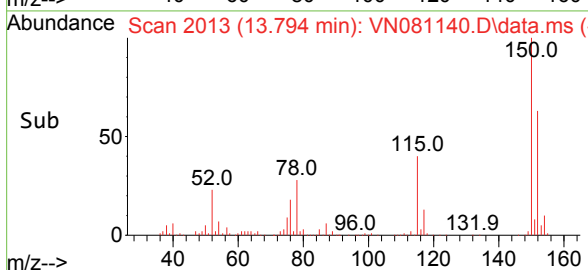
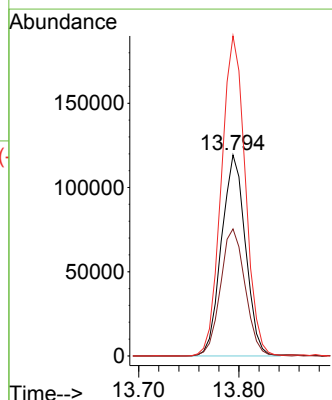
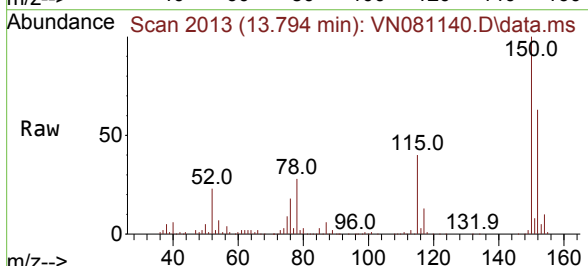
Tgt Ion:152 Resp: 198290

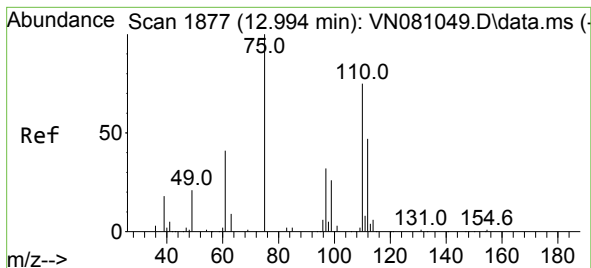
Ion Ratio Lower Upper

152 100

115 64.9 32.3 96.8

150 158.8 0.0 339.8

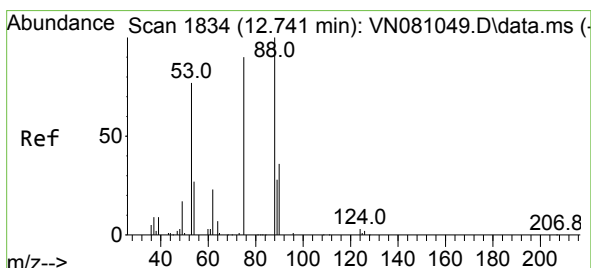
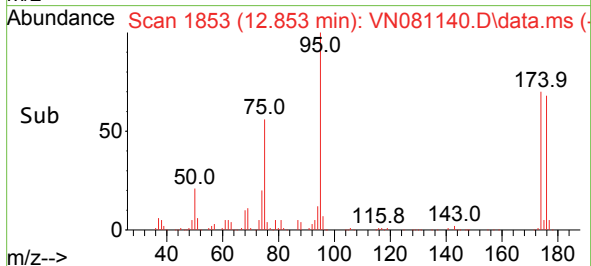
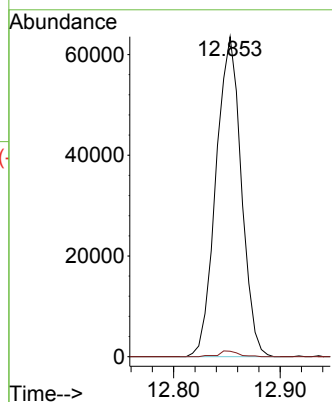
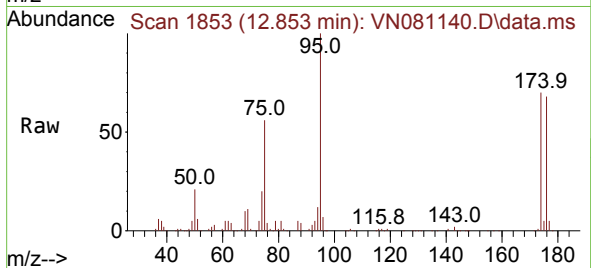




#76  
1,2,3-Trichloropropane  
Concen: 23.279 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.141 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion: 75 Resp: 104880  
Ion Ratio Lower Upper  
75 100  
77 1.4 91.0 272.8#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 59.919 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.112 min  
Lab File: VN081140.D  
Acq: 22 Feb 2024 17:11

Tgt Ion: 75 Resp: 104880  
Ion Ratio Lower Upper  
75 100  
53 0.0 71.4 107.2#  
89 0.0 33.4 50.0#

