

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112923\  
 Data File : VN080307.D  
 Acq On : 29 Nov 2023 14:10  
 Operator : JC\MD  
 Sample : 05470-01ME  
 Misc : 5.01g/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 8 Sample Multiplier: 1

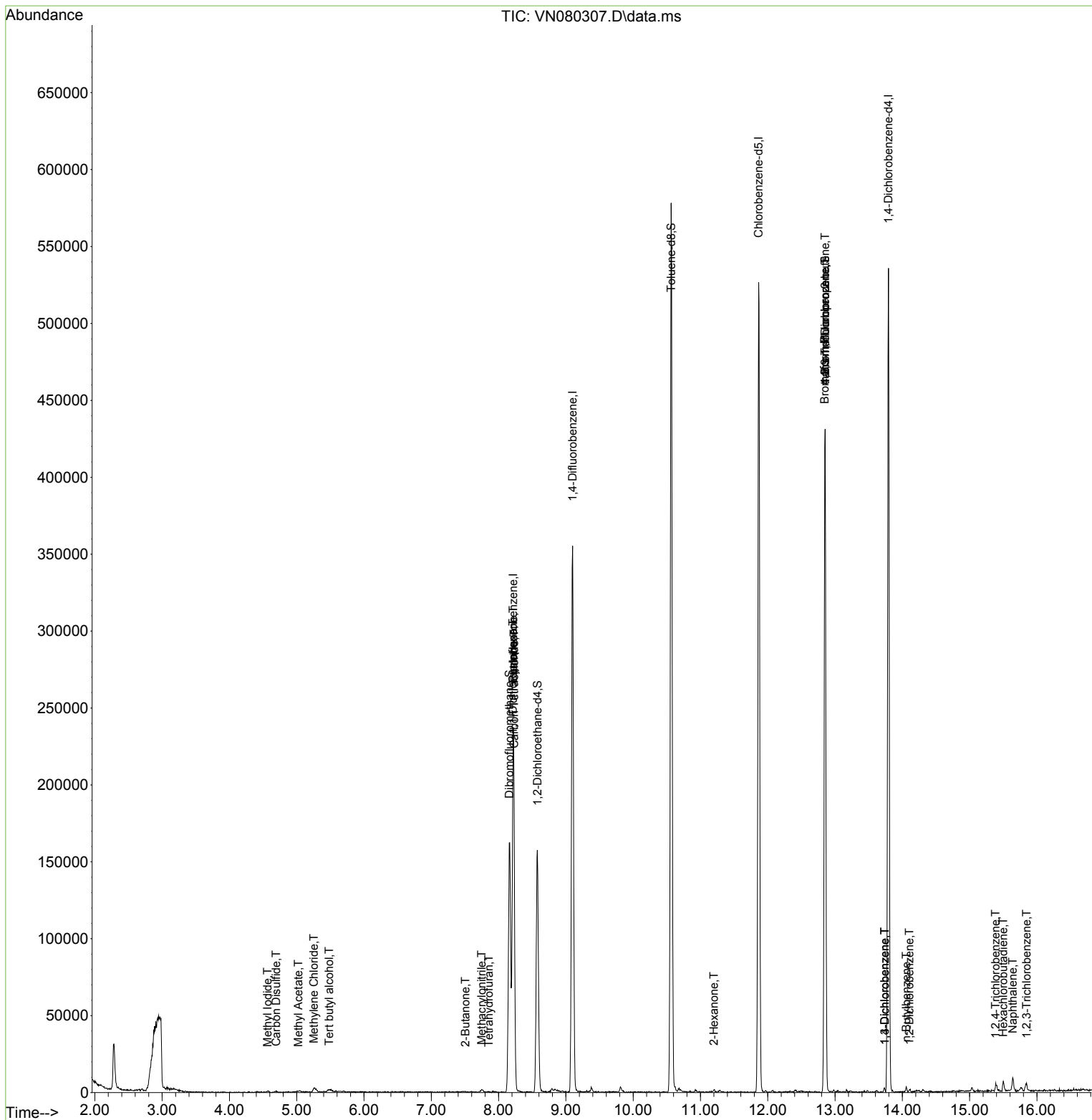
Instrument :  
 MSVOA\_N  
 ClientSampleId :

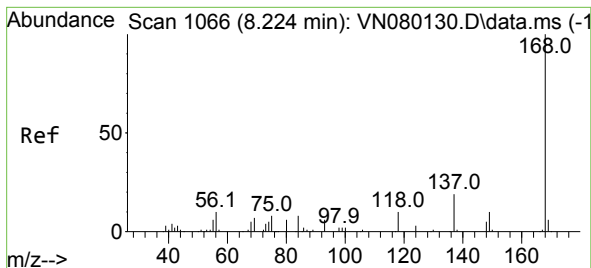
Quant Time: Nov 30 04:44:42 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N111623W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 17 01:19:32 2023  
 Response via : Initial Calibration

| Compound                      | R.T. QIon |       | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|-----------|-------|----------|-----------|------------|----------|
| -----                         |           |       |          |           |            |          |
| Internal Standards            |           |       |          |           |            |          |
| 1) Pentafluorobenzene         | 8.218     | 168   | 167905   | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100     | 114   | 303003   | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.865    | 117   | 308299   | 50.000    | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794    | 152   | 141196   | 50.000    | ug/l       | 0.00     |
| System Monitoring Compounds   |           |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.577     | 65    | 145946   | 52.643    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000    | Range | 74 - 125 | Recovery  | = 105.280% |          |
| 35) Dibromofluoromethane      | 8.159     | 113   | 116120   | 51.938    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000    | Range | 75 - 124 | Recovery  | = 103.880% |          |
| 50) Toluene-d8                | 10.565    | 98    | 400550   | 49.699    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000    | Range | 86 - 113 | Recovery  | = 99.400%  |          |
| 62) 4-Bromofluorobenzene      | 12.853    | 95    | 150198   | 49.339    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000    | Range | 83 - 123 | Recovery  | = 98.680%  |          |
| Target Compounds              |           |       |          |           |            |          |
|                               |           |       |          |           | Qvalue     |          |
| 6) Chloroethane               | 3.124     | 64    | 592      | Below Cal | #          | 43       |
| 10) Methyl Iodide             | 4.565     | 142   | 1044     | 0.509     | ug/l #     | 81       |
| 11) Tert butyl alcohol        | 5.483     | 59    | 1598     | 5.241     | ug/l #     | 72       |
| 17) Carbon Disulfide          | 4.694     | 76    | 1254     | 0.237     | ug/l #     | 75       |
| 18) Methyl Acetate            | 5.024     | 43    | 1900     | 0.635     | ug/l #     | 47       |
| 20) Methylene Chloride        | 5.253     | 84    | 914      | 0.469     | ug/l #     | 56       |
| 25) 2-Butanone                | 7.506     | 43    | 433      | 0.391     | ug/l #     | 74       |
| 29) Tetrahydrofuran           | 7.853     | 42    | 259      | 0.436     | ug/l #     | 20       |
| 31) Cyclohexane               | 8.218     | 56    | 3480     | 1.154     | ug/l #     | 37       |
| 36) 1,1-Dichloropropene       | 8.212     | 75    | 13518    | 4.176     | ug/l #     | 51       |
| 38) Carbon Tetrachloride      | 8.229     | 117   | 18145    | 4.417     | ug/l #     | 16       |
| 41) Methacrylonitrile         | 7.747     | 41    | 896      | 0.727     | ug/l #     | 18       |
| 59) 2-Hexanone                | 11.200    | 43    | 1077     | 0.593     | ug/l       | 81       |
| 71) Bromoform                 | 12.847    | 173   | 1070     | 0.532     | ug/l #     | 1        |
| 76) 1,2,3-Trichloropropane    | 12.853    | 75    | 85951    | 24.845    | ug/l #     | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853    | 75    | 85951    | 83.940    | ug/l #     | 15       |
| 87) 1,3-Dichlorobenzene       | 13.741    | 146   | 1133     | 0.227     | ug/l       | 84       |
| 88) 1,4-Dichlorobenzene       | 13.741    | 146   | 1133     | 0.226     | ug/l       | 86       |
| 89) n-Butylbenzene            | 14.059    | 91    | 2292     | 0.316     | ug/l       | 94       |
| 91) 1,2-Dichlorobenzene       | 14.106    | 146   | 1078     | 0.226     | ug/l       | 74       |
| 93) 1,2,4-Trichlorobenzene    | 15.388    | 180   | 2051     | 0.739     | ug/l       | 93       |
| 94) Hexachlorobutadiene       | 15.500    | 225   | 1388     | 0.870     | ug/l       | 95       |
| 95) Naphthalene               | 15.641    | 128   | 8091     | 1.006     | ug/l #     | 95       |
| 96) 1,2,3-Trichlorobenzene    | 15.847    | 180   | 1976     | 0.760     | ug/l       | 84       |
| -----                         |           |       |          |           |            |          |

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

Quant Time: Nov 30 04:44:42 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N111623W.M  
Quant Title : SW846 8260  
QLast Update : Fri Nov 17 01:19:32 2023  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 8.218 min Scan# 1065

Delta R.T. -0.006 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

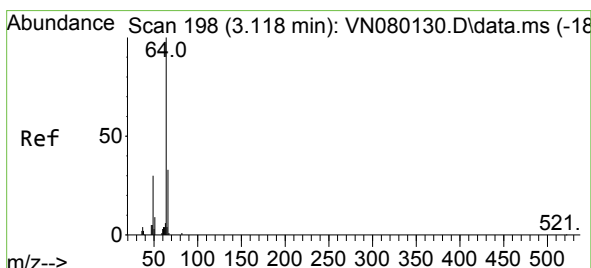
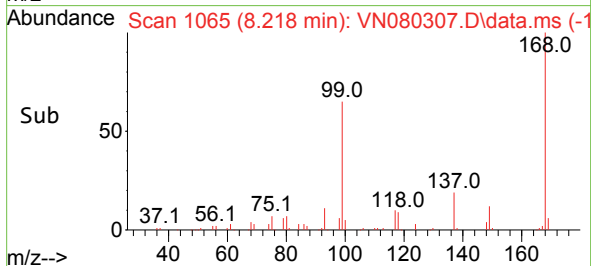
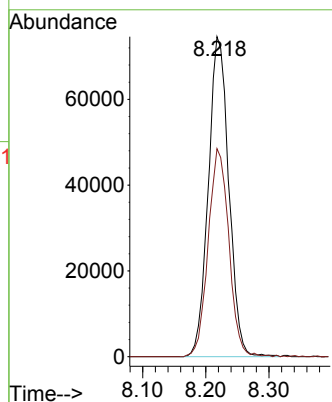
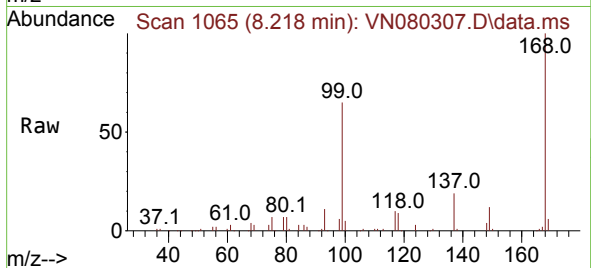
ClientSampleId :

Tgt Ion:168 Resp: 167905

Ion Ratio Lower Upper

168 100

99 65.0 53.0 79.6



#6

Chloroethane

Concen: Below Cal

RT: 3.124 min Scan# 199

Delta R.T. 0.006 min

Lab File: VN080307.D

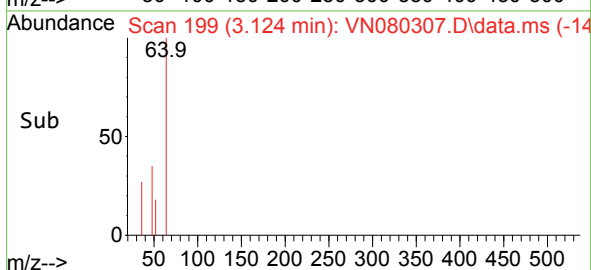
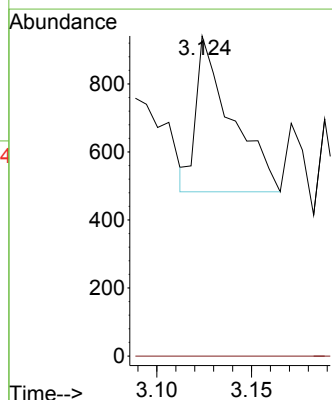
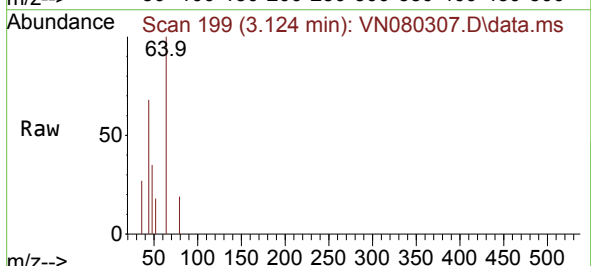
Acq: 29 Nov 2023 14:10

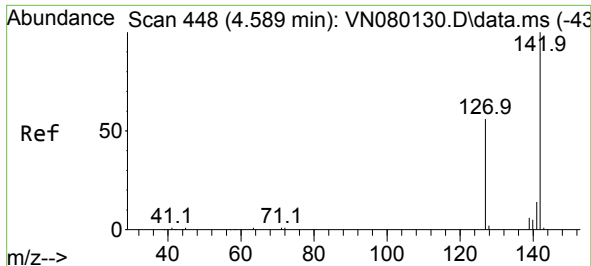
Tgt Ion: 64 Resp: 592

Ion Ratio Lower Upper

64 100

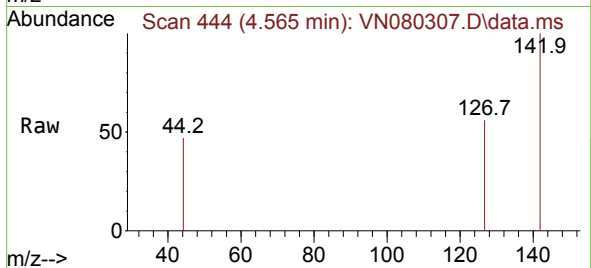
66 0.0 25.4 38.2#



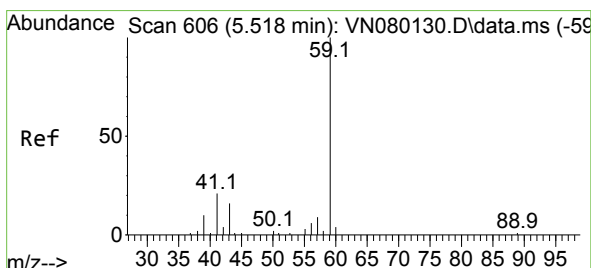
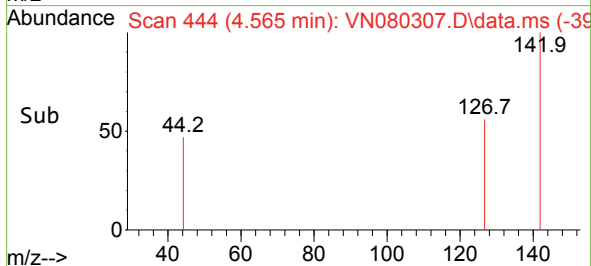
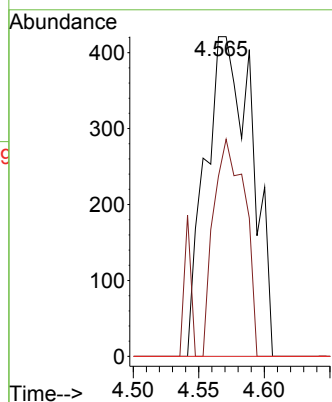


#10  
Methyl Iodide  
Concen: 0.509 ug/l  
RT: 4.565 min Scan# 44  
Delta R.T. -0.024 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Instrument :  
MSVOA\_N  
ClientSampleId :

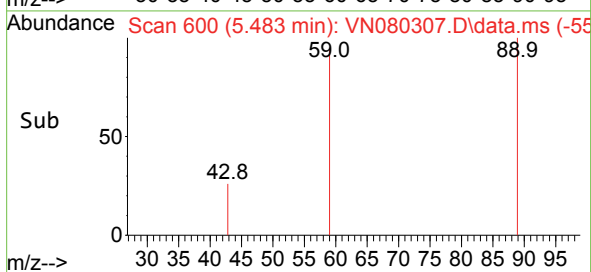
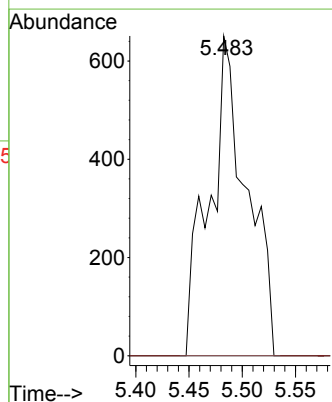
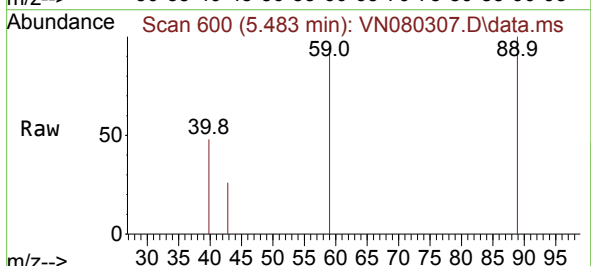


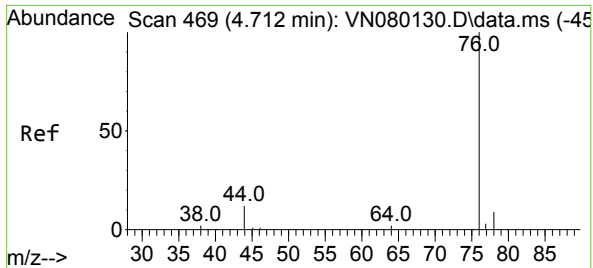
Tgt Ion:142 Resp: 1044  
Ion Ratio Lower Upper  
142 100  
127 56.3 37.6 56.4  
141 0.0 11.4 17.0#



#11  
Tert butyl alcohol  
Concen: 5.241 ug/l  
RT: 5.483 min Scan# 600  
Delta R.T. -0.035 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Tgt Ion: 59 Resp: 1598  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.2 12.4#





#17

Carbon Disulfide

Concen: 0.237 ug/l

RT: 4.694 min Scan# 4

Delta R.T. -0.018 min

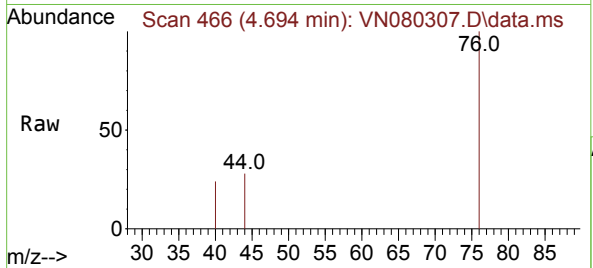
Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

ClientSampleId :

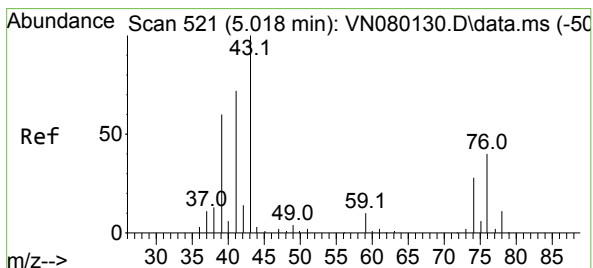
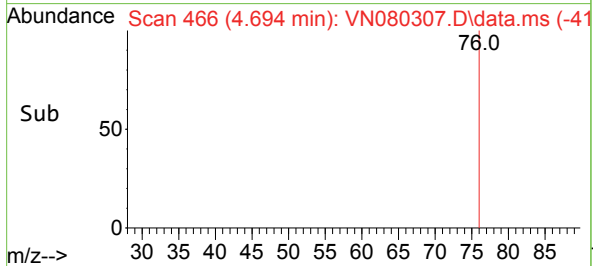
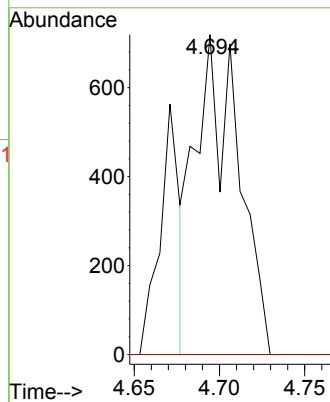


Tgt Ion: 76 Resp: 1254

Ion Ratio Lower Upper

76 100

78 0.0 7.4 11.0#



#18

Methyl Acetate

Concen: 0.635 ug/l

RT: 5.024 min Scan# 522

Delta R.T. 0.006 min

Lab File: VN080307.D

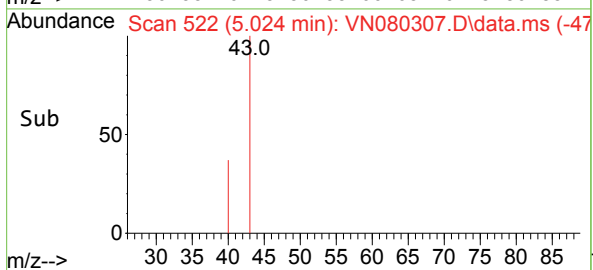
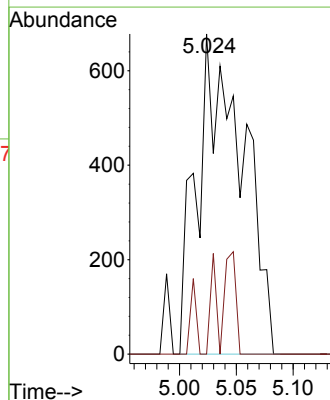
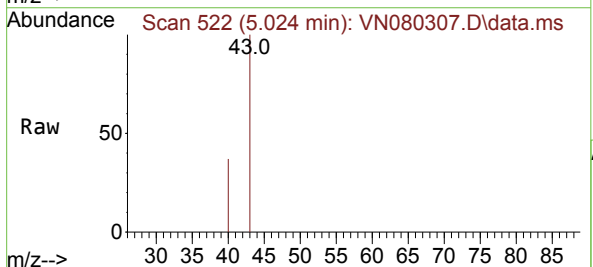
Acq: 29 Nov 2023 14:10

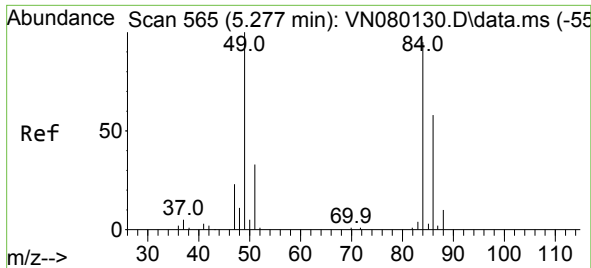
Tgt Ion: 43 Resp: 1900

Ion Ratio Lower Upper

43 100

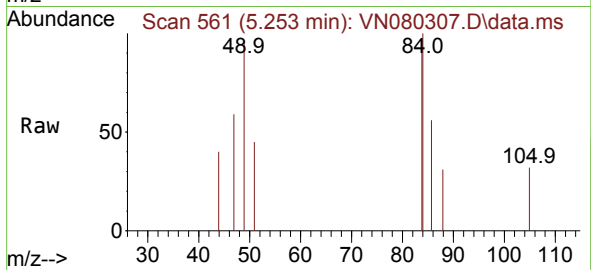
74 2.9 26.2 39.4#





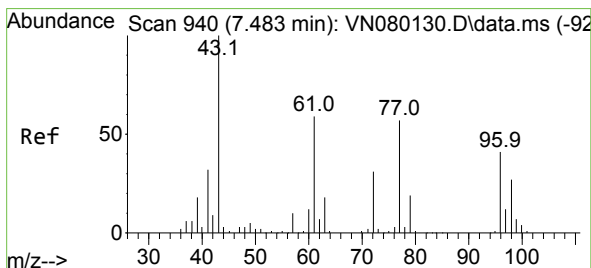
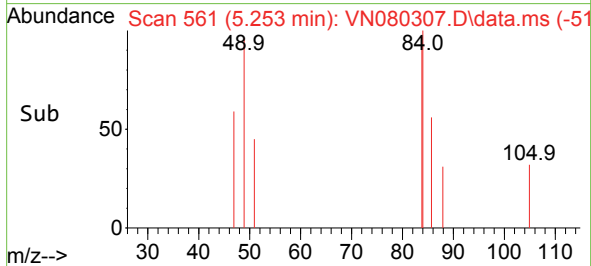
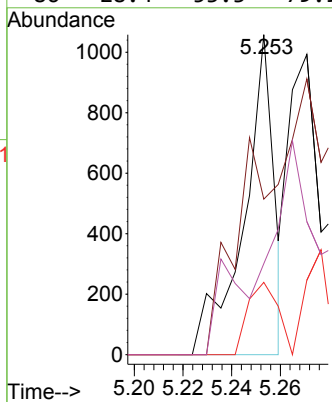
#20  
Methylene Chloride  
Concen: 0.469 ug/l  
RT: 5.253 min Scan# 51  
Delta R.T. -0.024 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Instrument :  
MSVOA\_N  
ClientSampleId :



Tgt Ion: 84 Resp: 914

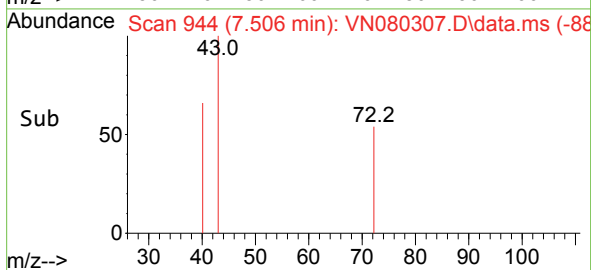
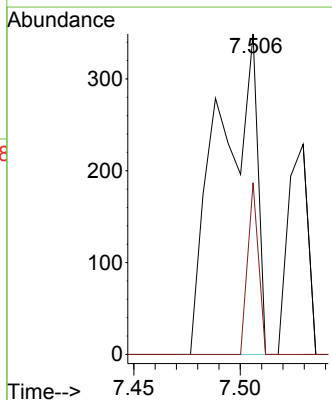
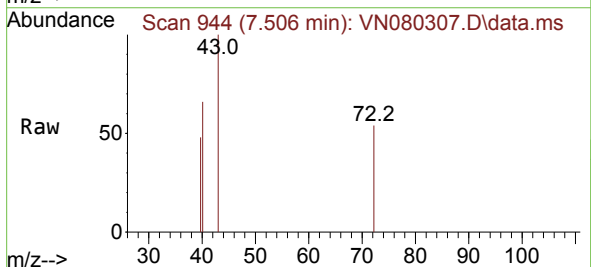
| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 84  | 100   |       |        |
| 49  | 48.6  | 79.7  | 119.5# |
| 51  | 22.6  | 25.2  | 37.8#  |
| 86  | 28.4  | 53.3  | 79.9#  |

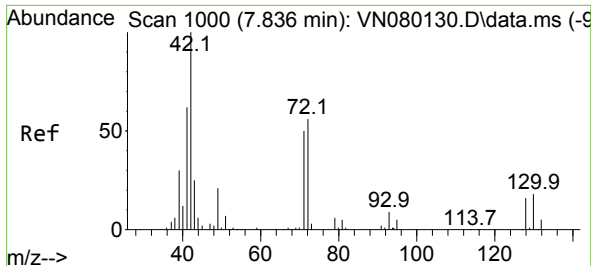


#25  
2-Butanone  
Concen: 0.391 ug/l  
RT: 7.506 min Scan# 944  
Delta R.T. 0.023 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Tgt Ion: 43 Resp: 433

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 53.6  | 30.2  | 45.2# |





#29

Tetrahydrofuran

Concen: 0.436 ug/l

RT: 7.853 min Scan# 10

Delta R.T. 0.017 min

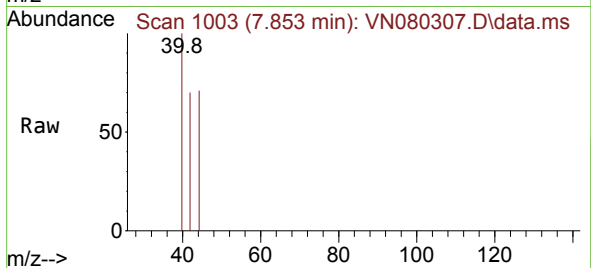
Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

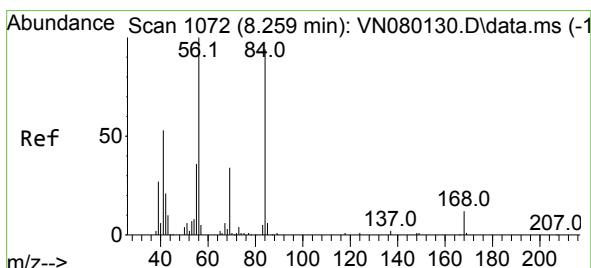
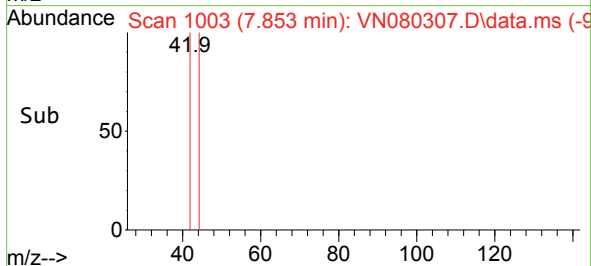
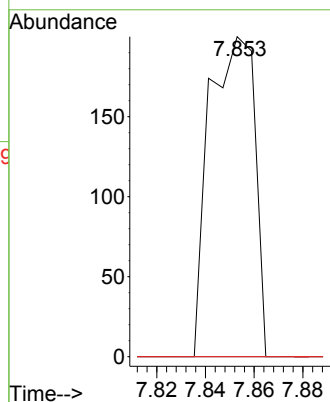
Instrument :

MSVOA\_N

ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 259   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 49.8  | 74.6# |
| 71       | 0.0   | 47.4  | 71.2# |



#31

Cyclohexane

Concen: 1.154 ug/l

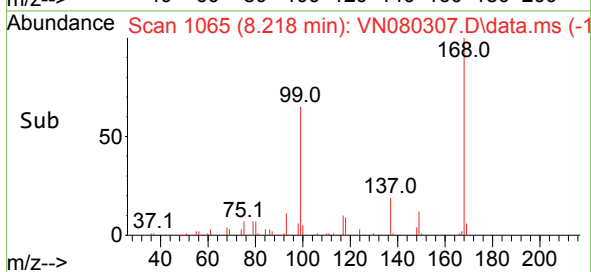
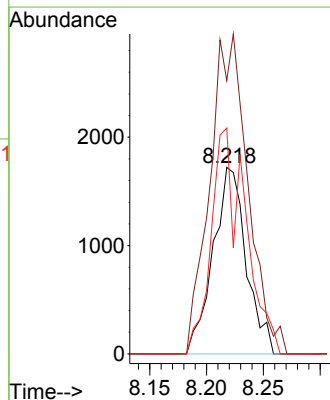
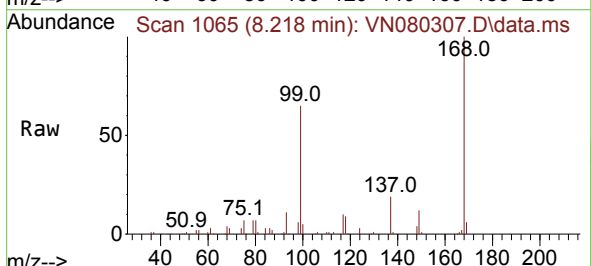
RT: 8.218 min Scan# 1065

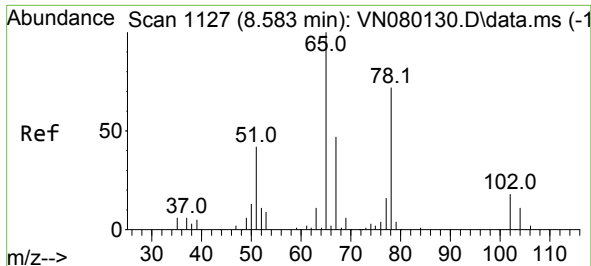
Delta R.T. -0.041 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 3480  |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 146.6 | 26.8  | 40.2# |
| 84       | 121.2 | 81.8  | 122.6 |





#33

1,2-Dichloroethane-d4

Concen: 52.643 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.006 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

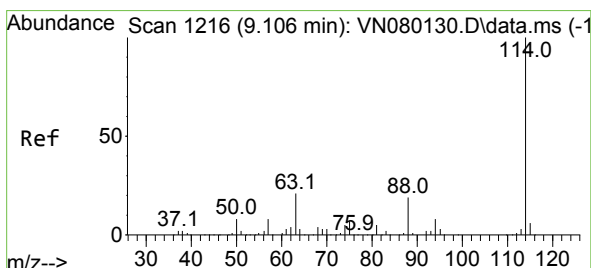
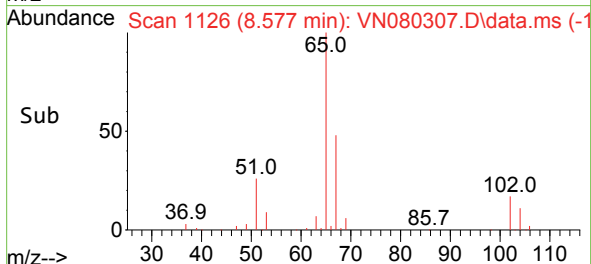
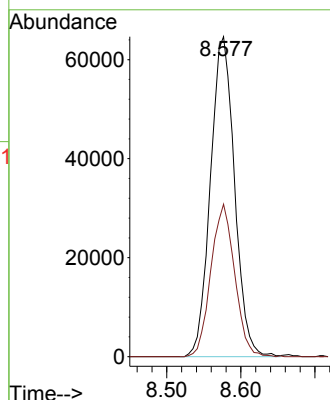
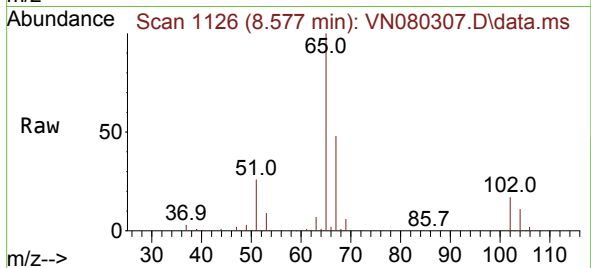
ClientSampleId :

Tgt Ion: 65 Resp: 145946

Ion Ratio Lower Upper

65 100

67 47.0 0.0 106.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.006 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

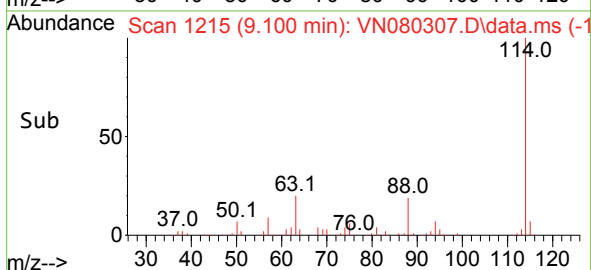
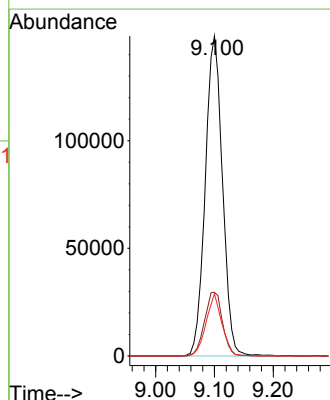
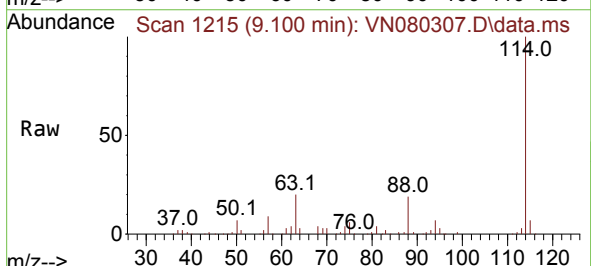
Tgt Ion: 114 Resp: 303003

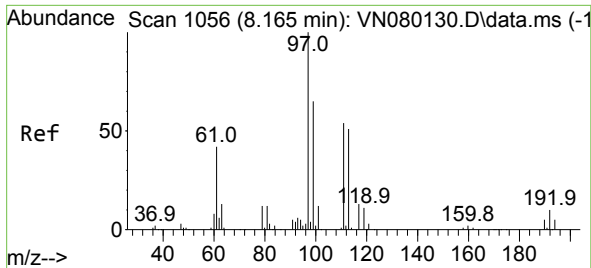
Ion Ratio Lower Upper

114 100

63 19.9 0.0 36.4

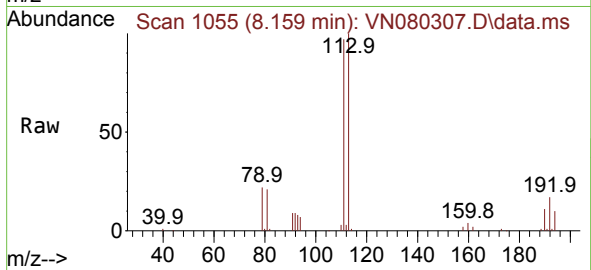
88 19.5 0.0 30.6



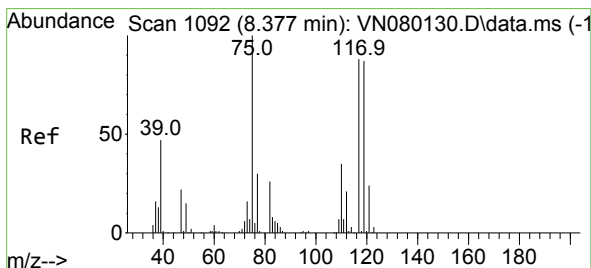
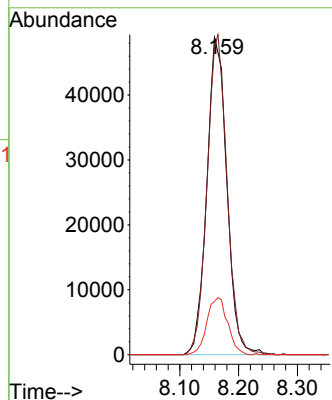
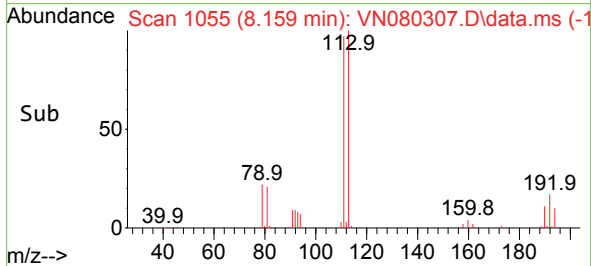


#35  
Dibromofluoromethane  
Concen: 51.938 ug/l  
RT: 8.159 min Scan# 1055  
Delta R.T. -0.006 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Instrument :  
MSVOA\_N  
ClientSampleId :

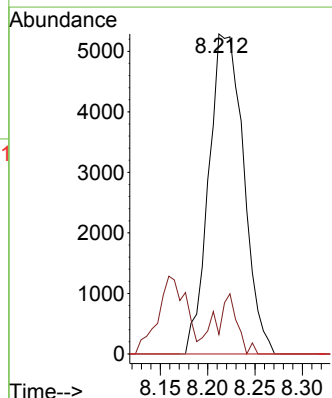
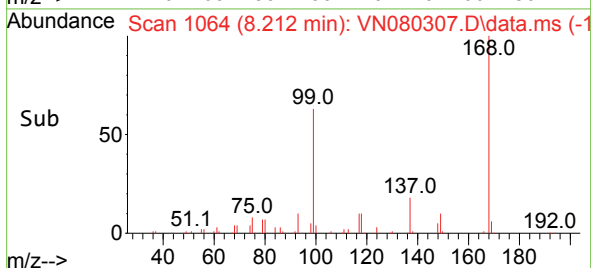
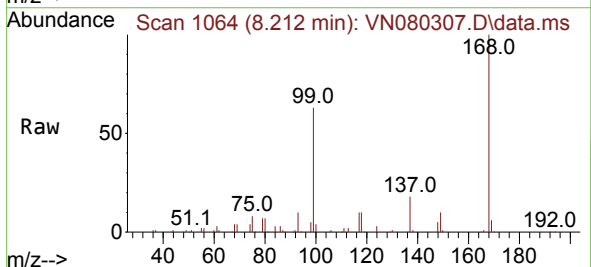


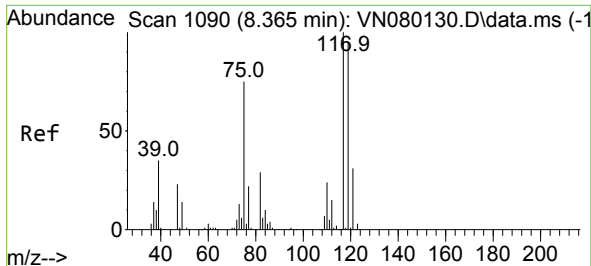
Tgt Ion:113 Resp: 116120  
Ion Ratio Lower Upper  
113 100  
111 100.1 82.6 123.8  
192 18.6 12.7 19.1



#36  
1,1-Dichloropropene  
Concen: 4.176 ug/l  
RT: 8.212 min Scan# 1064  
Delta R.T. -0.165 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

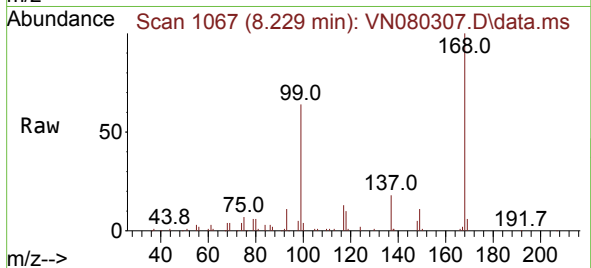
Tgt Ion: 75 Resp: 13518  
Ion Ratio Lower Upper  
75 100  
110 12.1 19.1 57.3#  
77 0.0 25.0 37.4#



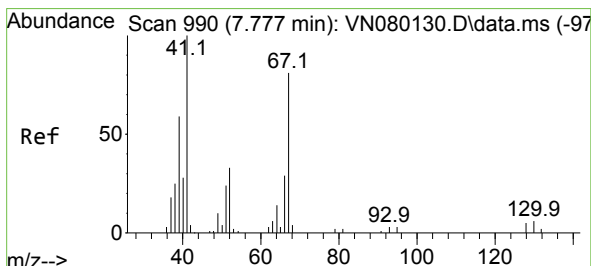
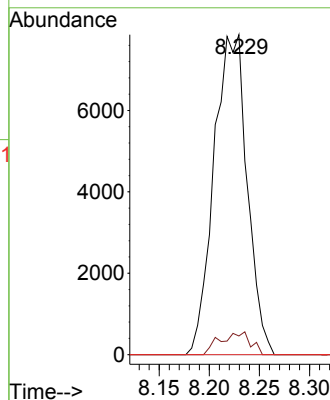
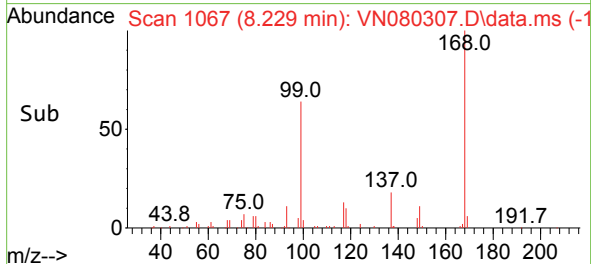


#38  
Carbon Tetrachloride  
Concen: 4.417 ug/l  
RT: 8.229 min Scan# 1067  
Delta R.T. -0.136 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Instrument :  
MSVOA\_N  
ClientSampleId :

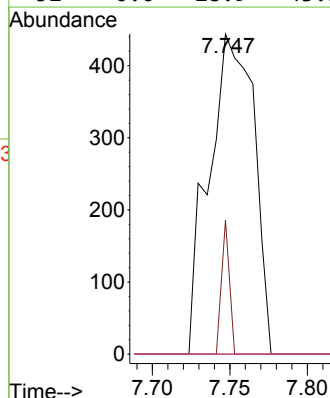
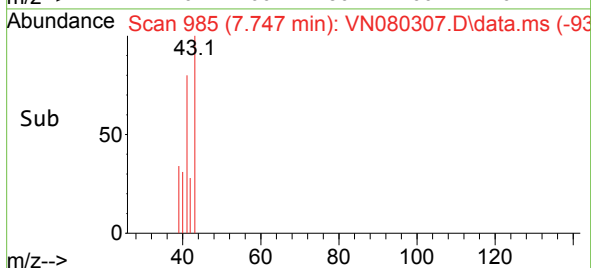
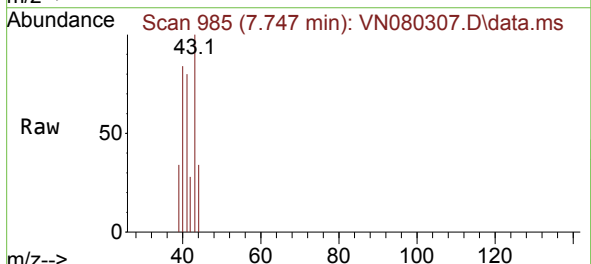


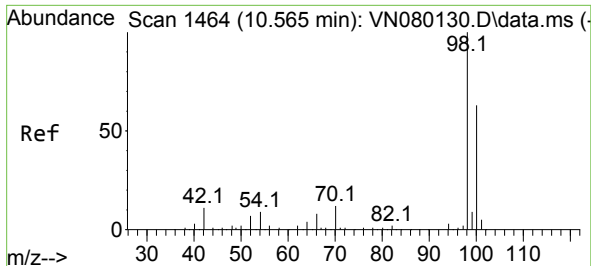
Tgt Ion:117 Resp: 18145  
Ion Ratio Lower Upper  
117 100  
119 5.8 77.3 115.9#  
121 0.0 23.3 34.9#



#41  
Methacrylonitrile  
Concen: 0.727 ug/l  
RT: 7.747 min Scan# 985  
Delta R.T. -0.030 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Tgt Ion: 41 Resp: 896  
Ion Ratio Lower Upper  
41 100  
39 7.4 42.6 64.0#  
67 0.0 77.5 116.3#  
52 0.0 28.9 43.3#

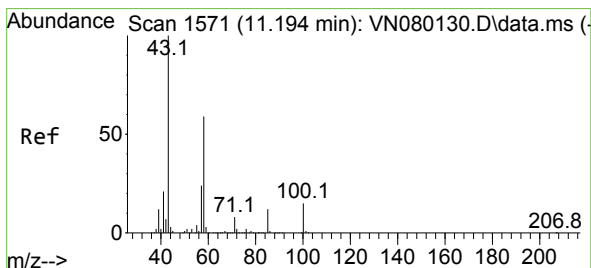
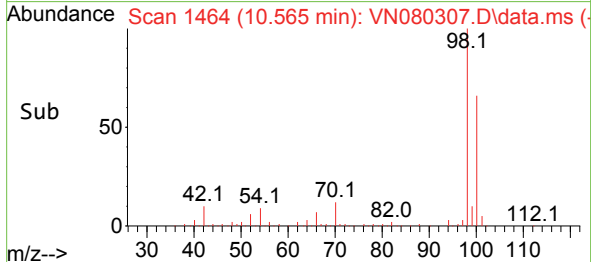
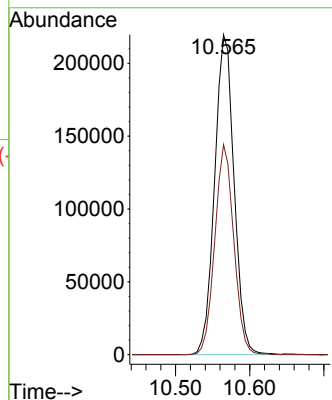
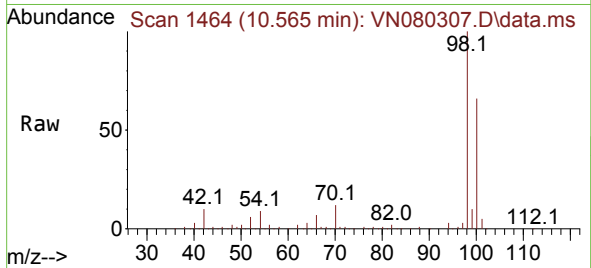




#50  
Toluene-d8  
Concen: 49.699 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. -0.000 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

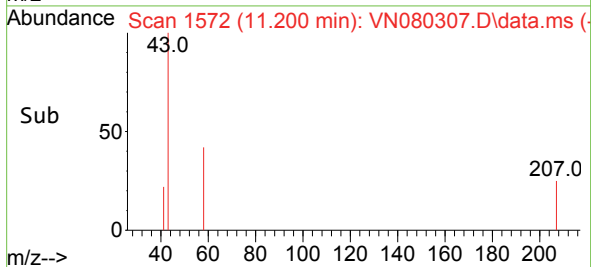
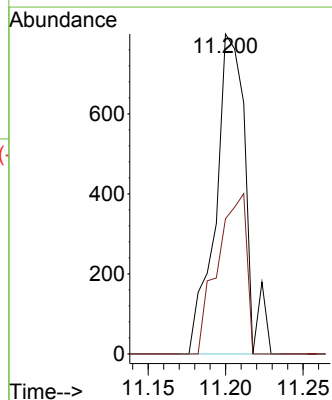
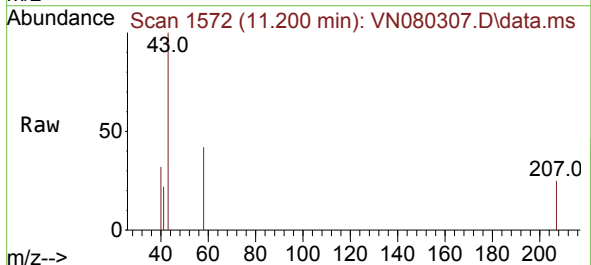
Instrument :  
MSVOA\_N  
ClientSampleId :

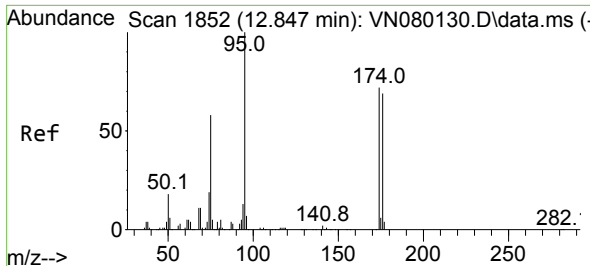
Tgt Ion: 98 Resp: 400550  
Ion Ratio Lower Upper  
98 100  
100 64.0 52.0 78.0



#59  
2-Hexanone  
Concen: 0.593 ug/l  
RT: 11.200 min Scan# 1572  
Delta R.T. 0.006 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Tgt Ion: 43 Resp: 1077  
Ion Ratio Lower Upper  
43 100  
58 48.5 31.7 95.1

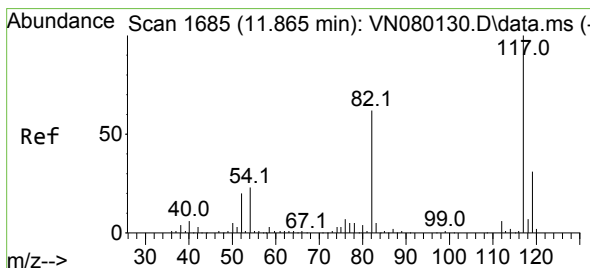
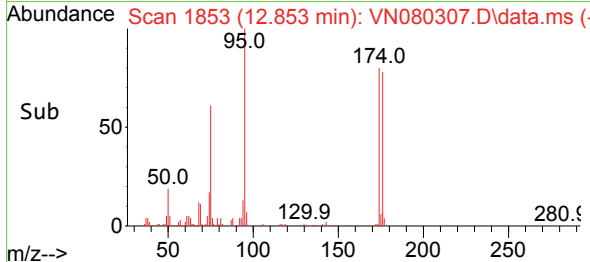
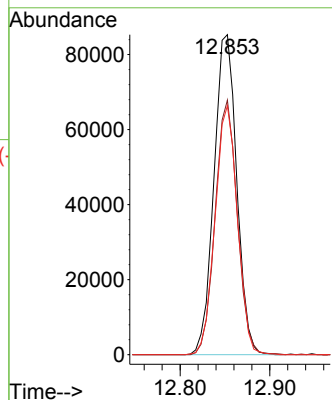
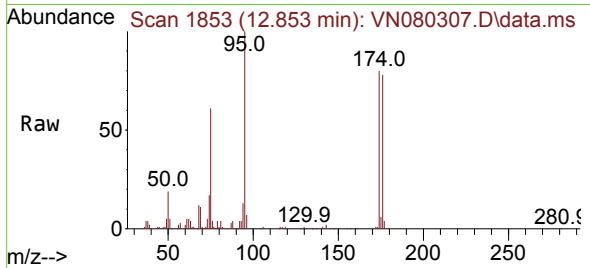




#62  
4-Bromofluorobenzene  
Concen: 49.339 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.006 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

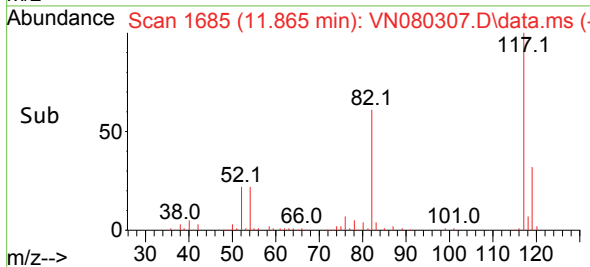
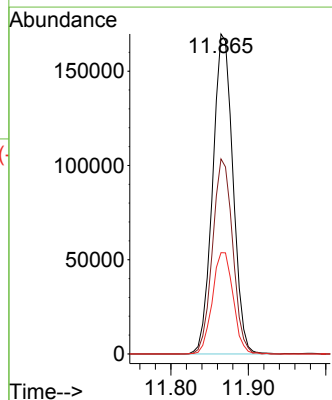
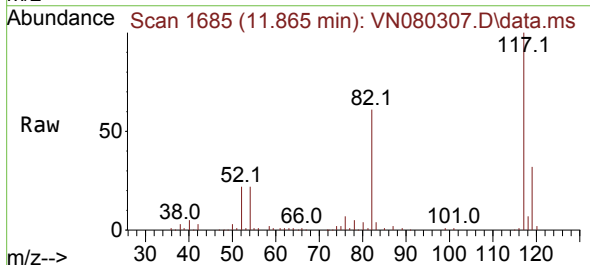
Instrument :  
MSVOA\_N  
ClientSampleId :

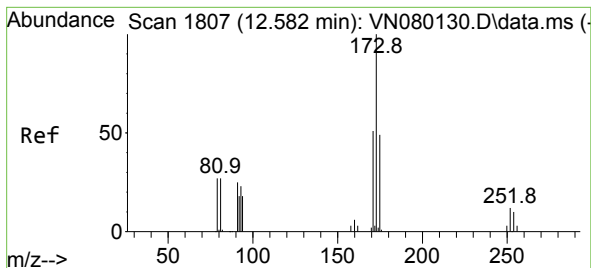
Tgt Ion: 95 Resp: 150198  
Ion Ratio Lower Upper  
95 100  
174 77.2 0.0 143.8  
176 76.3 0.0 135.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. -0.000 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Tgt Ion: 117 Resp: 308299  
Ion Ratio Lower Upper  
117 100  
82 60.9 44.0 66.0  
119 31.7 25.6 38.4





#71

Bromoform

Concen: 0.532 ug/l

RT: 12.847 min Scan# 11

Delta R.T. 0.264 min

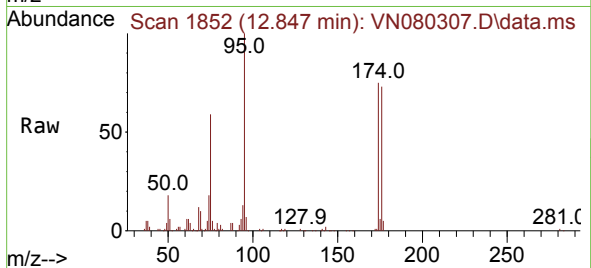
Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

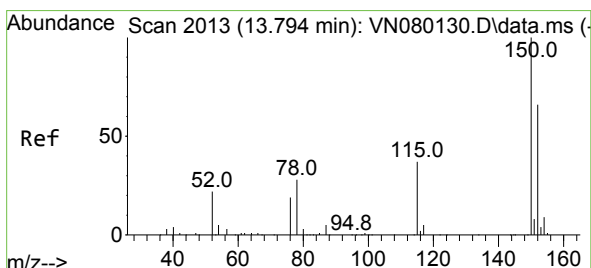
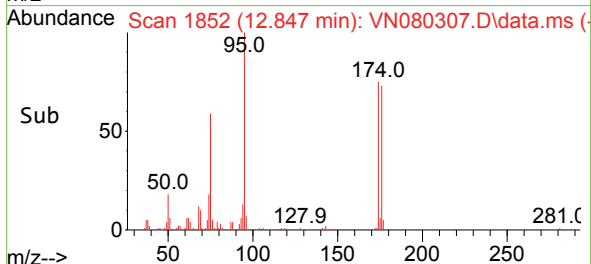
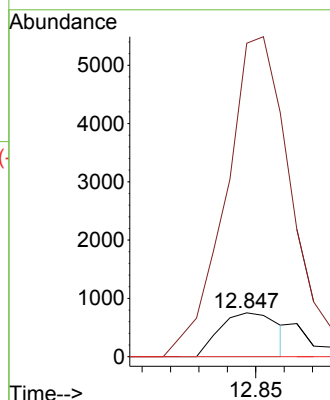
Instrument :

MSVOA\_N

ClientSampleId :



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 173   | Resp: | 1070  |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 689.1 | 24.3  | 73.0# |
| 254       | 0.0   | 0.0   | 0.0   |



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

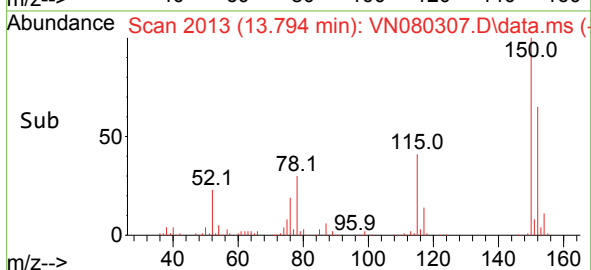
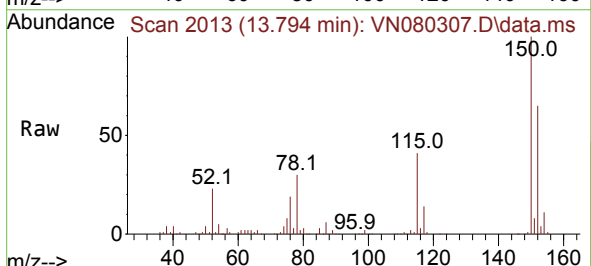
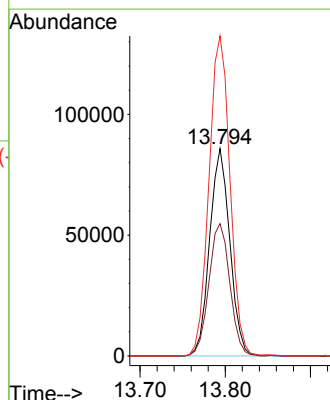
RT: 13.794 min Scan# 2013

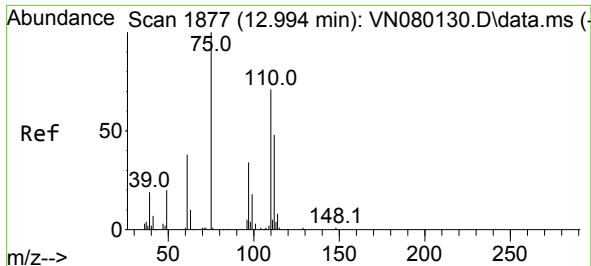
Delta R.T. -0.000 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 152   | Resp: | 141196 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 66.2  | 32.3  | 96.8   |
| 150       | 160.6 | 0.0   | 355.8  |

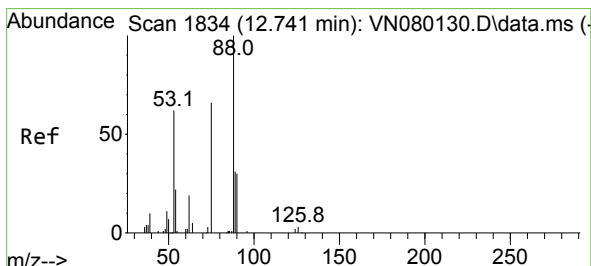
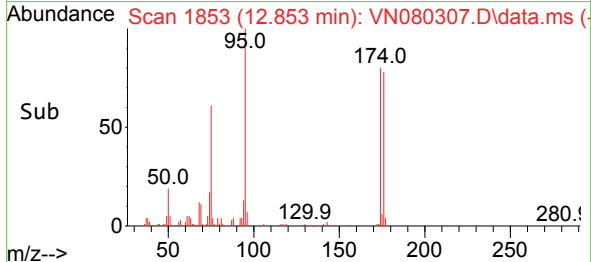
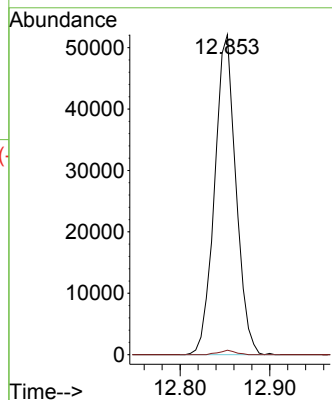
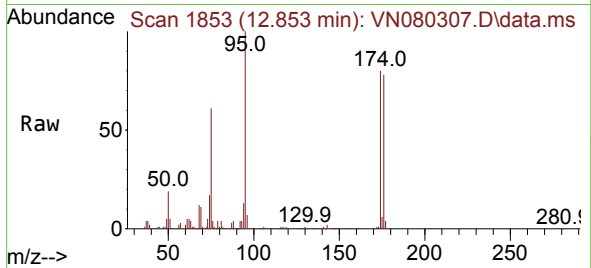




#76  
1,2,3-Trichloropropane  
Concen: 24.845 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. -0.141 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

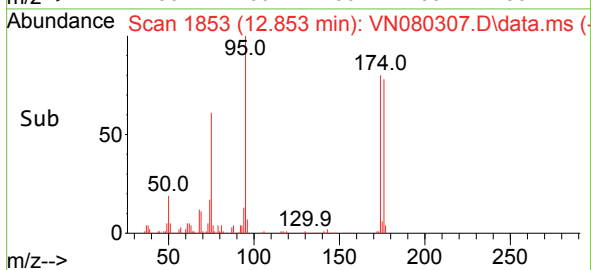
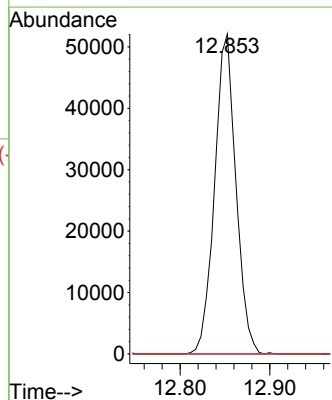
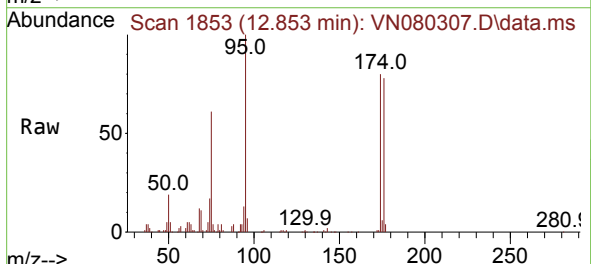
Instrument :  
MSVOA\_N  
ClientSampleId :

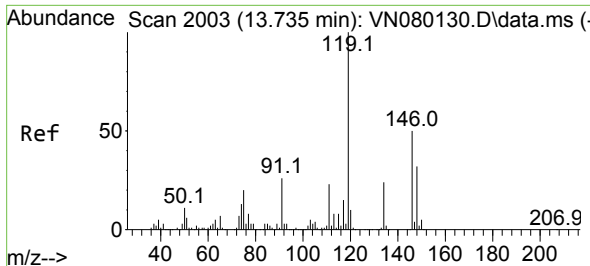
Tgt Ion: 75 Resp: 85951  
Ion Ratio Lower Upper  
75 100  
77 1.1 84.5 253.5#



#81  
trans-1,4-Dichloro-2-butene  
Concen: 83.940 ug/l  
RT: 12.853 min Scan# 1853  
Delta R.T. 0.112 min  
Lab File: VN080307.D  
Acq: 29 Nov 2023 14:10

Tgt Ion: 75 Resp: 85951  
Ion Ratio Lower Upper  
75 100  
53 0.0 67.4 101.2#  
89 0.0 38.8 58.2#





#87

1,3-Dichlorobenzene

Concen: 0.227 ug/l

RT: 13.741 min Scan# 2004

Delta R.T. 0.006 min

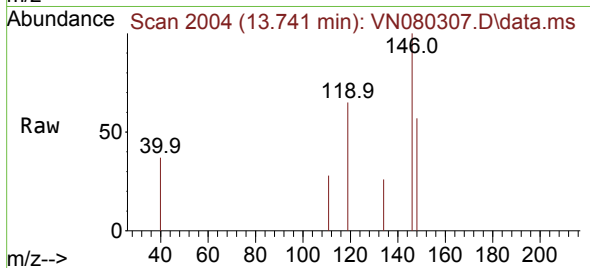
Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

ClientSampleId :



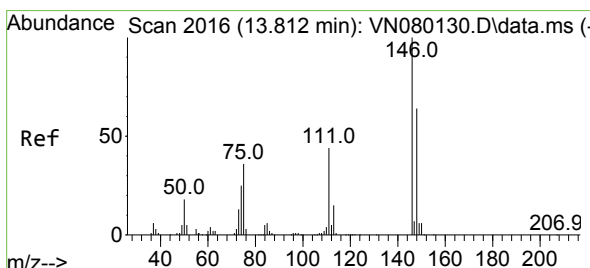
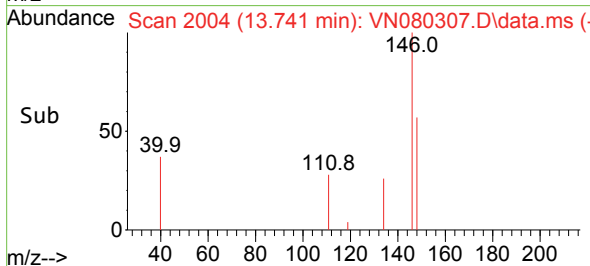
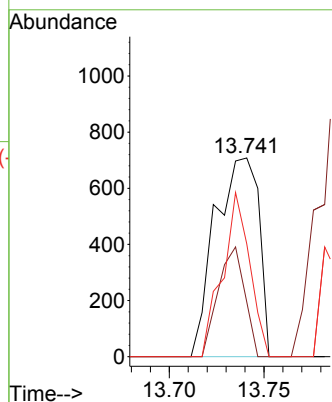
Tgt Ion:146 Resp: 1133

Ion Ratio Lower Upper

146 100

111 33.6 22.1 66.3

148 51.6 32.0 96.0



#88

1,4-Dichlorobenzene

Concen: 0.226 ug/l

RT: 13.741 min Scan# 2004

Delta R.T. -0.071 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

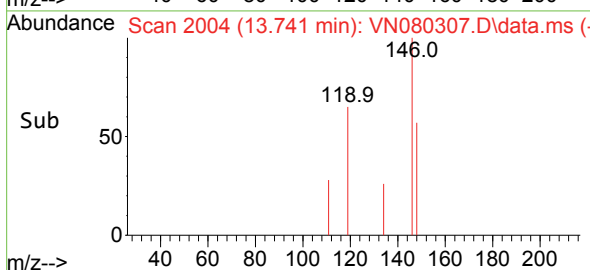
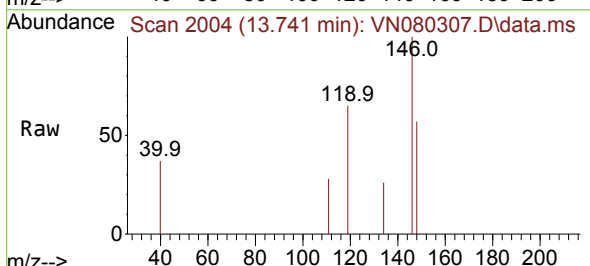
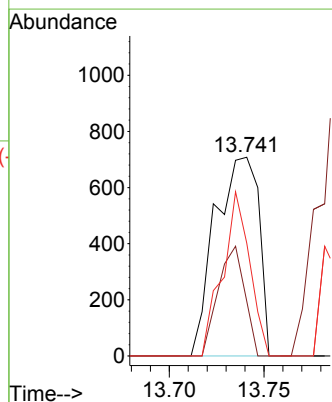
Tgt Ion:146 Resp: 1133

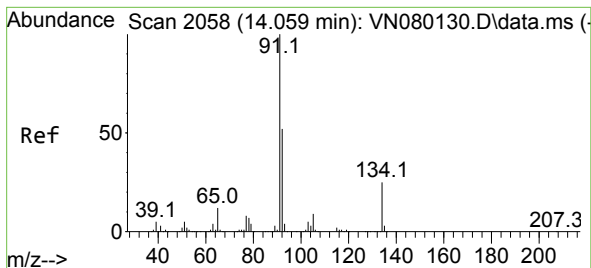
Ion Ratio Lower Upper

146 100

111 33.6 20.6 61.8

148 51.6 31.6 94.8





#89

n-Butylbenzene

Concen: 0.316 ug/l

RT: 14.059 min Scan# 2058

Delta R.T. -0.000 min

Lab File: VN080307.D

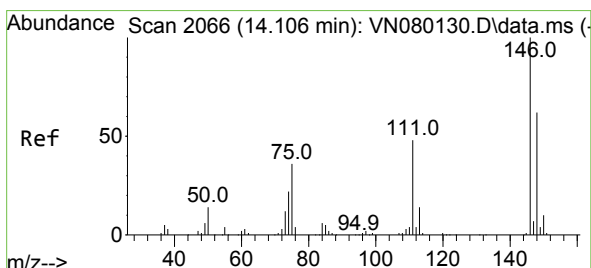
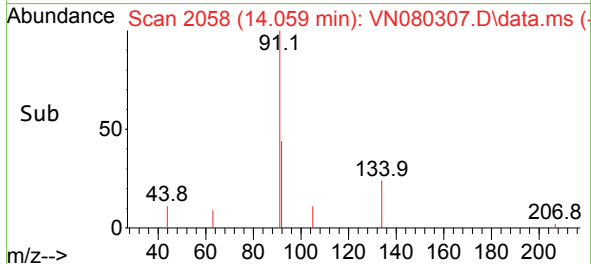
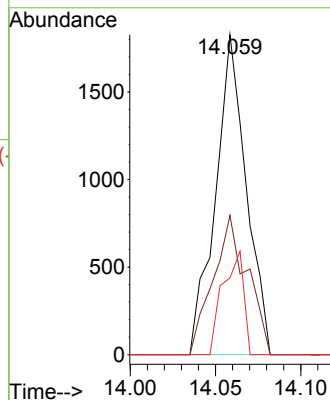
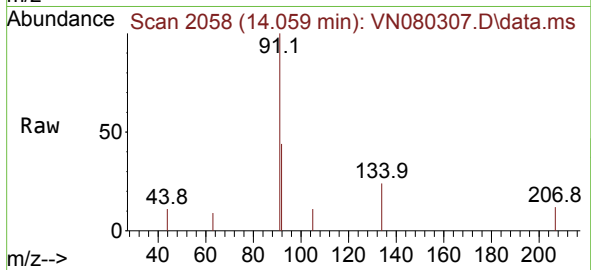
Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

ClientSampleId :

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion: 91 | Resp: | 2292        |
| Ion         | Ratio | Lower Upper |
| 91          | 100   |             |
| 92          | 48.5  | 26.4 79.0   |
| 134         | 21.9  | 12.6 37.6   |



#91

1,2-Dichlorobenzene

Concen: 0.226 ug/l

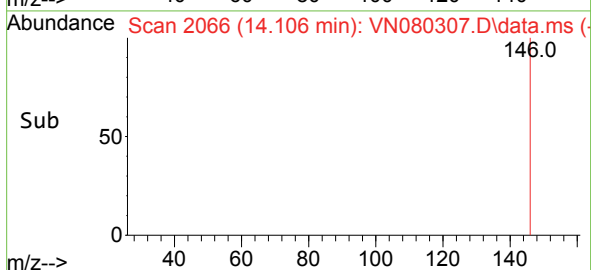
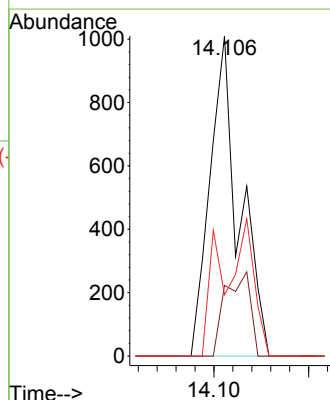
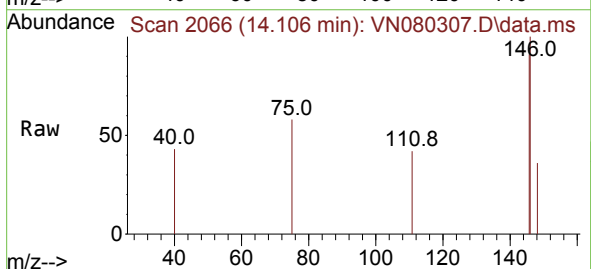
RT: 14.106 min Scan# 2066

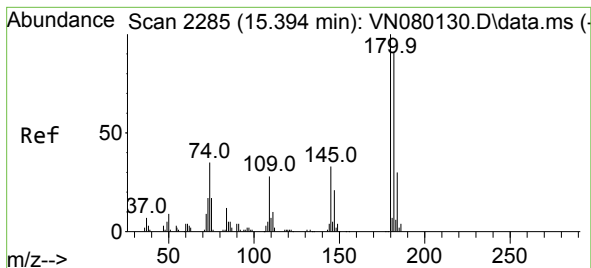
Delta R.T. -0.000 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

|              |       |             |
|--------------|-------|-------------|
| Tgt Ion: 146 | Resp: | 1078        |
| Ion          | Ratio | Lower Upper |
| 146          | 100   |             |
| 111          | 22.7  | 22.0 66.0   |
| 148          | 47.0  | 31.8 95.3   |





#93

1,2,4-Trichlorobenzene

Concen: 0.739 ug/l

RT: 15.388 min Scan# 21

Delta R.T. -0.006 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

ClientSampleId :

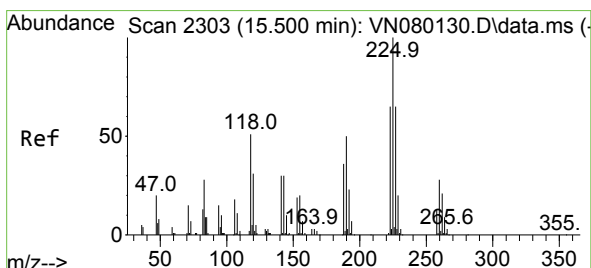
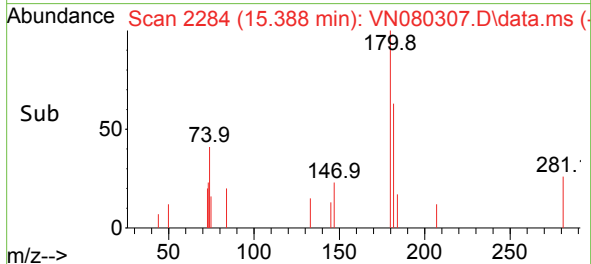
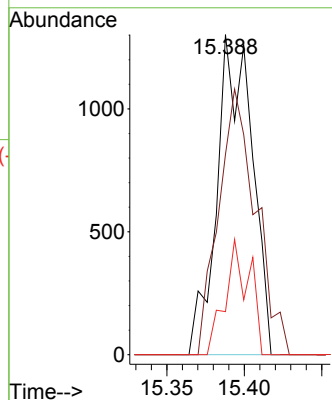
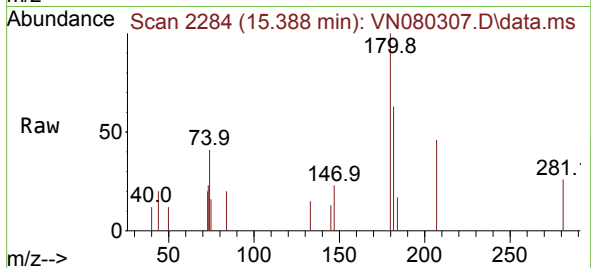
Tgt Ion:180 Resp: 2051

Ion Ratio Lower Upper

180 100

182 88.1 46.1 138.2

145 24.9 16.6 49.8



#94

Hexachlorobutadiene

Concen: 0.870 ug/l

RT: 15.500 min Scan# 2303

Delta R.T. -0.000 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

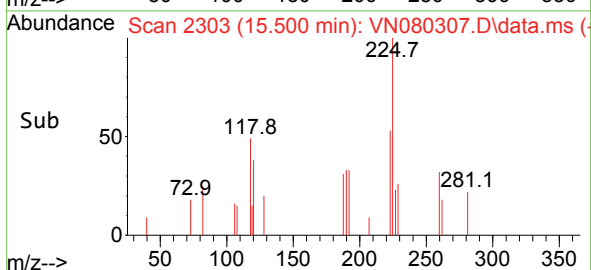
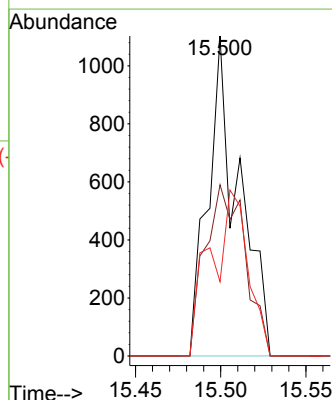
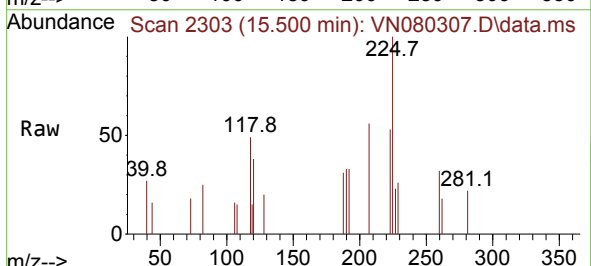
Tgt Ion:225 Resp: 1388

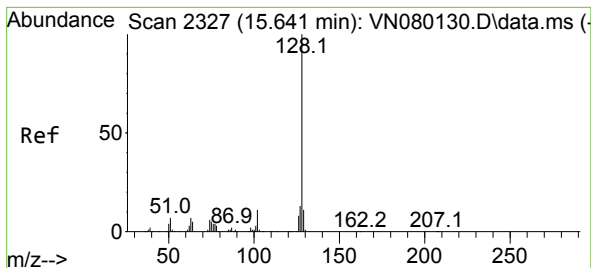
Ion Ratio Lower Upper

225 100

223 68.8 31.3 93.8

227 62.8 31.9 95.9





#95

Naphthalene

Concen: 1.006 ug/l

RT: 15.641 min Scan# 21

Delta R.T. -0.000 min

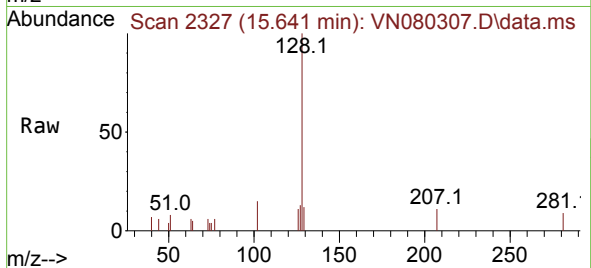
Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Instrument :

MSVOA\_N

ClientSampleId :



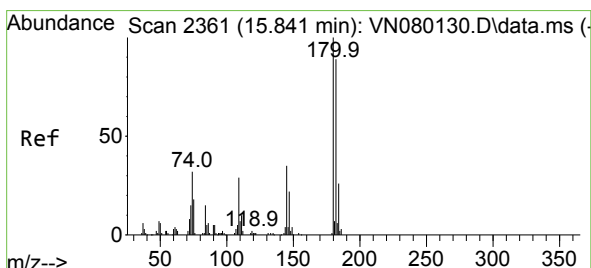
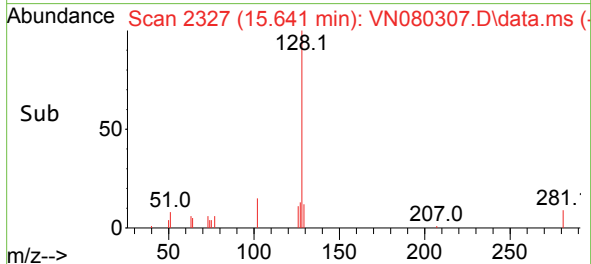
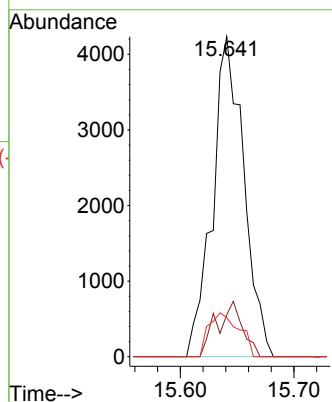
Tgt Ion:128 Resp: 8091

Ion Ratio Lower Upper

128 100

127 14.3 10.0 15.0

129 13.3 8.7 13.1#



#96

1,2,3-Trichlorobenzene

Concen: 0.760 ug/l

RT: 15.847 min Scan# 2362

Delta R.T. 0.006 min

Lab File: VN080307.D

Acq: 29 Nov 2023 14:10

Tgt Ion:180 Resp: 1976

Ion Ratio Lower Upper

180 100

182 107.1 46.2 138.6

145 46.2 17.5 52.6

