

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN041824\  
 Data File : VN081793.D  
 Acq On : 18 Apr 2024 17:30  
 Operator : JC\MD  
 Sample : P2121-02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Apr 19 02:10:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N041524W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Apr 15 15:37:39 2024  
 Response via : Initial Calibration

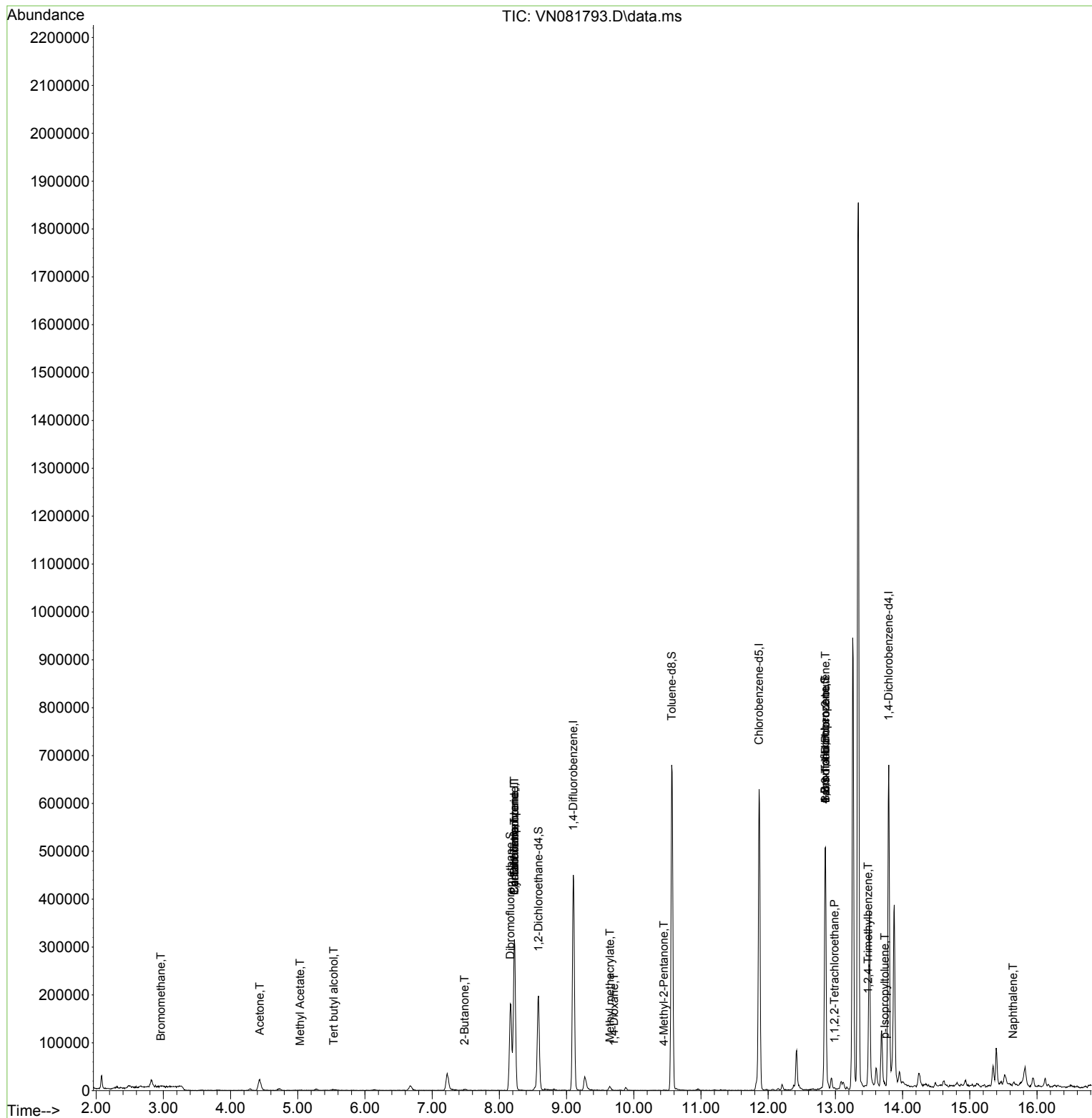
| Compound                      | R.T.   | QIon  | Response | Conc      | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|------------|----------|
| Internal Standards            |        |       |          |           |            |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 223005   | 50.000    | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 392133   | 50.000    | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 362939   | 50.000    | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794 | 152   | 174494   | 50.000    | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |           |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.582  | 65    | 161103   | 51.339    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery  | = 102.680% |          |
| 35) Dibromofluoromethane      | 8.165  | 113   | 127922   | 49.402    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery  | = 98.800%  |          |
| 50) Toluene-d8                | 10.565 | 98    | 479078   | 50.221    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery  | = 100.440% |          |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 172077   | 52.787    | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 64 - 133 | Recovery  | = 105.580% |          |
| Target Compounds              |        |       |          |           |            |          |
|                               |        |       |          |           | Qvalue     |          |
| 3) Chloromethane              | 2.359  | 50    | 594      | Below Cal | #          | 34       |
| 5) Bromomethane               | 2.965  | 94    | 979      | 0.469     | ug/l #     | 52       |
| 6) Chloroethane               | 3.124  | 64    | 125      | Below Cal | #          | 1        |
| 11) Tert butyl alcohol        | 5.536  | 59    | 2987     | 6.978     | ug/l #     | 71       |
| 16) Acetone                   | 4.436  | 43    | 41355    | 47.350    | ug/l       | 92       |
| 18) Methyl Acetate            | 5.036  | 43    | 689      | 0.282     | ug/l #     | 47       |
| 20) Methylene Chloride        | 5.265  | 84    | 1227     | Below Cal | #          | 45       |
| 25) 2-Butanone                | 7.483  | 43    | 3552     | 2.467     | ug/l       | 90       |
| 31) Cyclohexane               | 8.224  | 56    | 5473     | 1.271     | ug/l #     | 18       |
| 36) 1,1-Dichloropropene       | 8.224  | 75    | 19125    | 5.301     | ug/l #     | 50       |
| 38) Carbon Tetrachloride      | 8.224  | 117   | 24840    | 5.918     | ug/l #     | 18       |
| 48) Methyl methacrylate       | 9.647  | 41    | 2726     | 1.209     | ug/l #     | 36       |
| 49) 1,4-Dioxane               | 9.706  | 88    | 66       | 1.167     | ug/l #     | 28       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43    | 733      | 0.238     | ug/l #     | 34       |
| 71) Bromoform                 | 12.853 | 173   | 2114     | 0.962     | ug/l #     | 1        |
| 75) 1,1,2,2-Tetrachloroethane | 12.988 | 83    | 1561     | 0.406     | ug/l #     | 25       |
| 76) 1,2,3-Trichloropropane    | 12.853 | 75    | 93567    | 27.804    | ug/l #     | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.853 | 75    | 93567    | 65.611    | ug/l #     | 13       |
| 84) 1,2,4-Trimethylbenzene    | 13.488 | 105   | 8852     | 0.821     | ug/l       | 96       |
| 86) p-Isopropyltoluene        | 13.735 | 119   | 3664     | 0.342     | ug/l #     | 74       |
| 95) Naphthalene               | 15.647 | 128   | 2655     | 0.261     | ug/l #     | 82       |

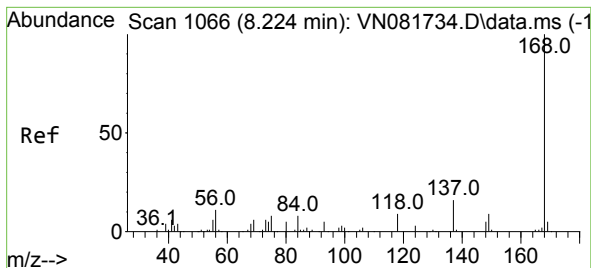
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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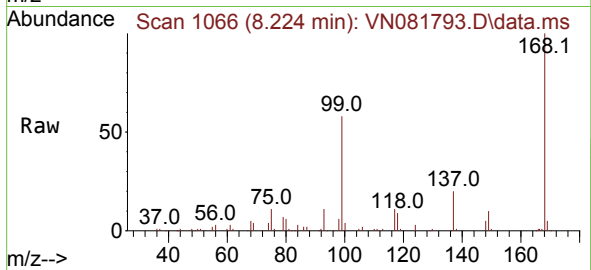
Quant Time: Apr 19 02:10:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N041524W.M  
Quant Title : SW846 8260  
QLast Update : Mon Apr 15 15:37:39 2024  
Response via : Initial Calibration



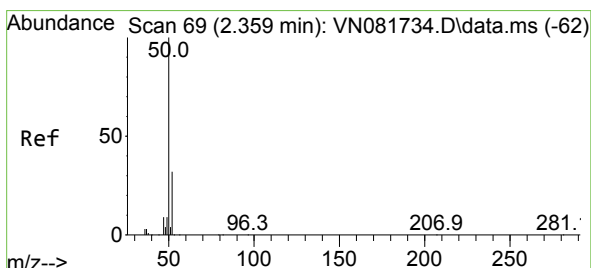
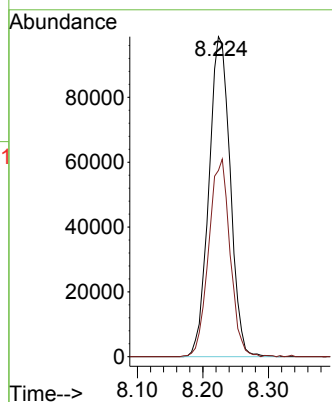
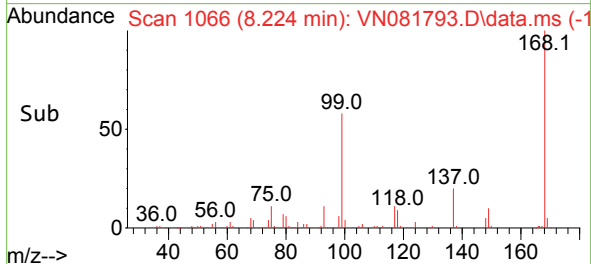


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Instrument :  
MSVOA\_N  
ClientSampleId :

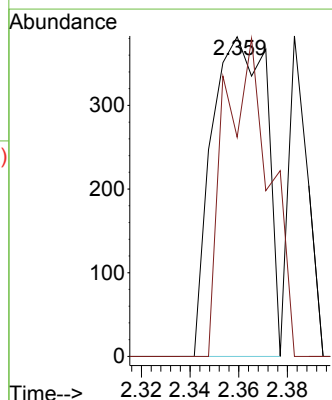
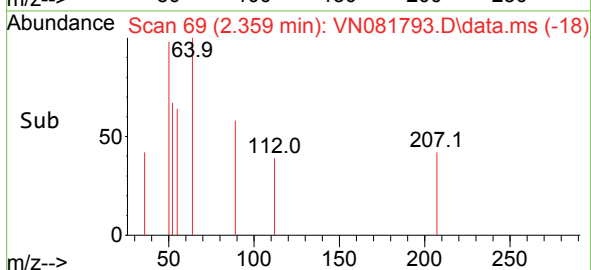
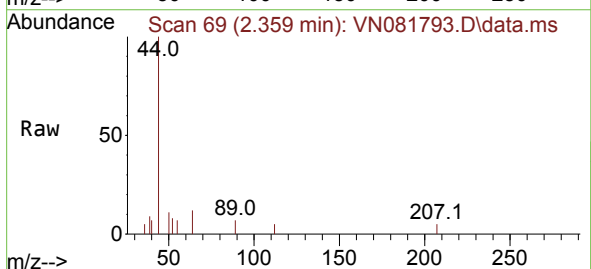


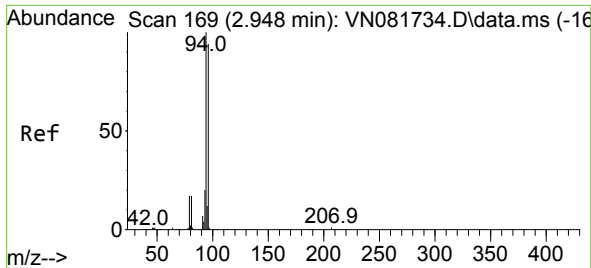
Tgt Ion:168 Resp: 223005  
Ion Ratio Lower Upper  
168 100  
99 58.2 48.2 72.4



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Tgt Ion: 50 Resp: 594  
Ion Ratio Lower Upper  
50 100  
52 68.6 25.5 38.3#

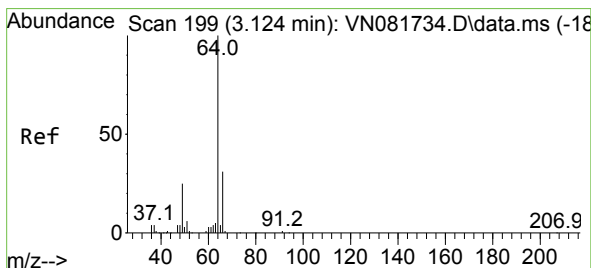
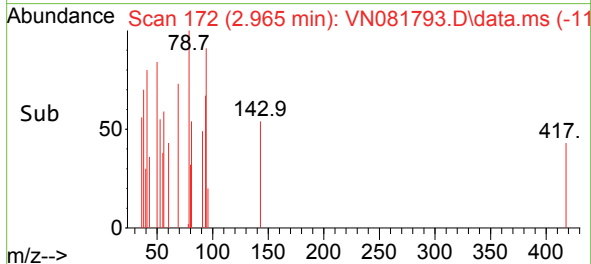
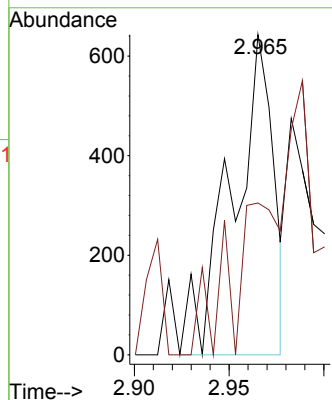
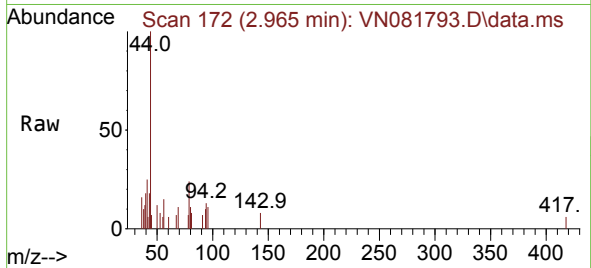




#5  
Bromomethane  
Concen: 0.469 ug/l  
RT: 2.965 min Scan# 11  
Delta R.T. 0.017 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

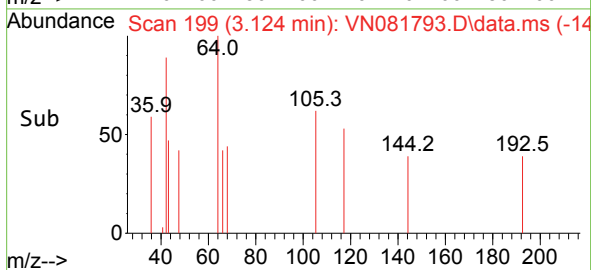
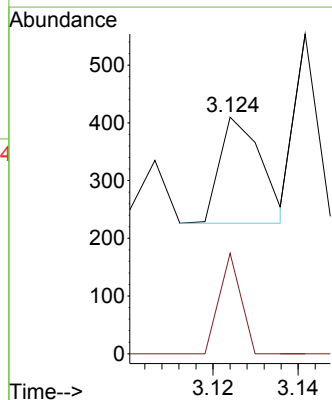
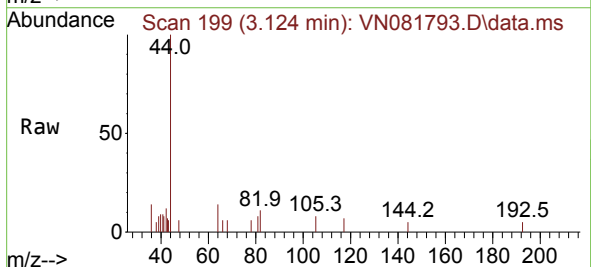
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ClientSampleId :

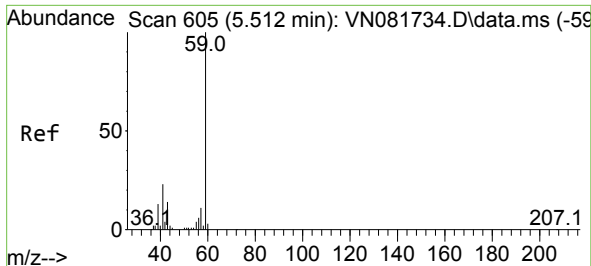
Tgt Ion: 94 Resp: 979  
Ion Ratio Lower Upper  
94 100  
96 47.4 74.8 112.2#



#6  
Chloroethane  
Concen: Below Cal  
RT: 3.124 min Scan# 199  
Delta R.T. 0.000 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

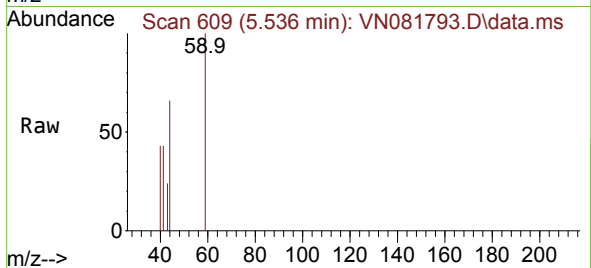
Tgt Ion: 64 Resp: 125  
Ion Ratio Lower Upper  
64 100  
66 94.6 24.7 37.1#



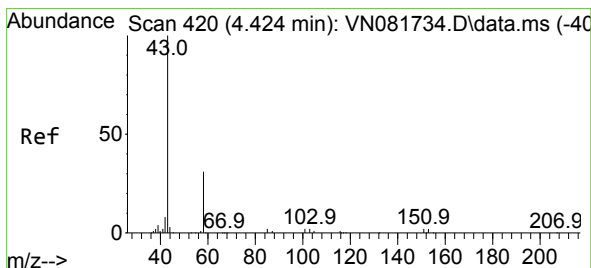
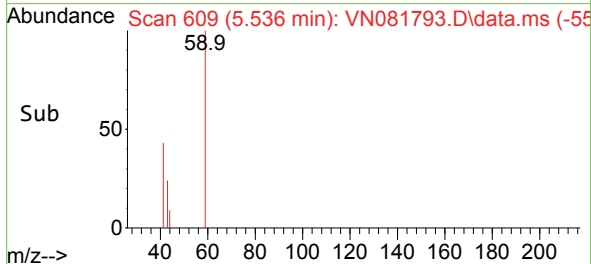
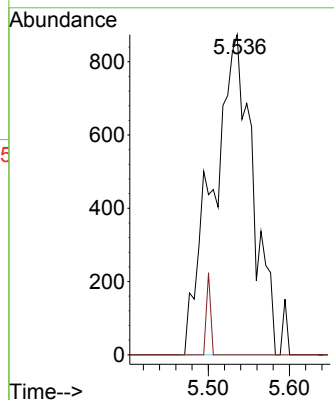


#11  
Tert butyl alcohol  
Concen: 6.978 ug/l  
RT: 5.536 min Scan# 605  
Delta R.T. 0.024 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Instrument :  
MSVOA\_N  
ClientSampleId :

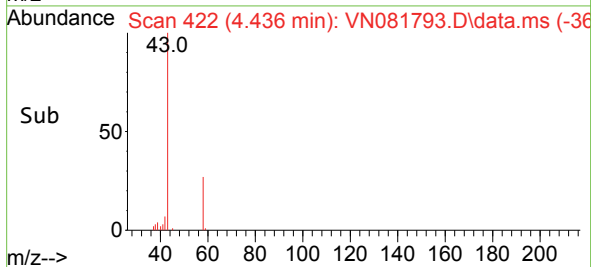
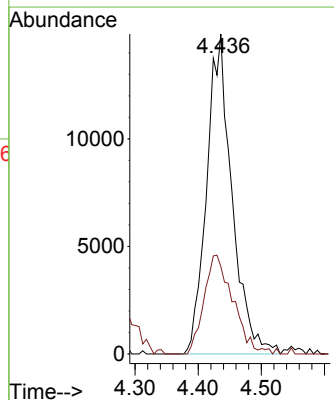
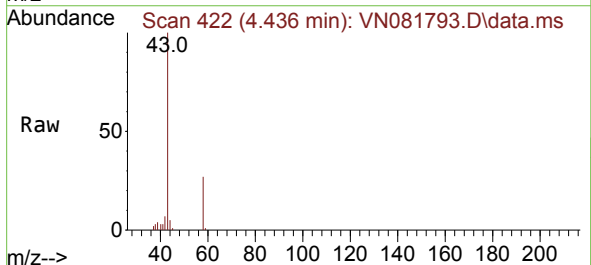


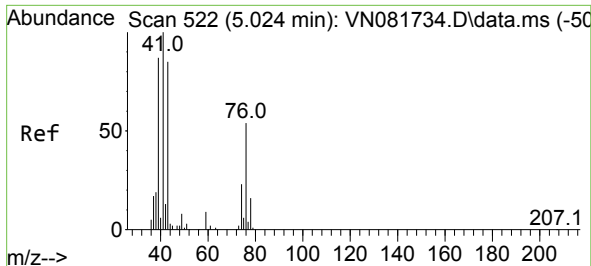
Tgt Ion: 59 Resp: 2987  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.9 13.3#



#16  
Acetone  
Concen: 47.350 ug/l  
RT: 4.436 min Scan# 422  
Delta R.T. 0.012 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

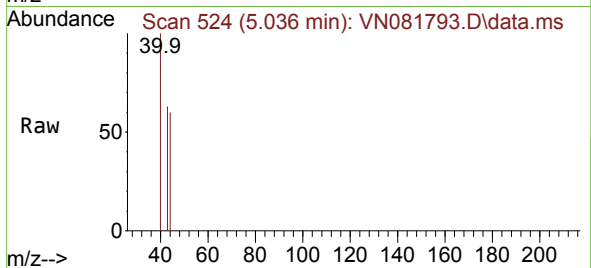
Tgt Ion: 43 Resp: 41355  
Ion Ratio Lower Upper  
43 100  
58 27.3 25.2 37.8



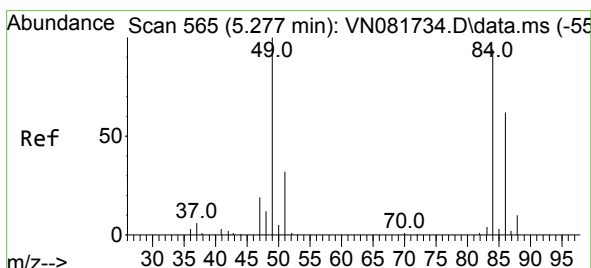
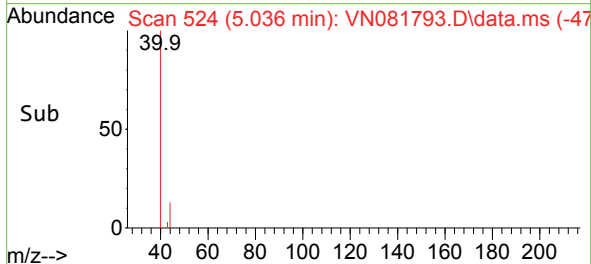
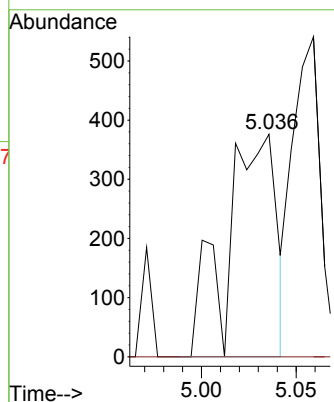


#18  
Methyl Acetate  
Concen: 0.282 ug/l  
RT: 5.036 min Scan# 51  
Delta R.T. 0.012 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Instrument :  
MSVOA\_N  
ClientSampleId :

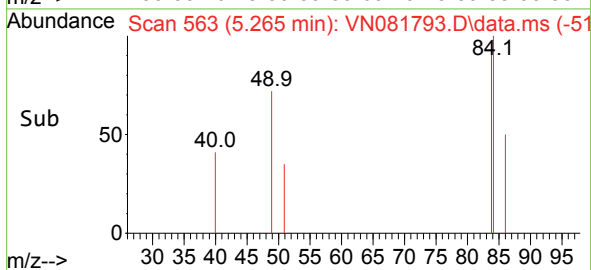
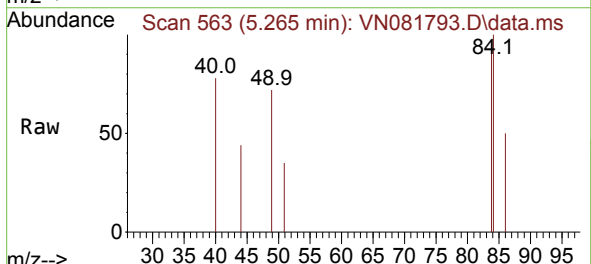
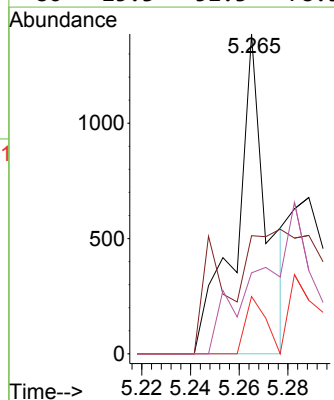


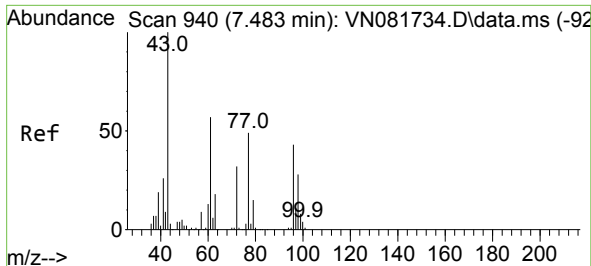
Tgt Ion: 43 Resp: 689  
Ion Ratio Lower Upper  
43 100  
74 0.0 22.2 33.2#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 5.265 min Scan# 563  
Delta R.T. -0.012 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

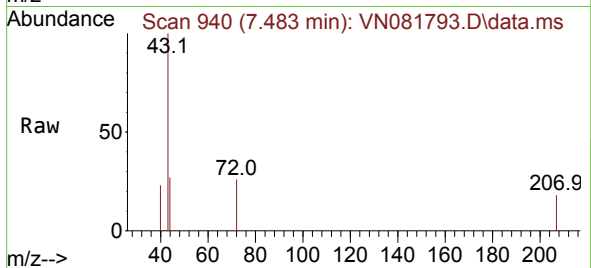
Tgt Ion: 84 Resp: 1227  
Ion Ratio Lower Upper  
84 100  
49 36.9 84.9 127.3#  
51 18.0 27.0 40.6#  
86 25.3 52.3 78.5#



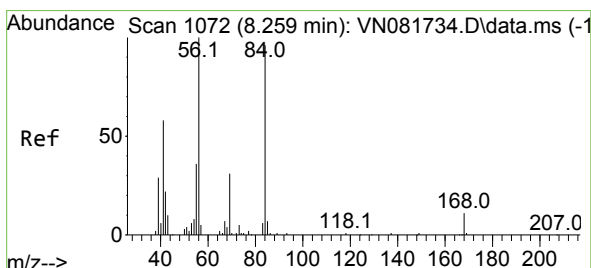
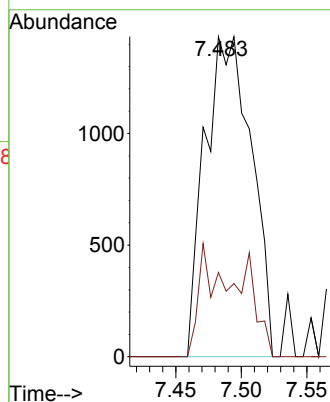
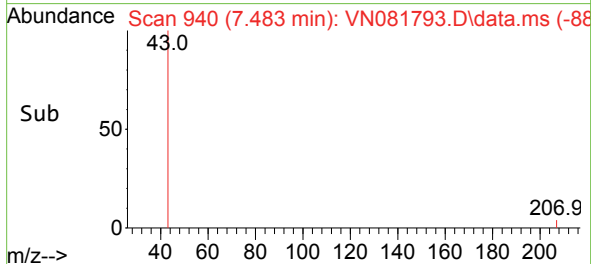


#25  
2-Butanone  
Concen: 2.467 ug/l  
RT: 7.483 min Scan# 940  
Delta R.T. -0.000 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Instrument :  
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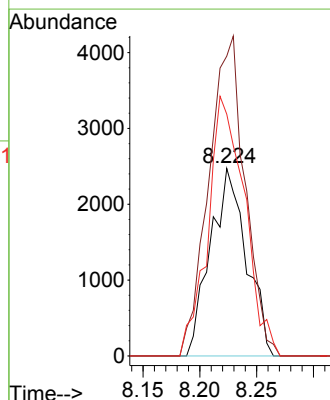
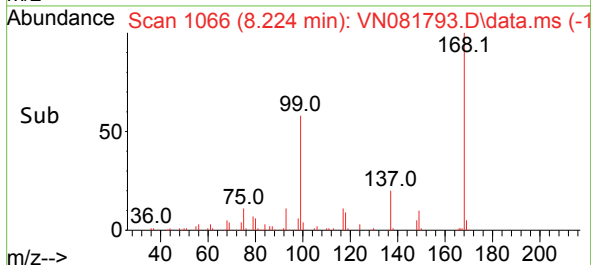
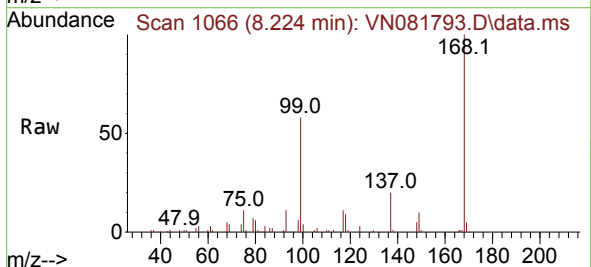


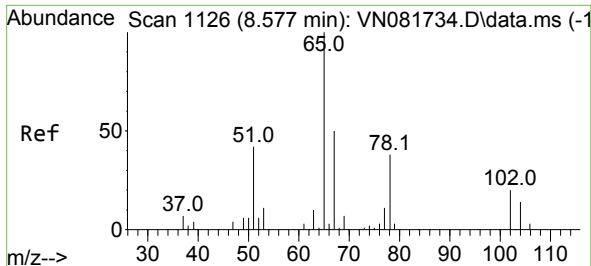
Tgt Ion: 43 Resp: 3552  
Ion Ratio Lower Upper  
43 100  
72 26.3 25.3 37.9



#31  
Cyclohexane  
Concen: 1.271 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.035 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Tgt Ion: 56 Resp: 5473  
Ion Ratio Lower Upper  
56 100  
69 159.9 24.4 36.6#  
84 128.9 77.0 115.4#





#33

1,2-Dichloroethane-d4

Concen: 51.339 ug/l

RT: 8.582 min Scan# 1126

Delta R.T. 0.005 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

Instrument :

MSVOA\_N

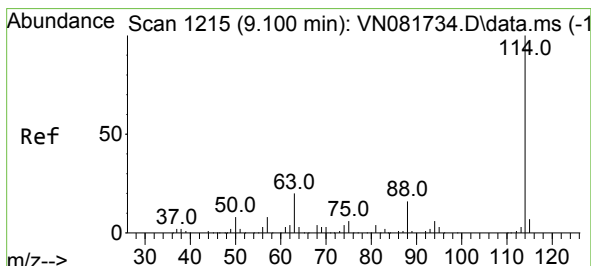
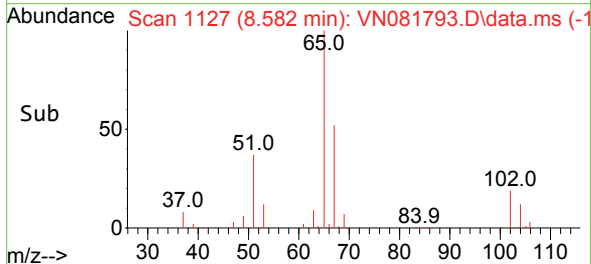
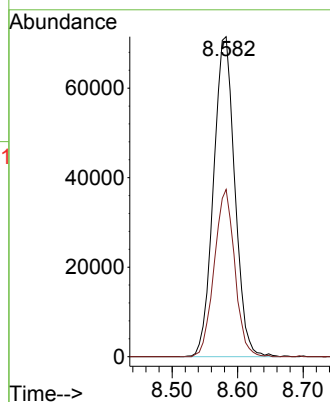
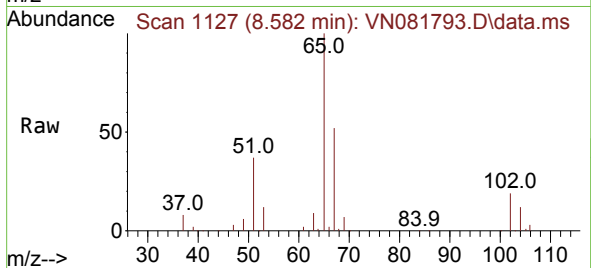
ClientSampleId :

Tgt Ion: 65 Resp: 161103

Ion Ratio Lower Upper

65 100

67 50.4 0.0 103.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

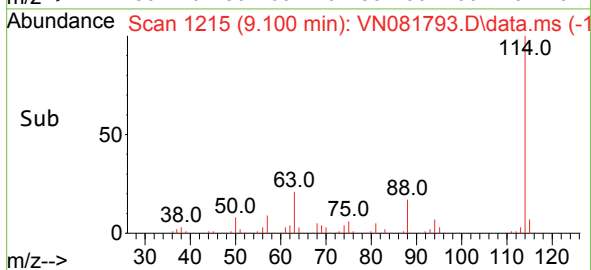
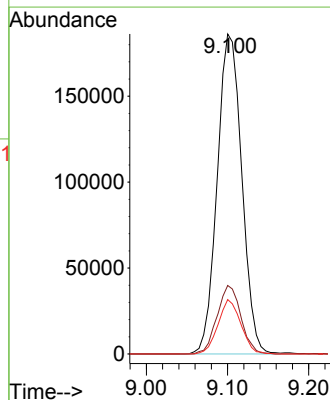
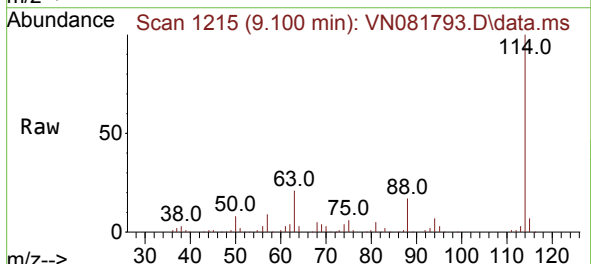
Tgt Ion: 114 Resp: 392133

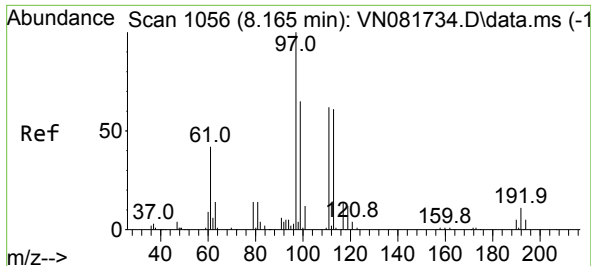
Ion Ratio Lower Upper

114 100

63 21.4 0.0 41.0

88 17.0 0.0 31.4

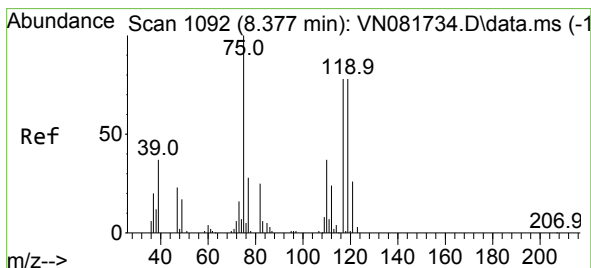
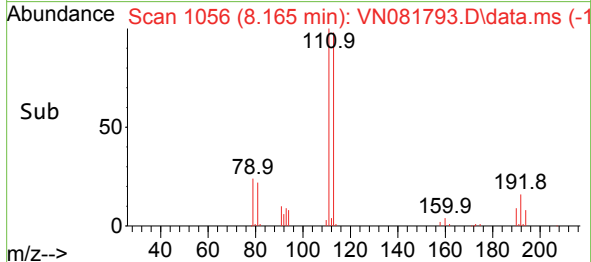
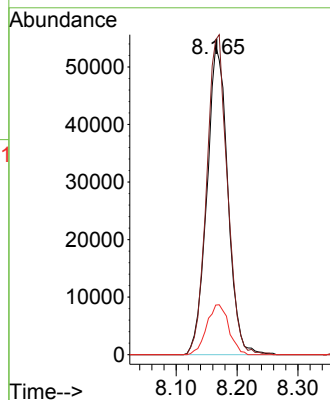
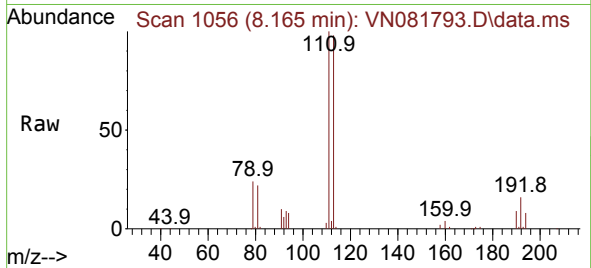




#35  
 Dibromofluoromethane  
 Concen: 49.402 ug/l  
 RT: 8.165 min Scan# 1056  
 Delta R.T. -0.000 min  
 Lab File: VN081793.D  
 Acq: 18 Apr 2024 17:30

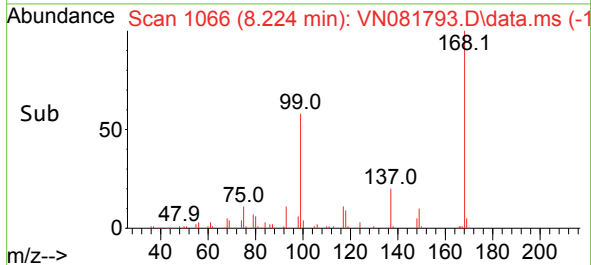
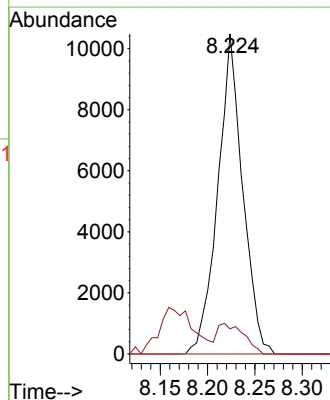
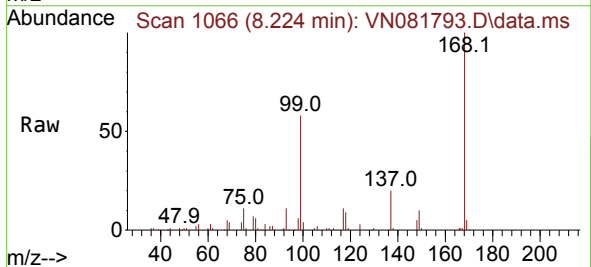
Instrument :  
 MSVOA\_N  
 ClientSampleId :

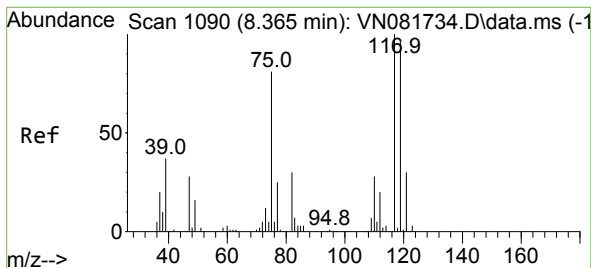
Tgt Ion:113 Resp: 127922  
 Ion Ratio Lower Upper  
 113 100  
 111 102.7 83.4 125.2  
 192 17.1 14.0 21.0



#36  
 1,1-Dichloropropene  
 Concen: 5.301 ug/l  
 RT: 8.224 min Scan# 1066  
 Delta R.T. -0.153 min  
 Lab File: VN081793.D  
 Acq: 18 Apr 2024 17:30

Tgt Ion: 75 Resp: 19125  
 Ion Ratio Lower Upper  
 75 100  
 110 10.0 17.8 53.5#  
 77 0.0 25.0 37.4#





#38

Carbon Tetrachloride

Concen: 5.918 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.141 min

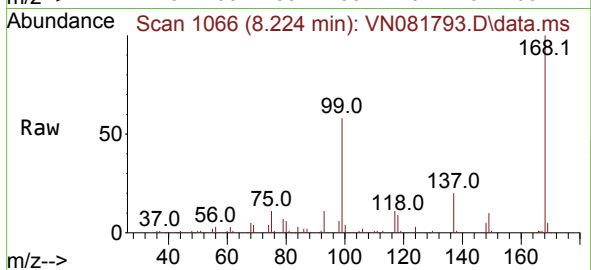
Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

Instrument :

MSVOA\_N

ClientSampleId :



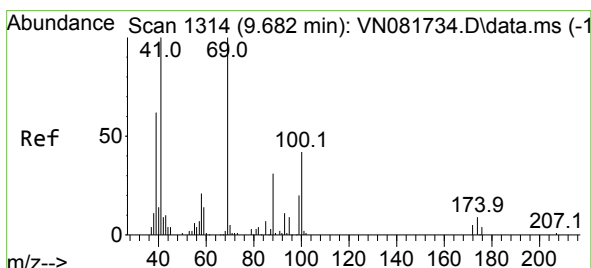
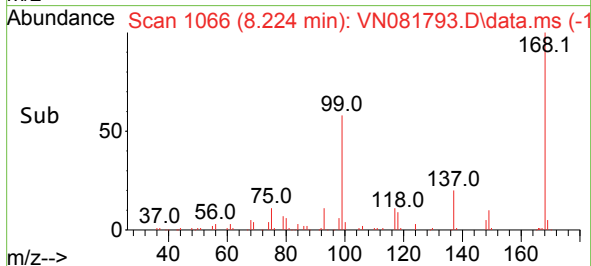
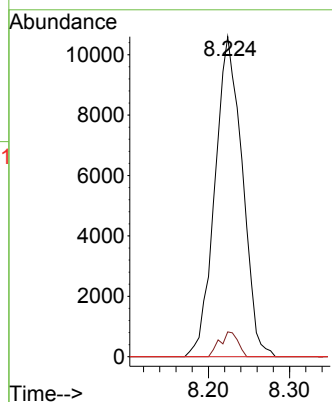
Tgt Ion:117 Resp: 24840

Ion Ratio Lower Upper

117 100

119 7.7 76.5 114.7#

121 0.0 23.9 35.9#



#48

Methyl methacrylate

Concen: 1.209 ug/l

RT: 9.647 min Scan# 1308

Delta R.T. -0.035 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

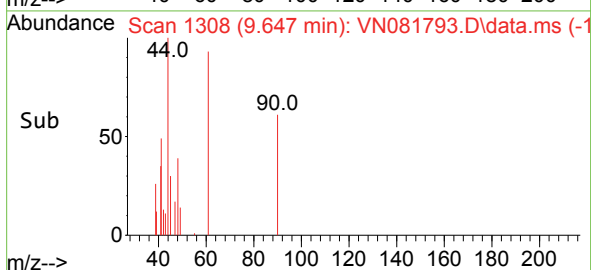
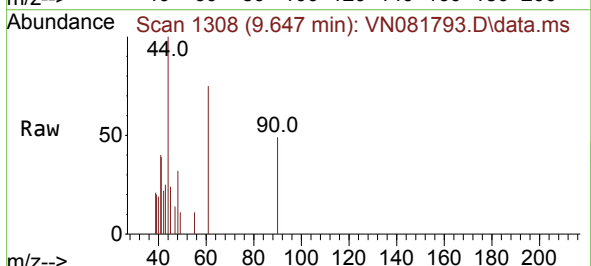
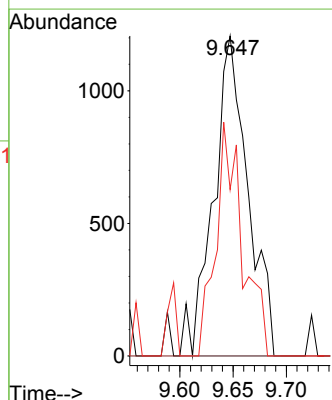
Tgt Ion: 41 Resp: 2726

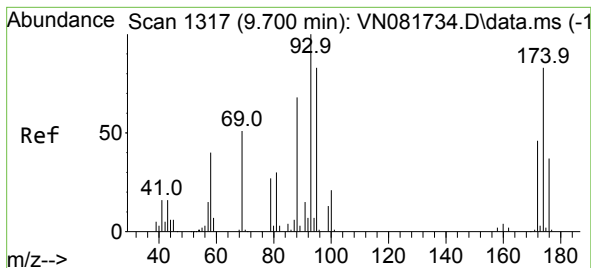
Ion Ratio Lower Upper

41 100

69 0.0 77.9 116.9#

39 56.3 50.9 76.3





#49

1,4-Dioxane

Concen: 1.167 ug/l

RT: 9.706 min Scan# 11

Delta R.T. 0.006 min

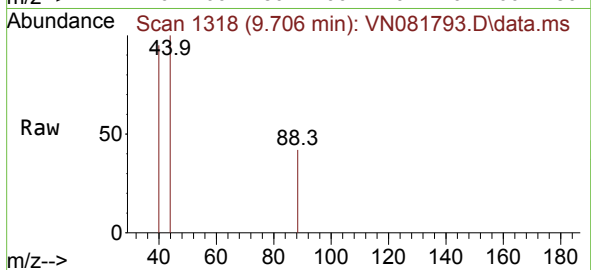
Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

Instrument :

MSVOA\_N

ClientSampleId :



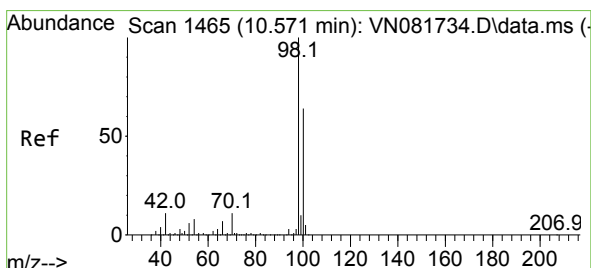
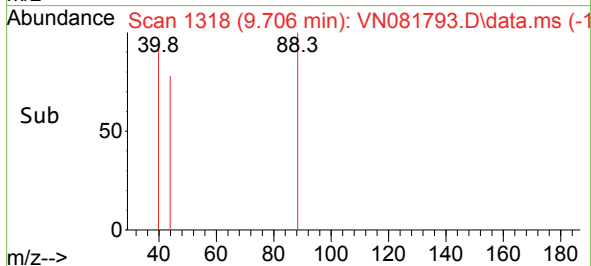
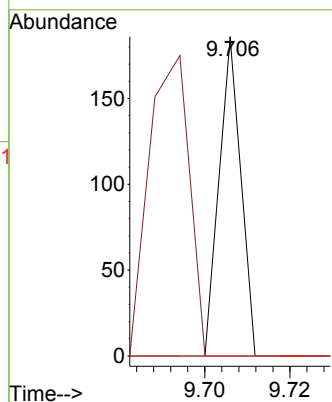
Tgt Ion: 88 Resp: 66

Ion Ratio Lower Upper

88 100

43 0.0 19.0 28.6#

58 0.0 50.6 76.0#



#50

Toluene-d8

Concen: 50.221 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.006 min

Lab File: VN081793.D

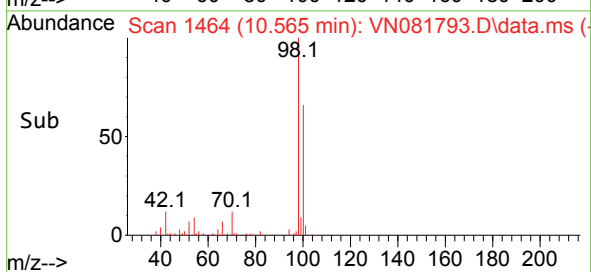
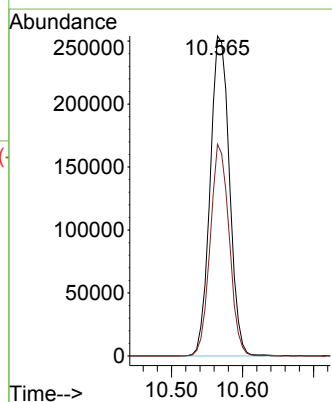
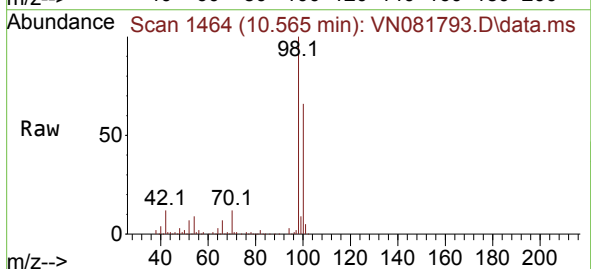
Acq: 18 Apr 2024 17:30

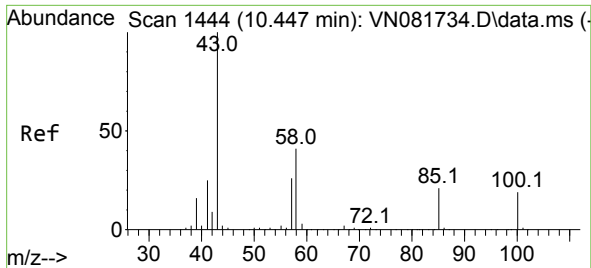
Tgt Ion: 98 Resp: 479078

Ion Ratio Lower Upper

98 100

100 65.0 51.8 77.6

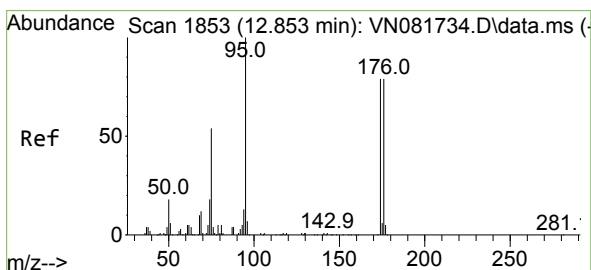
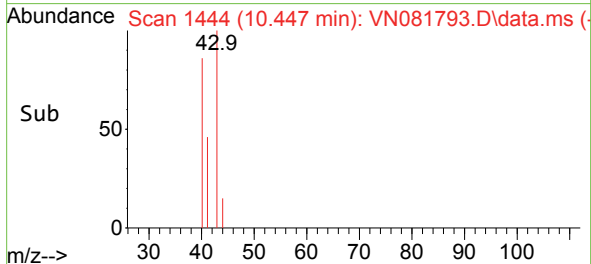
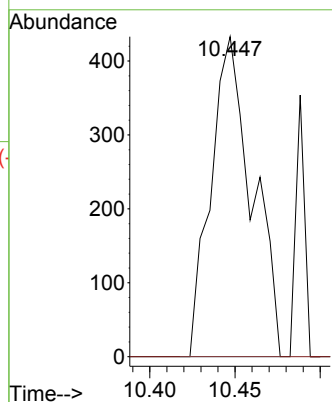
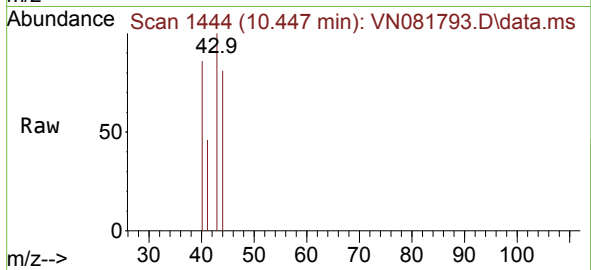




#51  
4-Methyl-2-Pentanone  
Concen: 0.238 ug/l  
RT: 10.447 min Scan# 1444  
Delta R.T. 0.000 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

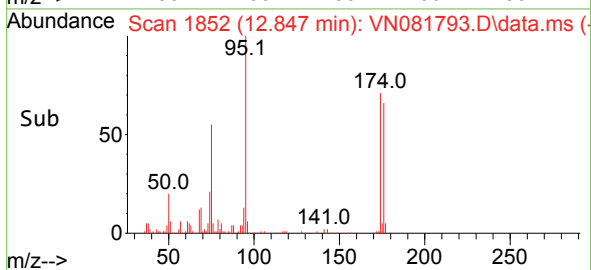
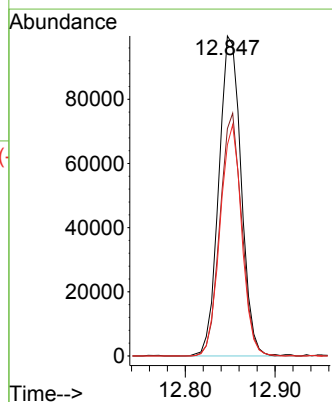
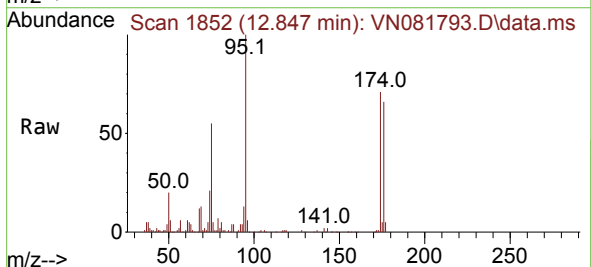
Instrument :  
MSVOA\_N  
ClientSampleId :

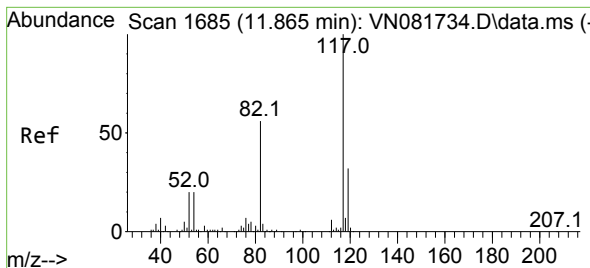
Tgt Ion: 43 Resp: 733  
Ion Ratio Lower Upper  
43 100  
58 0.0 33.2 49.8#



#62  
4-Bromofluorobenzene  
Concen: 52.787 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.006 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Tgt Ion: 95 Resp: 172077  
Ion Ratio Lower Upper  
95 100  
174 74.1 0.0 160.6  
176 70.3 0.0 152.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

Instrument :

MSVOA\_N

ClientSampleId :

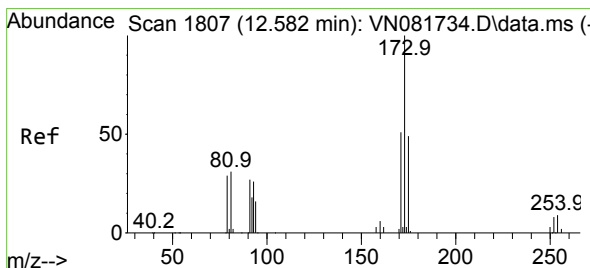
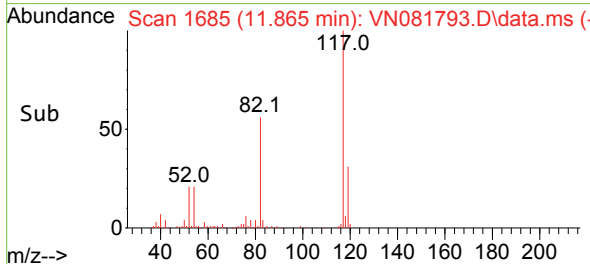
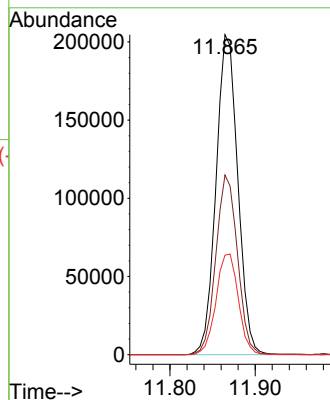
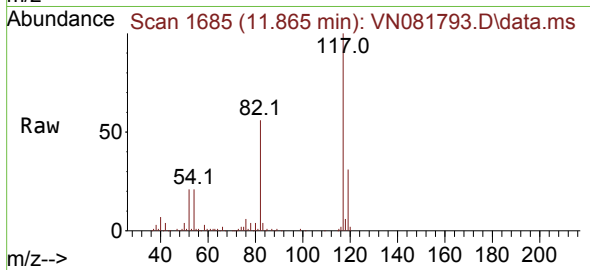
Tgt Ion:117 Resp: 362939

Ion Ratio Lower Upper

117 100

82 56.2 44.6 66.8

119 31.1 25.9 38.9



#71

Bromoform

Concen: 0.962 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. 0.271 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

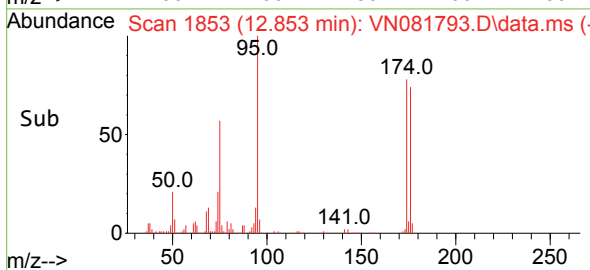
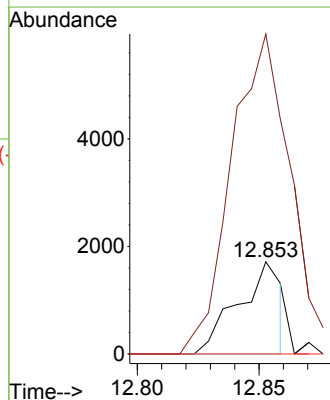
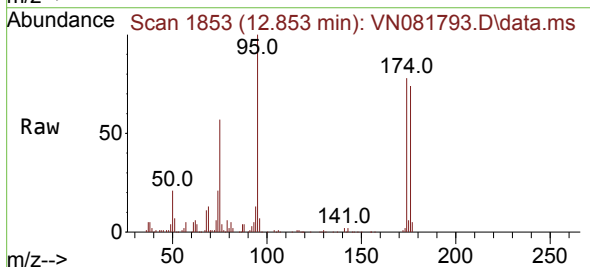
Tgt Ion:173 Resp: 2114

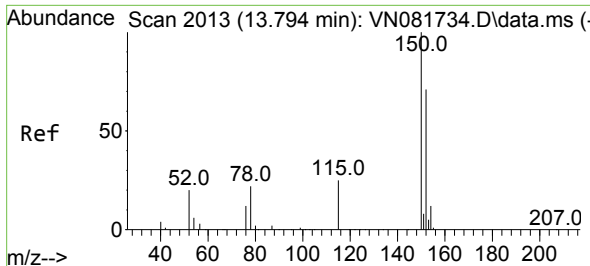
Ion Ratio Lower Upper

173 100

175 392.1 24.6 74.0#

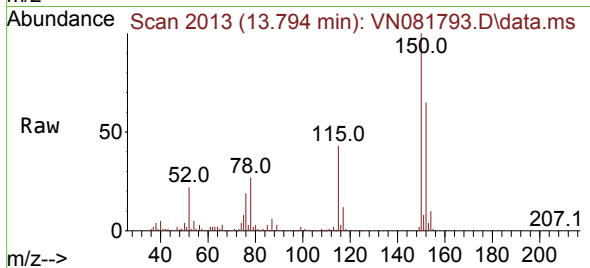
254 0.0 0.0 0.0



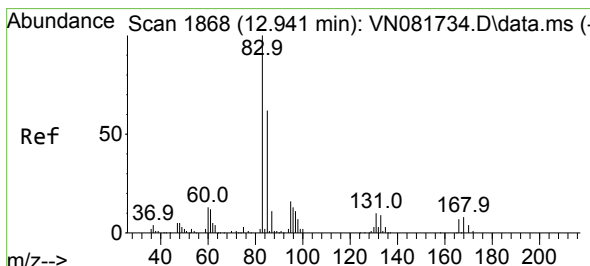
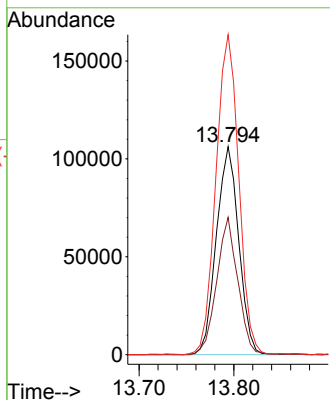
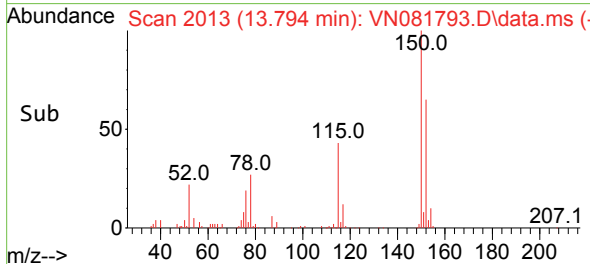


#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 13.794 min Scan# 20  
 Delta R.T. -0.000 min  
 Lab File: VN081793.D  
 Acq: 18 Apr 2024 17:30

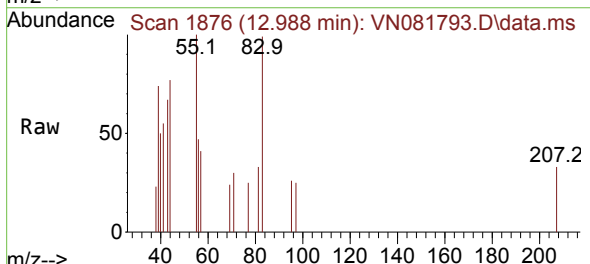
Instrument :  
 MSVOA\_N  
 ClientSampleId :



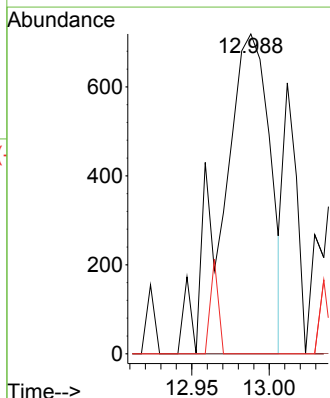
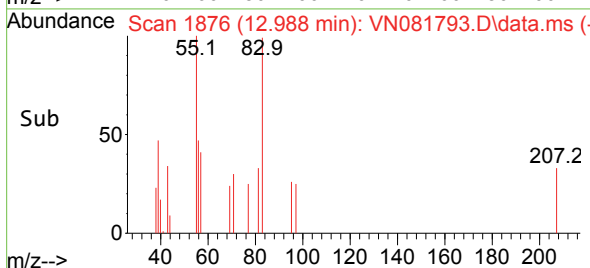
Tgt Ion:152 Resp: 174494  
 Ion Ratio Lower Upper  
 152 100  
 115 62.4 30.4 91.3  
 150 156.6 0.0 353.2

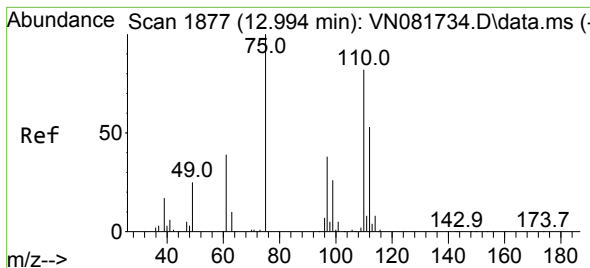


#75  
 1,1,2,2-Tetrachloroethane  
 Concen: 0.406 ug/l  
 RT: 12.988 min Scan# 1876  
 Delta R.T. 0.047 min  
 Lab File: VN081793.D  
 Acq: 18 Apr 2024 17:30



Tgt Ion: 83 Resp: 1561  
 Ion Ratio Lower Upper  
 83 100  
 131 0.0 5.5 16.4#  
 85 0.0 32.9 98.6#





#76

1,2,3-Trichloropropane

Concen: 27.804 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. -0.141 min

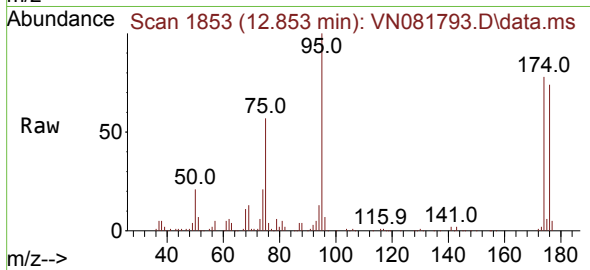
Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

Instrument :

MSVOA\_N

ClientSampleId :

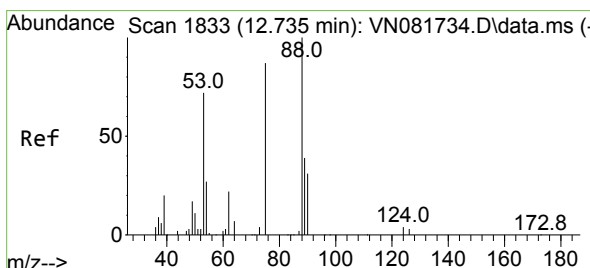
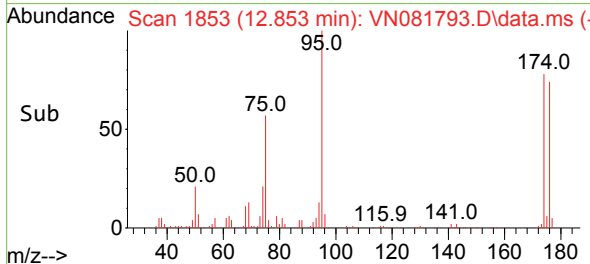
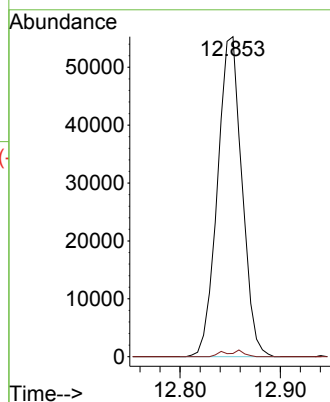


Tgt Ion: 75 Resp: 93567

Ion Ratio Lower Upper

75 100

77 1.5 90.5 271.3#



#81

trans-1,4-Dichloro-2-butene

Concen: 65.611 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. 0.118 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

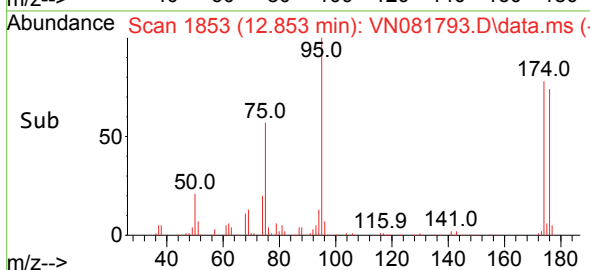
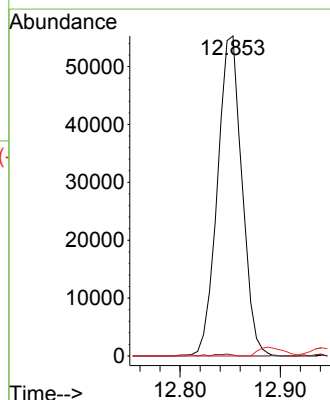
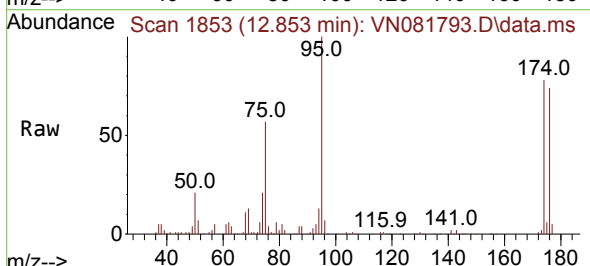
Tgt Ion: 75 Resp: 93567

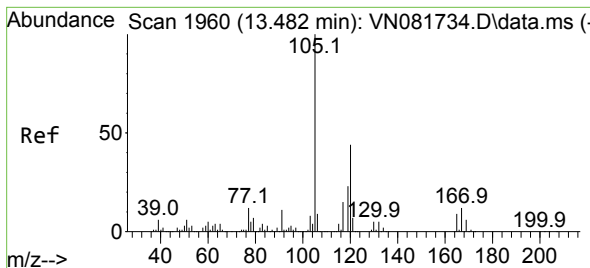
Ion Ratio Lower Upper

75 100

53 0.4 72.9 109.3#

89 0.0 39.1 58.7#





#84

1,2,4-Trimethylbenzene

Concen: 0.821 ug/l

RT: 13.488 min Scan# 1960

Delta R.T. 0.006 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

Instrument :

MSVOA\_N

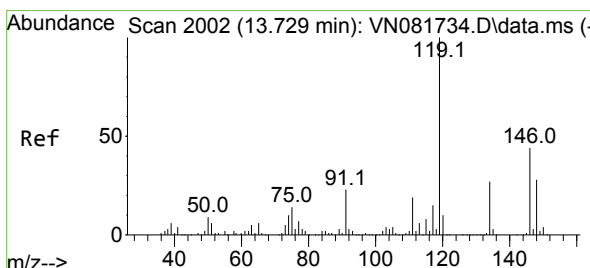
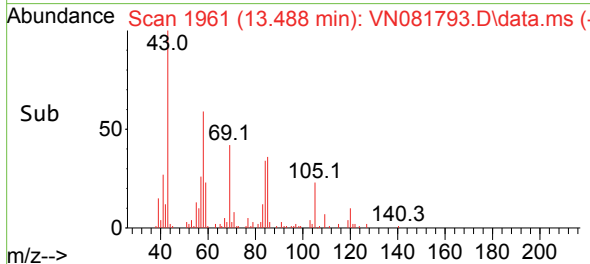
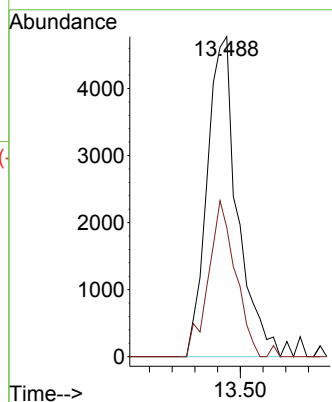
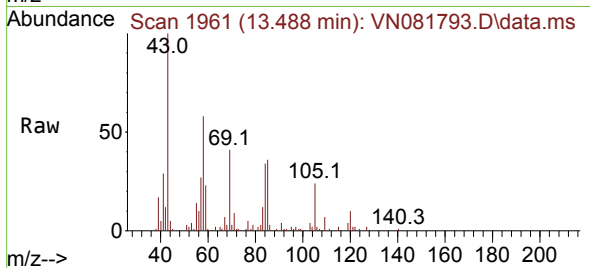
ClientSampleId :

Tgt Ion:105 Resp: 8852

Ion Ratio Lower Upper

105 100

120 43.3 22.9 68.7



#86

p-Isopropyltoluene

Concen: 0.342 ug/l

RT: 13.735 min Scan# 2003

Delta R.T. 0.006 min

Lab File: VN081793.D

Acq: 18 Apr 2024 17:30

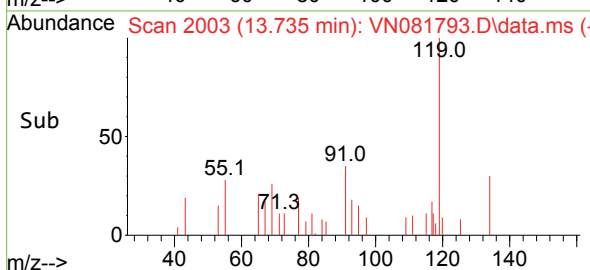
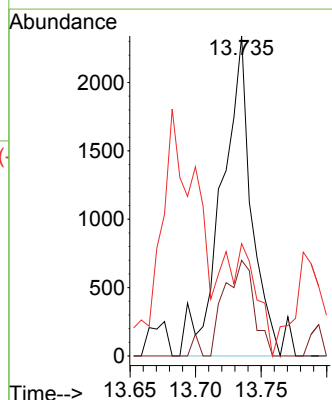
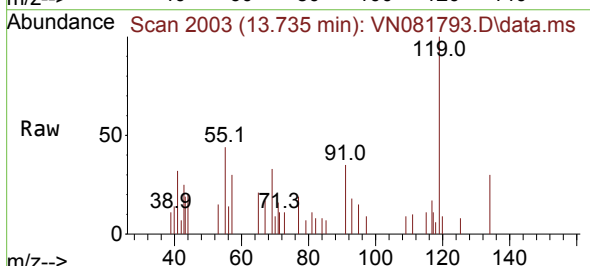
Tgt Ion:119 Resp: 3664

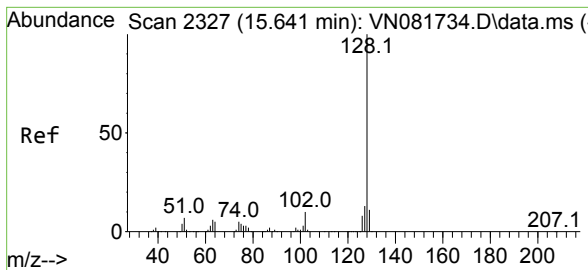
Ion Ratio Lower Upper

119 100

134 30.0 13.2 39.5

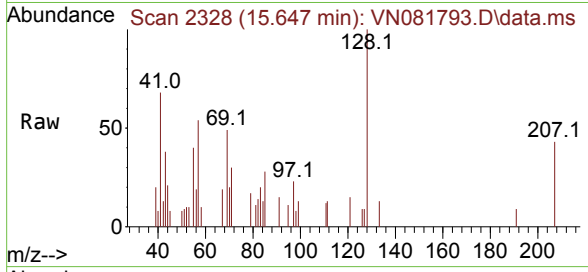
91 0.0 11.8 35.3#





#95  
Naphthalene  
Concen: 0.261 ug/l  
RT: 15.647 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VN081793.D  
Acq: 18 Apr 2024 17:30

Instrument :  
MSVOA\_N  
ClientSampleId :



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 0.0   | 10.1  | 15.1# |
| 129     | 10.5  | 8.9   | 13.3  |

