

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091824\  
 Data File : VN083976.D  
 Acq On : 18 Sep 2024 12:29  
 Operator : JC\MD  
 Sample : VN0918MBL01  
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 4 Sample Multiplier: 1

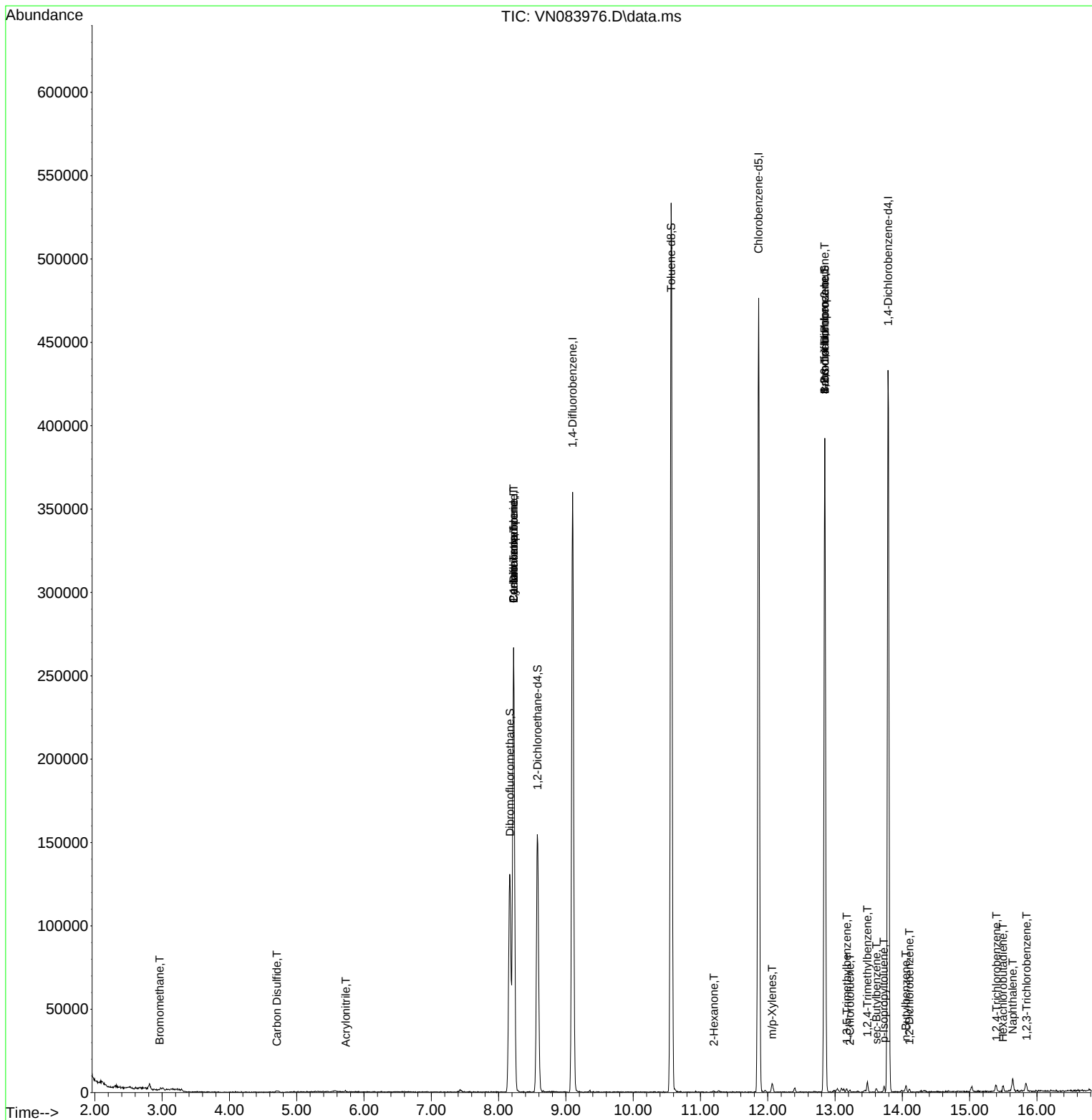
Instrument :  
 MSVOA\_N  
 ClientSampleId :

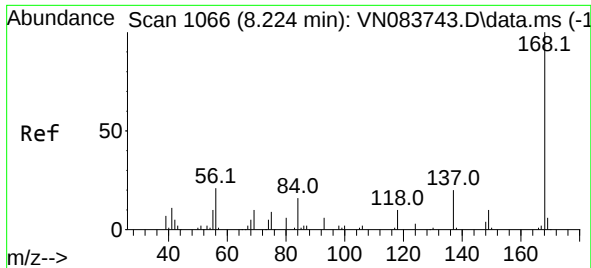
Quant Time: Sep 19 01:30:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N091024W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 11 15:18:56 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|--------|----------|
| -----                         |        |       |          |           |        |          |
| Internal Standards            |        |       |          |           |        |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 177326   | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 299400   | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 251646   | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788 | 152   | 107558   | 50.000    | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577  | 65    | 132866   | 49.691    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery  | =      | 99.380%  |
| 35) Dibromofluoromethane      | 8.171  | 113   | 94255    | 49.175    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery  | =      | 98.360%  |
| 50) Toluene-d8                | 10.565 | 98    | 358397   | 54.088    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery  | =      | 108.180% |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 132265   | 48.381    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery  | =      | 96.760%  |
| Target Compounds              |        |       |          |           |        |          |
|                               |        |       |          |           | Qvalue |          |
| 3) Chloromethane              | 2.359  | 50    | 202      | Below Cal | #      | 41       |
| 5) Bromomethane               | 2.965  | 94    | 380      | 0.293     | ug/l # | 2        |
| 15) Acrylonitrile             | 5.730  | 53    | 393      | 0.404     | ug/l # | 78       |
| 17) Carbon Disulfide          | 4.706  | 76    | 1914     | 0.357     | ug/l # | 75       |
| 31) Cyclohexane               | 8.224  | 56    | 4898     | 1.267     | ug/l # | 34       |
| 36) 1,1-Dichloropropene       | 8.224  | 75    | 16677    | 5.781     | ug/l # | 51       |
| 38) Carbon Tetrachloride      | 8.224  | 117   | 19957    | 6.098     | ug/l # | 16       |
| 59) 2-Hexanone                | 11.200 | 43    | 661      | 0.346     | ug/l # | 39       |
| 68) m/p-Xylenes               | 12.065 | 106   | 1870     | 0.507     | ug/l   | 99       |
| 71) Bromoform                 | 12.847 | 173   | 656      | 0.502     | ug/l # | 1        |
| 76) 1,2,3-Trichloropropane    | 12.847 | 75    | 74946    | 34.532    | ug/l # | 1        |
| 79) 2-Chlorotoluene           | 13.223 | 91    | 1235     | 0.200     | ug/l   | 81       |
| 80) 1,3,5-Trimethylbenzene    | 13.176 | 105   | 1672     | 0.238     | ug/l   | 79       |
| 81) trans-1,4-Dichloro-2-b... | 12.847 | 75    | 74946    | 90.443    | ug/l # | 9        |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105   | 3997     | 0.567     | ug/l   | 93       |
| 85) sec-Butylbenzene          | 13.617 | 105   | 1906     | 0.234     | ug/l   | 90       |
| 86) p-Isopropyltoluene        | 13.723 | 119   | 1593     | 0.233     | ug/l   | 96       |
| 89) n-Butylbenzene            | 14.053 | 91    | 2703     | 0.441     | ug/l   | 91       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146   | 889      | 0.244     | ug/l   | 92       |
| 93) 1,2,4-Trichlorobenzene    | 15.400 | 180   | 1815     | 0.927     | ug/l   | 89       |
| 94) Hexachlorobutadiene       | 15.494 | 225   | 827      | 0.995     | ug/l   | 91       |
| 95) Naphthalene               | 15.641 | 128   | 8084     | 1.357     | ug/l # | 96       |
| 96) 1,2,3-Trichlorobenzene    | 15.847 | 180   | 1915     | 1.023     | ug/l   | 99       |
| -----                         |        |       |          |           |        |          |

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

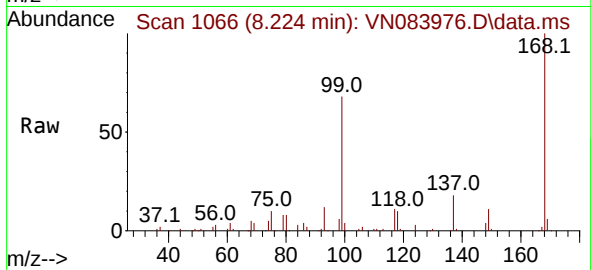
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Quant Title : SW846 8260  
QLast Update : Wed Sep 11 15:18:56 2024  
Response via : Initial Calibration



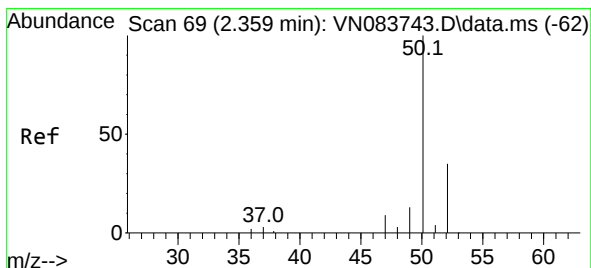
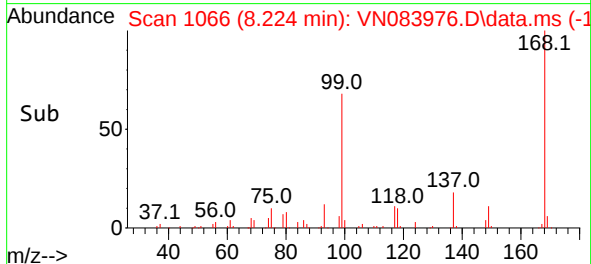
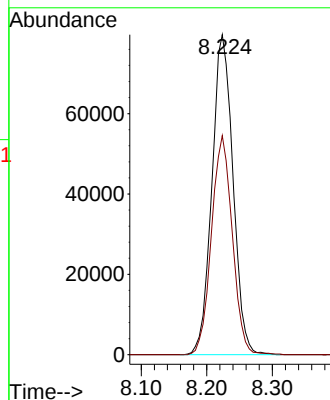


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Instrument :  
MSVOA\_N  
ClientSampleId :

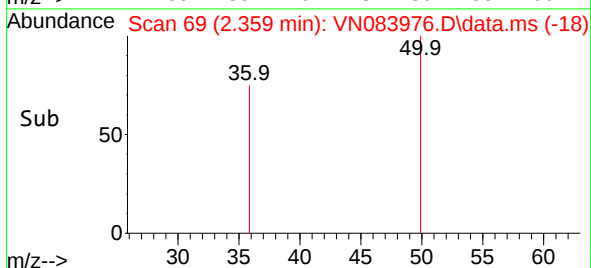
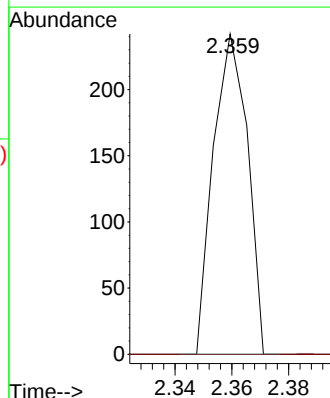
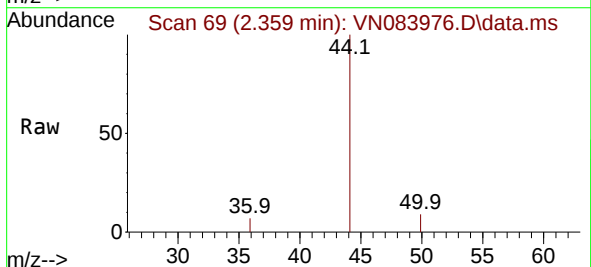


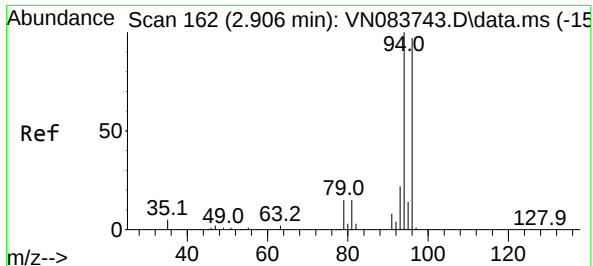
Tgt Ion:168 Resp: 177326  
Ion Ratio Lower Upper  
168 100  
99 68.4 54.2 81.2



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.359 min Scan# 69  
Delta R.T. 0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Tgt Ion: 50 Resp: 202  
Ion Ratio Lower Upper  
50 100  
52 0.0 27.2 40.8#

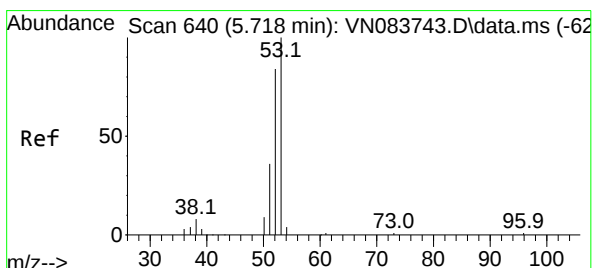
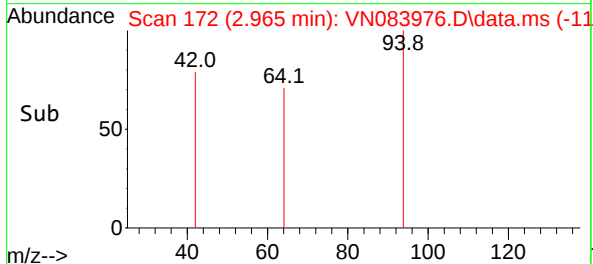
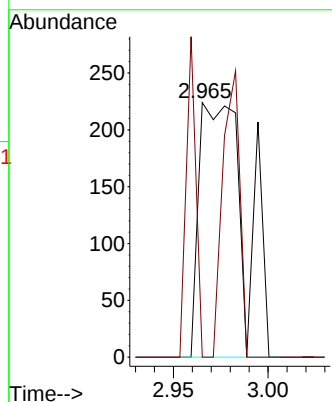
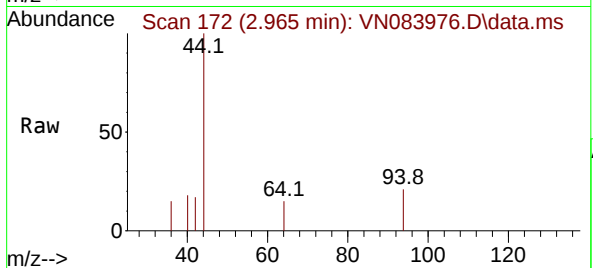




#5  
Bromomethane  
Concen: 0.293 ug/l  
RT: 2.965 min Scan# 11  
Delta R.T. 0.059 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

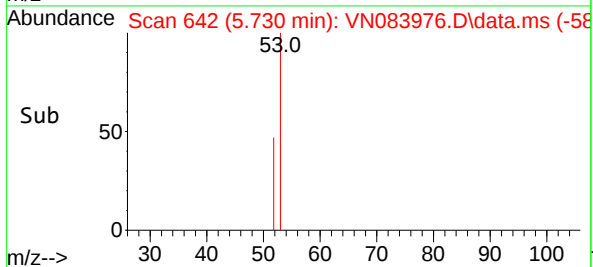
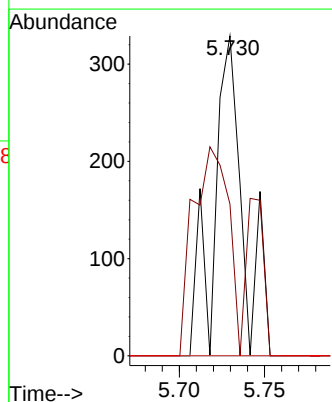
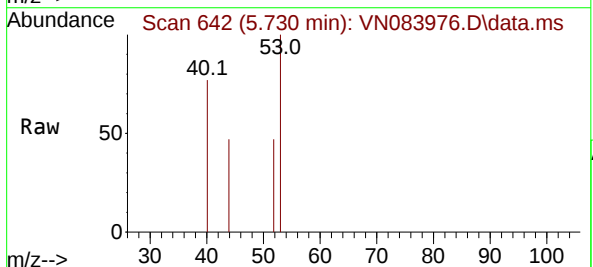
Instrument :  
MSVOA\_N  
ClientSampleId :

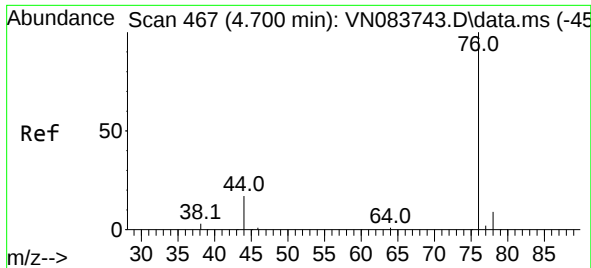
Tgt Ion: 94 Resp: 380  
Ion Ratio Lower Upper  
94 100  
96 0.0 76.0 114.0#



#15  
Acrylonitrile  
Concen: 0.404 ug/l  
RT: 5.730 min Scan# 642  
Delta R.T. 0.012 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

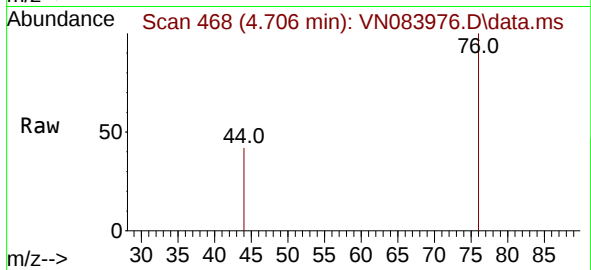
Tgt Ion: 53 Resp: 393  
Ion Ratio Lower Upper  
53 100  
52 79.4 66.1 99.1  
51 0.0 29.6 44.4#



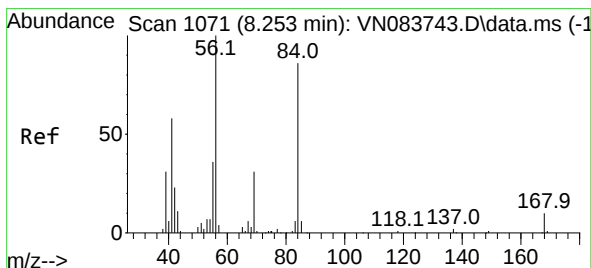
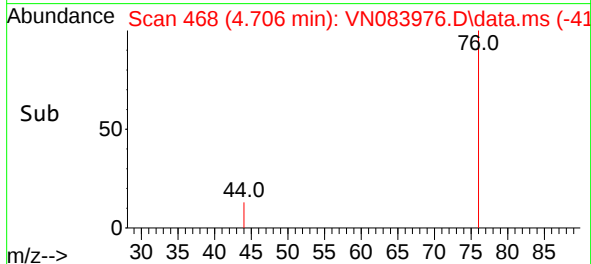
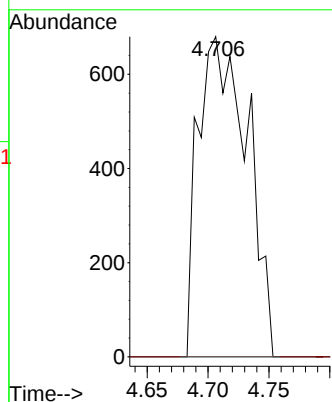


#17  
Carbon Disulfide  
Concen: 0.357 ug/l  
RT: 4.706 min Scan# 41  
Delta R.T. 0.006 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Instrument :  
MSVOA\_N  
ClientSampleId :

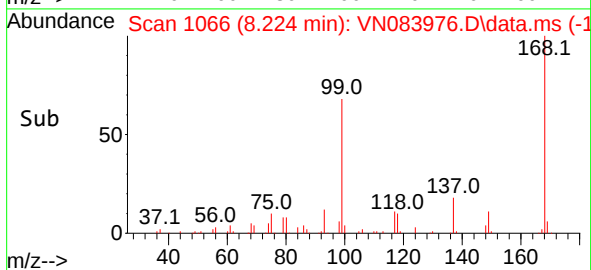
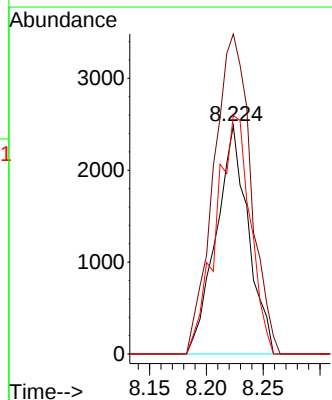
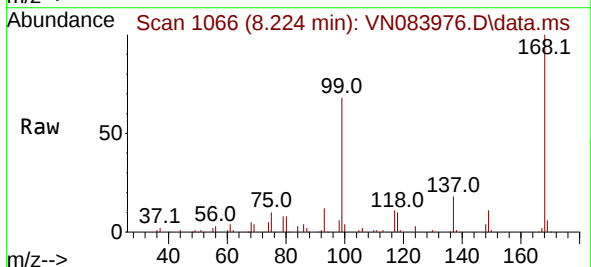


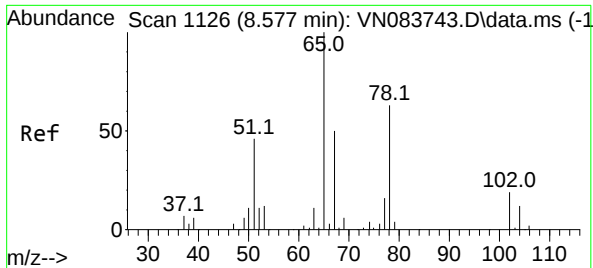
Tgt Ion: 76 Resp: 1914  
Ion Ratio Lower Upper  
76 100  
78 0.0 7.1 10.7#



#31  
Cyclohexane  
Concen: 1.267 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.029 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Tgt Ion: 56 Resp: 4898  
Ion Ratio Lower Upper  
56 100  
69 140.1 26.9 40.3#  
84 104.4 69.2 103.8#





#33

1,2-Dichloroethane-d4

Concen: 49.691 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

Instrument :

MSVOA\_N

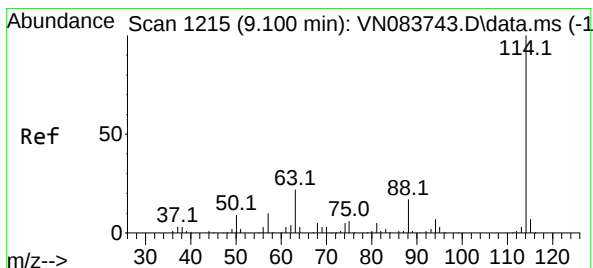
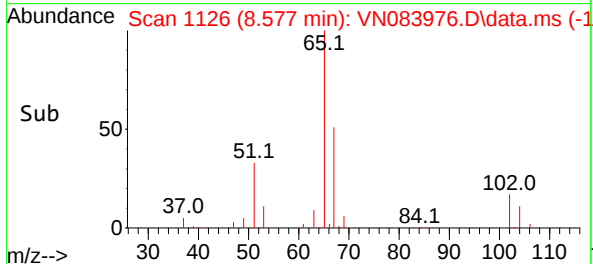
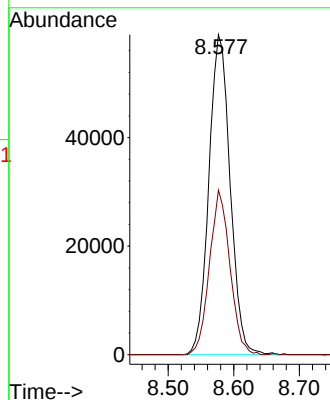
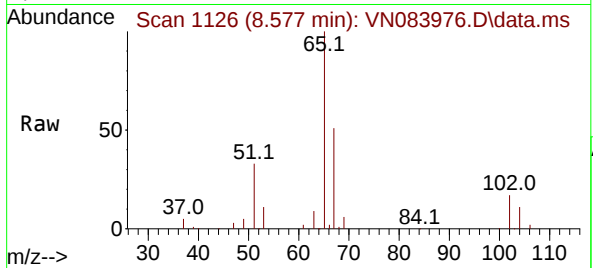
ClientSampleId :

Tgt Ion: 65 Resp: 132866

Ion Ratio Lower Upper

65 100

67 49.4 0.0 100.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

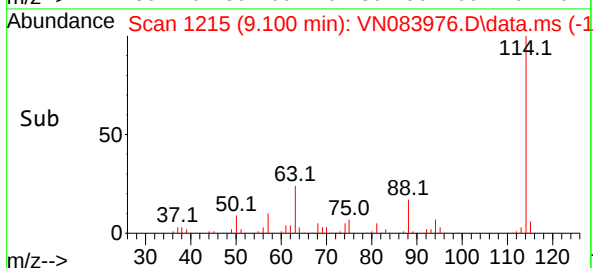
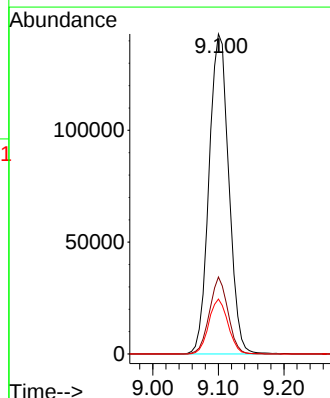
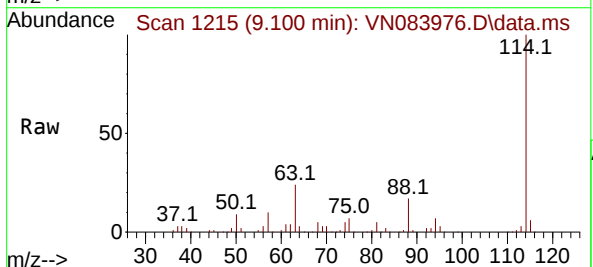
Tgt Ion: 114 Resp: 299400

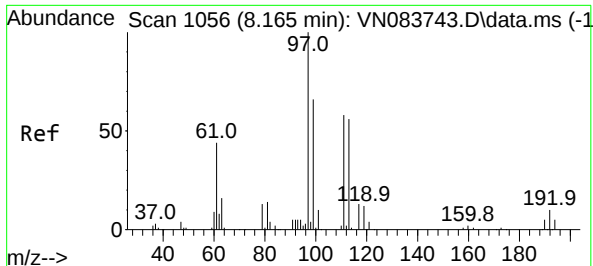
Ion Ratio Lower Upper

114 100

63 24.0 0.0 43.4

88 17.1 0.0 32.6





#35

Dibromofluoromethane

Concen: 49.175 ug/l

RT: 8.171 min Scan# 1056

Delta R.T. 0.006 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

Instrument :

MSVOA\_N

ClientSampleId :

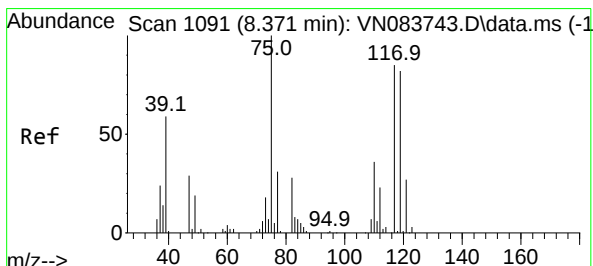
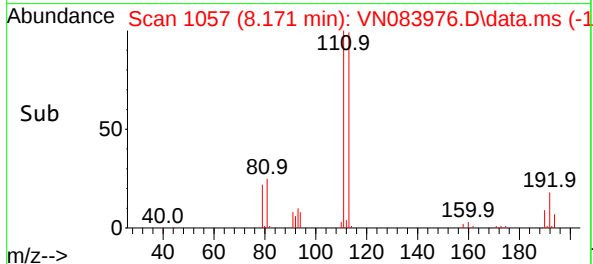
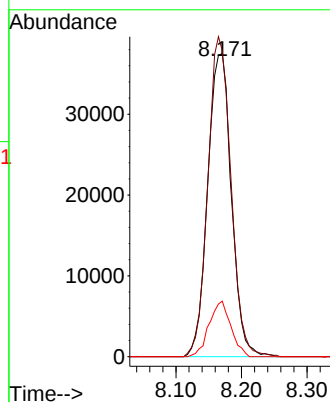
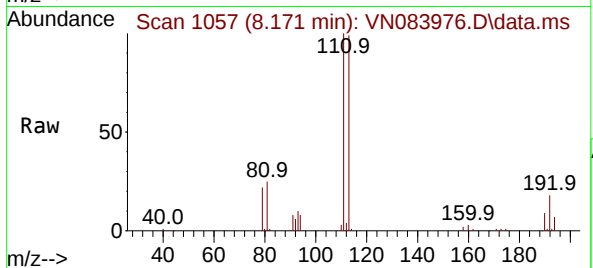
Tgt Ion:113 Resp: 94255

Ion Ratio Lower Upper

113 100

111 102.7 82.6 124.0

192 16.9 14.3 21.5



#36

1,1-Dichloropropene

Concen: 5.781 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.147 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

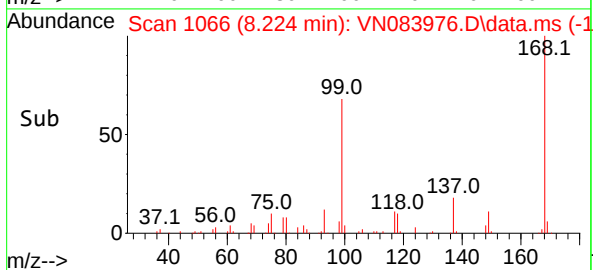
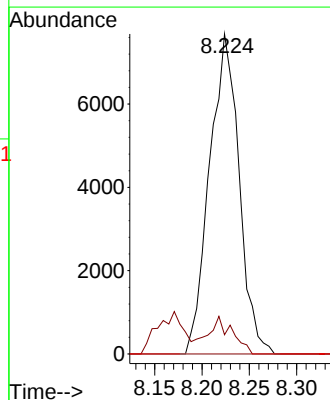
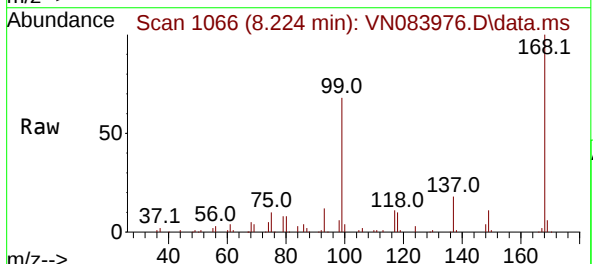
Tgt Ion: 75 Resp: 16677

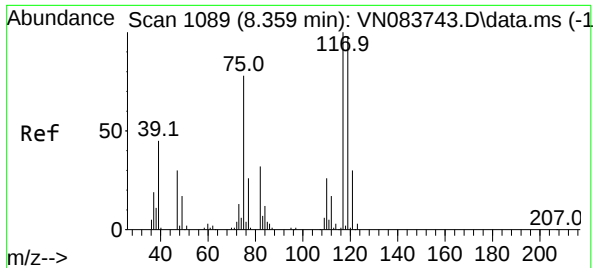
Ion Ratio Lower Upper

75 100

110 9.3 16.7 50.1#

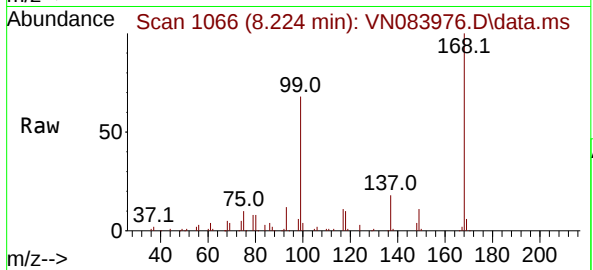
77 0.0 25.2 37.8#



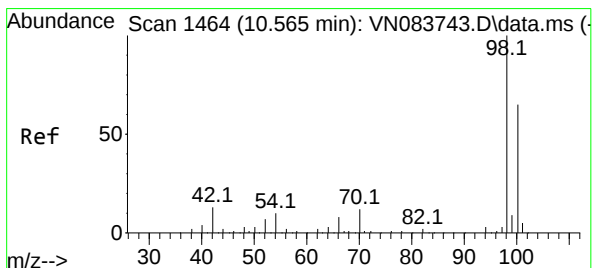
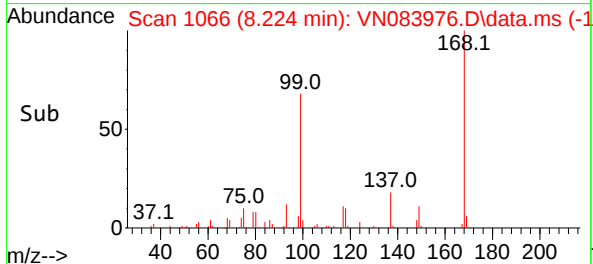
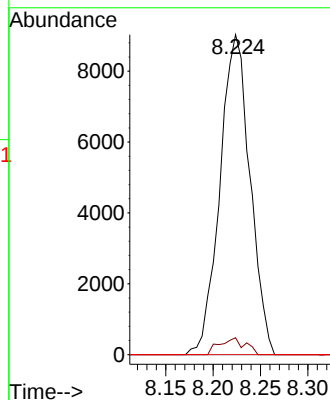


#38  
Carbon Tetrachloride  
Concen: 6.098 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.135 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Instrument :  
MSVOA\_N  
ClientSampleId :

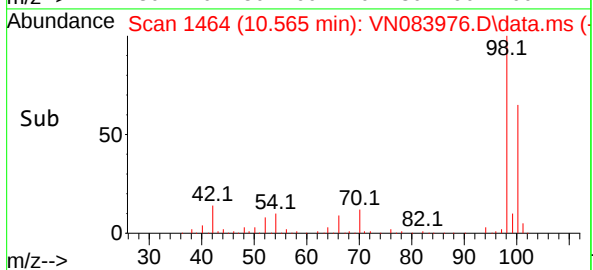
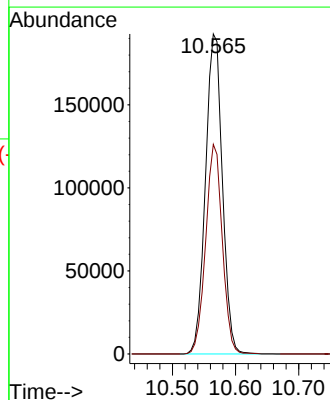
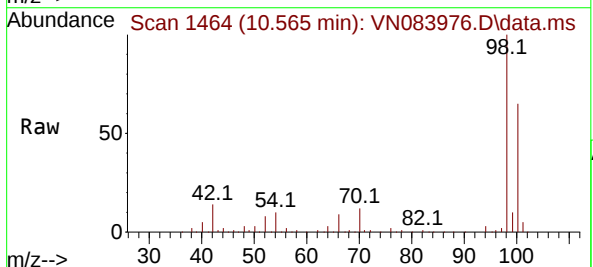


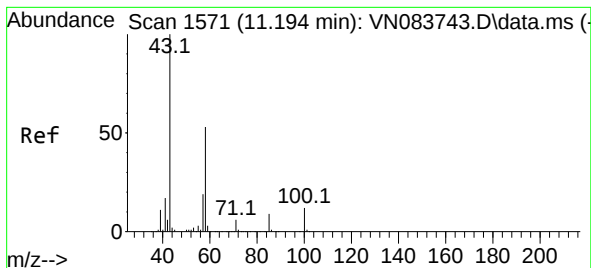
Tgt Ion:117 Resp: 19957  
Ion Ratio Lower Upper  
117 100  
119 5.3 76.1 114.1#  
121 0.0 24.1 36.1#



#50  
Toluene-d8  
Concen: 54.088 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Tgt Ion: 98 Resp: 358397  
Ion Ratio Lower Upper  
98 100  
100 64.5 52.0 78.0

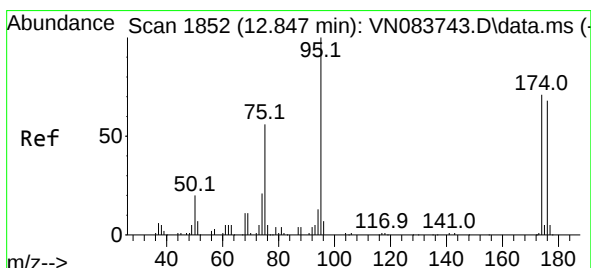
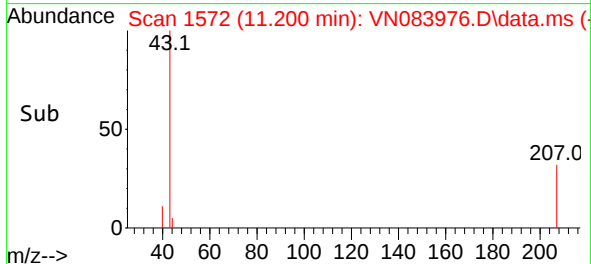
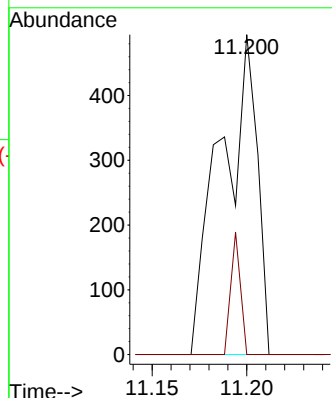
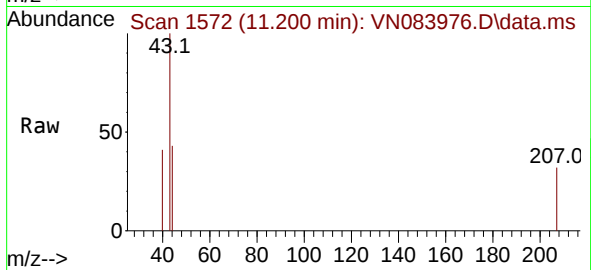




#59  
2-Hexanone  
Concen: 0.346 ug/l  
RT: 11.200 min Scan# 1571  
Delta R.T. 0.006 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

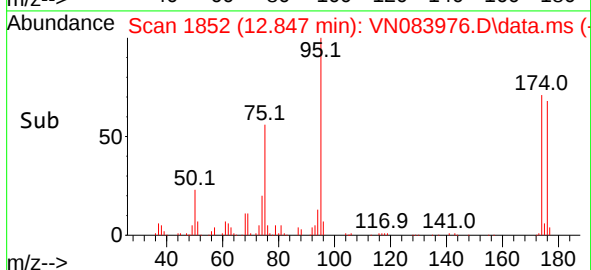
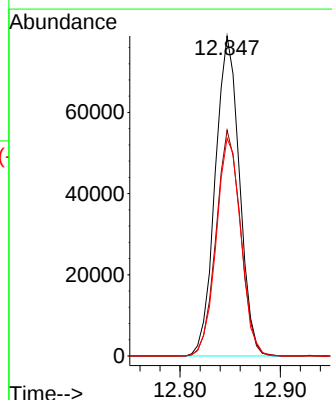
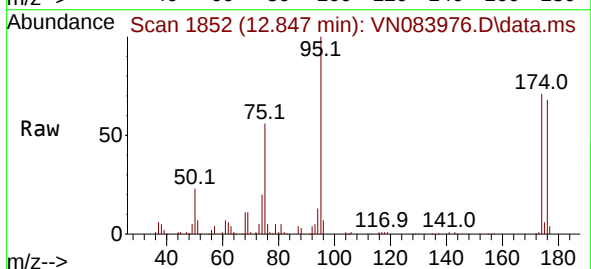
Instrument :  
MSVOA\_N  
ClientSampleId :

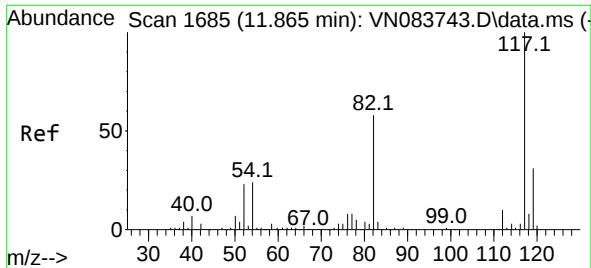
Tgt Ion: 43 Resp: 661  
Ion Ratio Lower Upper  
43 100  
58 10.1 27.2 81.5#



#62  
4-Bromofluorobenzene  
Concen: 48.381 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

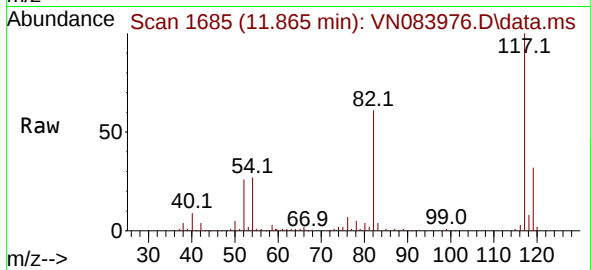
Tgt Ion: 95 Resp: 132265  
Ion Ratio Lower Upper  
95 100  
174 71.0 0.0 139.8  
176 69.2 0.0 131.4



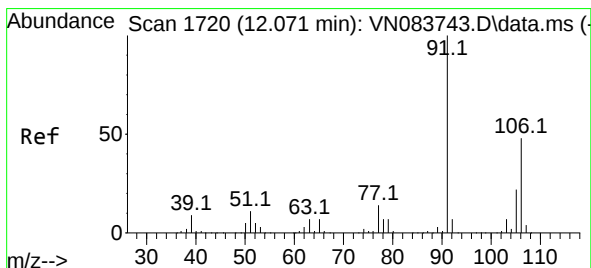
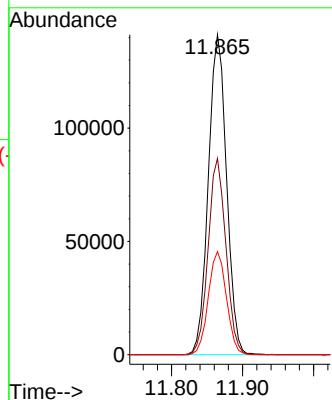
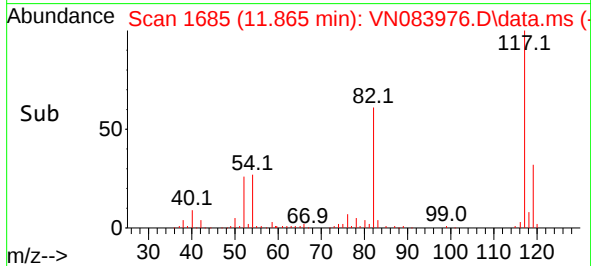


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1719  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Instrument :  
MSVOA\_N  
ClientSampleId :

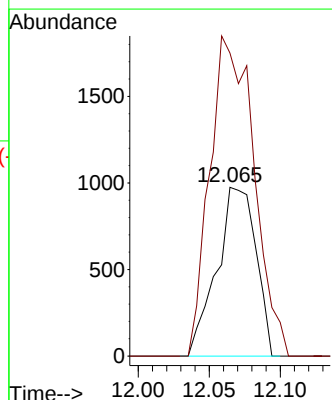
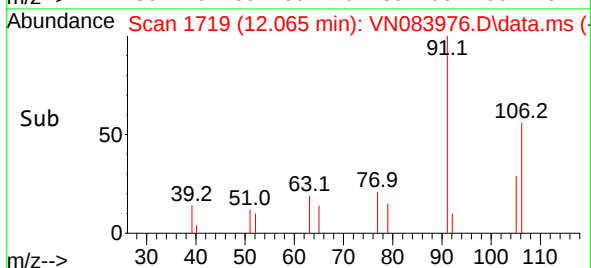
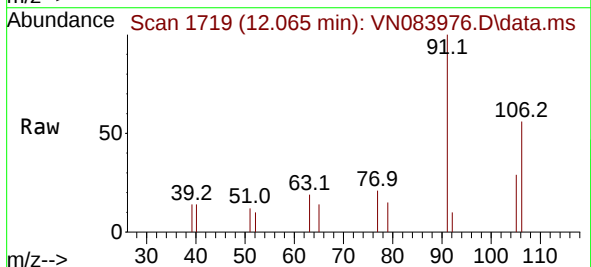


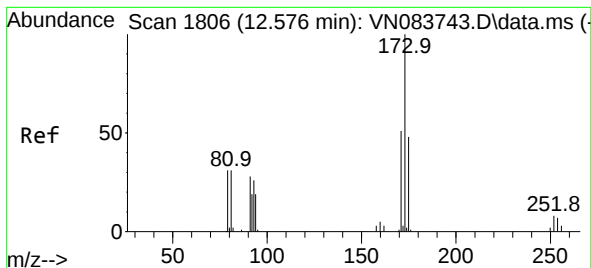
Tgt Ion:117 Resp: 251646  
Ion Ratio Lower Upper  
117 100  
82 61.4 47.4 71.0  
119 32.2 26.3 39.5



#68  
m/p-Xylenes  
Concen: 0.507 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. -0.006 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Tgt Ion:106 Resp: 1870  
Ion Ratio Lower Upper  
106 100  
91 213.4 169.2 253.8





#71

Bromoform

Concen: 0.502 ug/l

RT: 12.847 min Scan# 1806

Delta R.T. 0.271 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

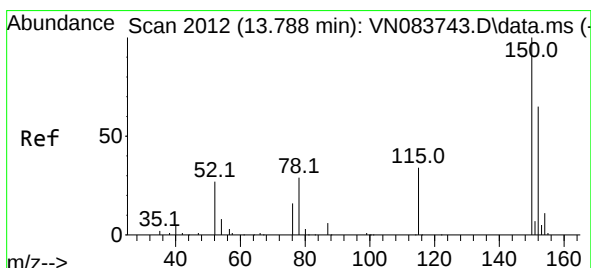
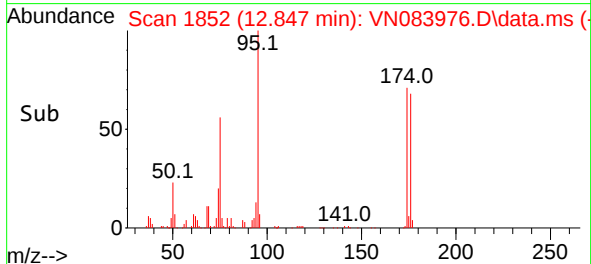
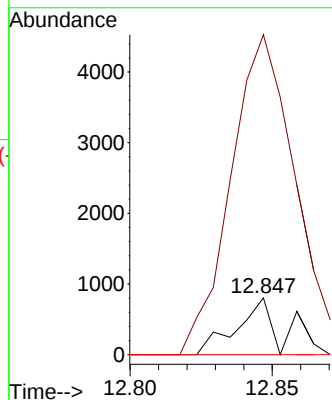
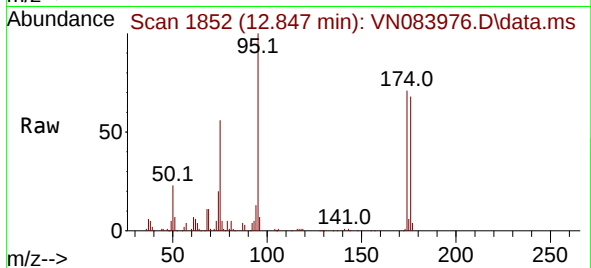
Instrument :

MSVOA\_N

ClientSampleId :

Tgt Ion:173 Resp: 656

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 173 | 100   |       |       |
| 175 | 860.4 | 24.1  | 72.2# |
| 254 | 0.0   | 0.0   | 0.0   |



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 1212

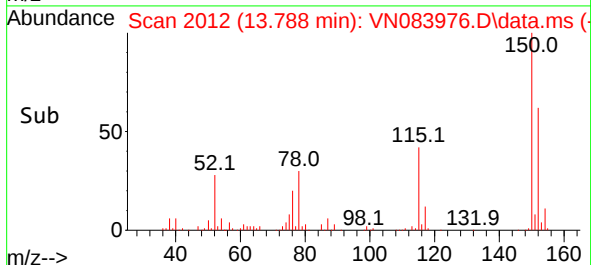
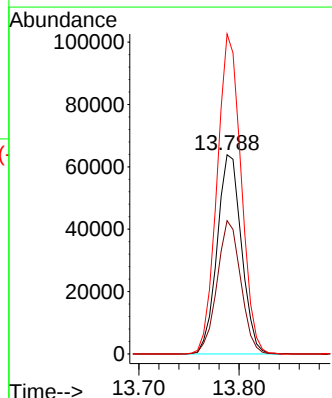
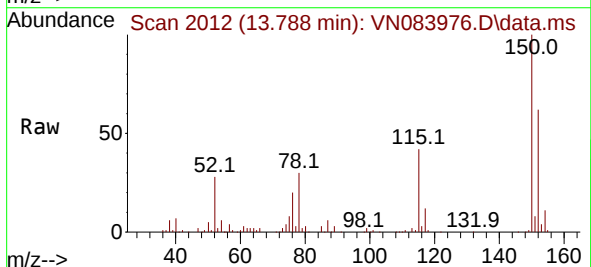
Delta R.T. -0.000 min

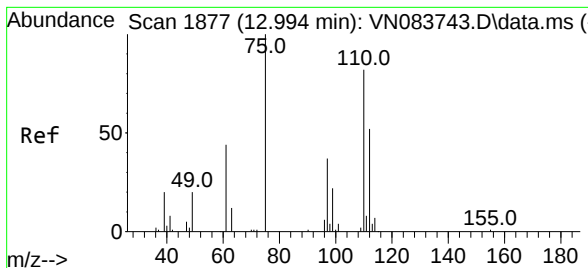
Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

Tgt Ion:152 Resp: 107558

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 152 | 100   |       |       |
| 115 | 65.2  | 32.2  | 96.6  |
| 150 | 158.8 | 0.0   | 348.6 |





#76

1,2,3-Trichloropropane

Concen: 34.532 ug/l

RT: 12.847 min Scan# 11

Delta R.T. -0.147 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

Instrument :

MSVOA\_N

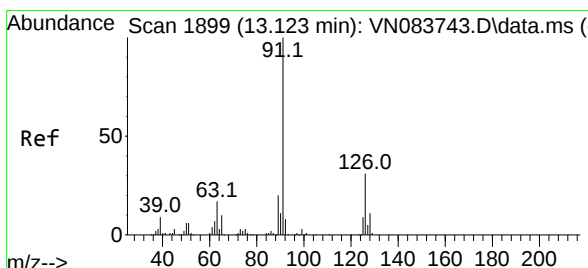
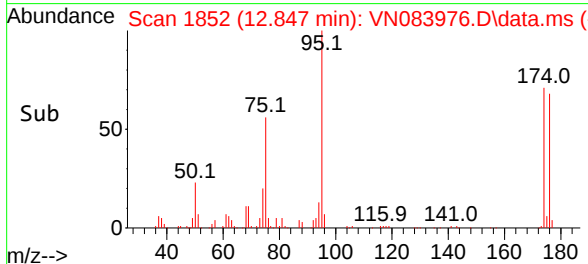
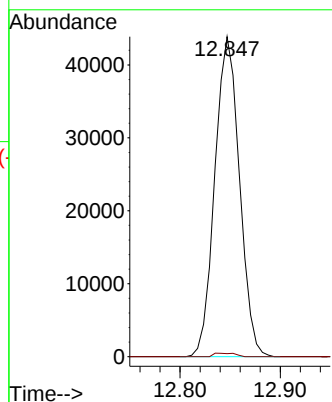
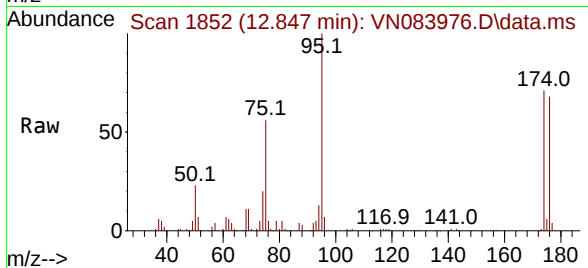
ClientSampleId :

Tgt Ion: 75 Resp: 74946

Ion Ratio Lower Upper

75 100

77 1.0 95.2 285.6#



#79

2-Chlorotoluene

Concen: 0.200 ug/l

RT: 13.223 min Scan# 1916

Delta R.T. 0.100 min

Lab File: VN083976.D

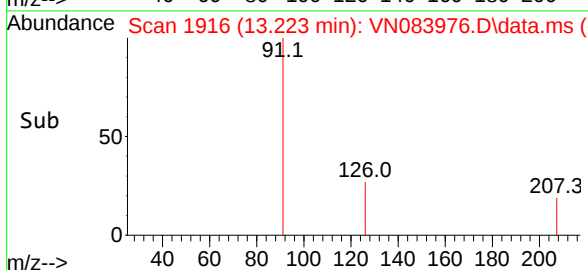
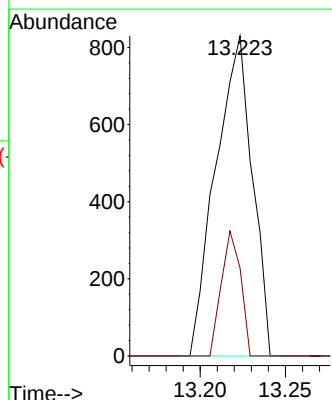
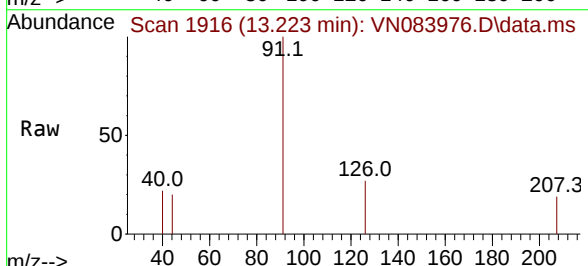
Acq: 18 Sep 2024 12:29

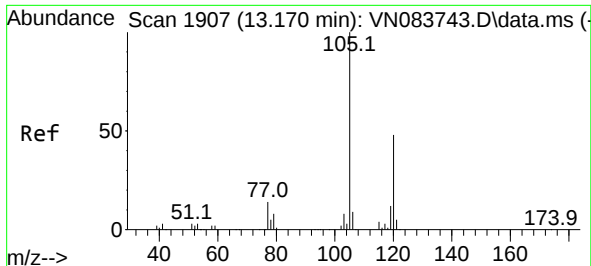
Tgt Ion: 91 Resp: 1235

Ion Ratio Lower Upper

91 100

126 20.6 15.4 46.2

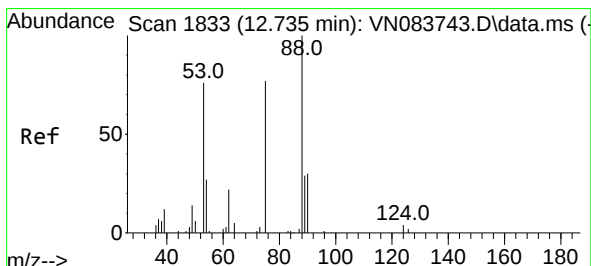
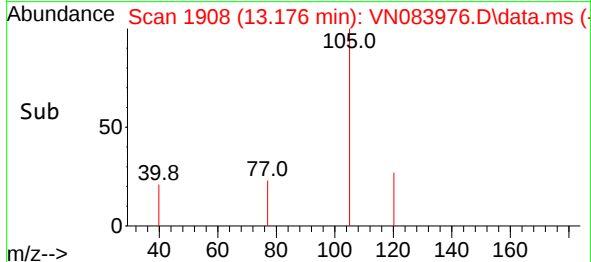
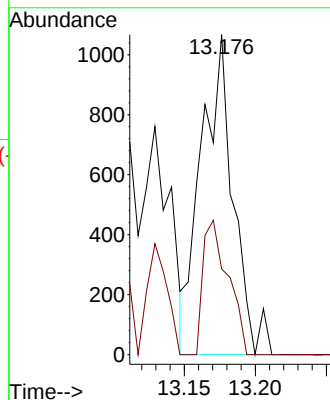
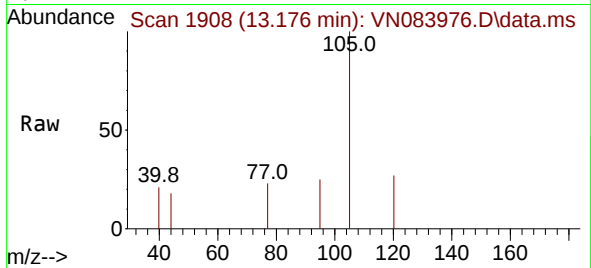




#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.238 ug/l  
 RT: 13.176 min Scan# 1907  
 Delta R.T. 0.006 min  
 Lab File: VN083976.D  
 Acq: 18 Sep 2024 12:29

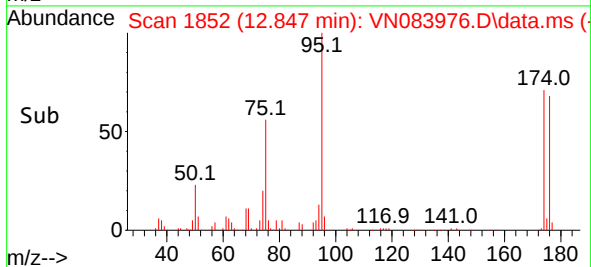
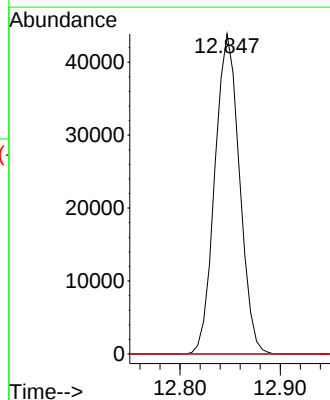
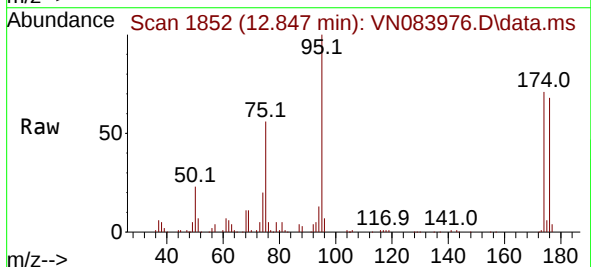
Instrument :  
 MSVOA\_N  
 ClientSampleId :

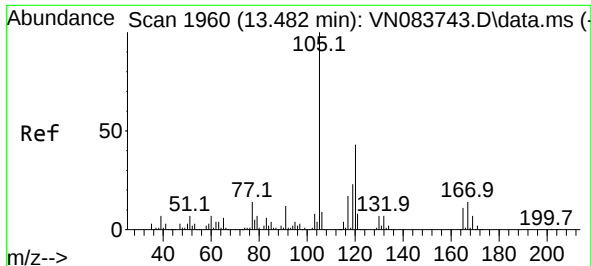
Tgt Ion:105 Resp: 1672  
 Ion Ratio Lower Upper  
 105 100  
 120 32.8 23.4 70.3



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 90.443 ug/l  
 RT: 12.847 min Scan# 1852  
 Delta R.T. 0.112 min  
 Lab File: VN083976.D  
 Acq: 18 Sep 2024 12:29

Tgt Ion: 75 Resp: 74946  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 81.2 121.8#  
 89 0.0 35.7 53.5#

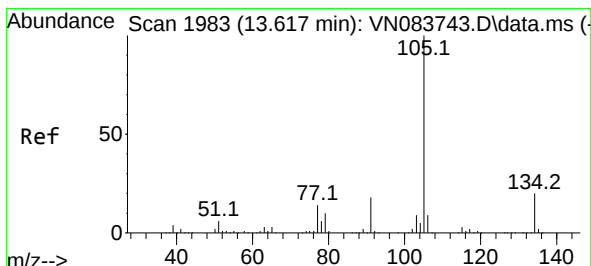
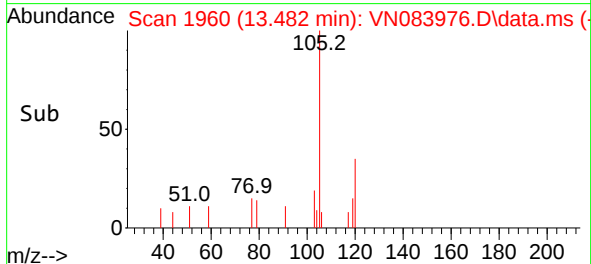
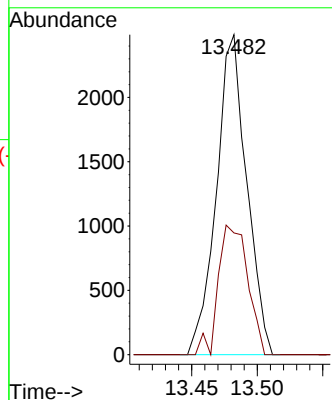
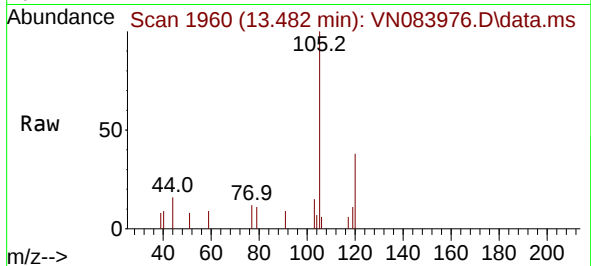




#84  
1,2,4-Trimethylbenzene  
Concen: 0.567 ug/l  
RT: 13.482 min Scan# 1960  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

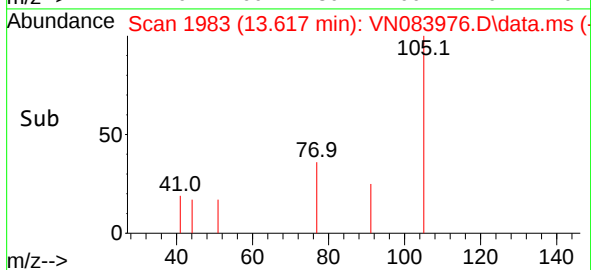
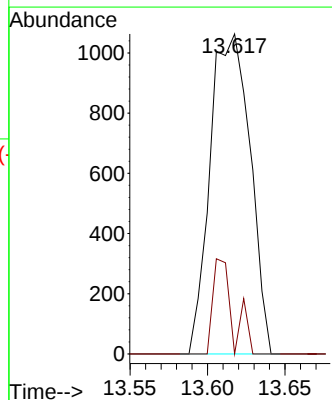
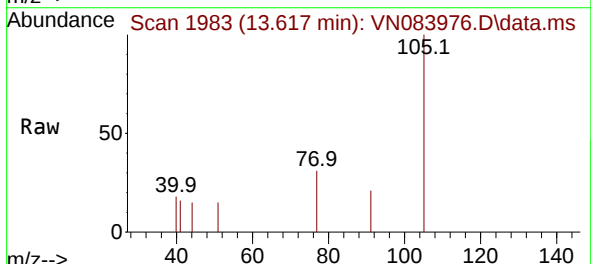
Instrument :  
MSVOA\_N  
ClientSampleId :

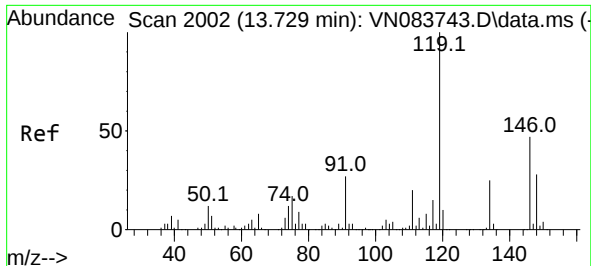
Tgt Ion:105 Resp: 3997  
Ion Ratio Lower Upper  
105 100  
120 39.2 21.8 65.4



#85  
sec-Butylbenzene  
Concen: 0.234 ug/l  
RT: 13.617 min Scan# 1983  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Tgt Ion:105 Resp: 1906  
Ion Ratio Lower Upper  
105 100  
134 14.8 9.7 29.1

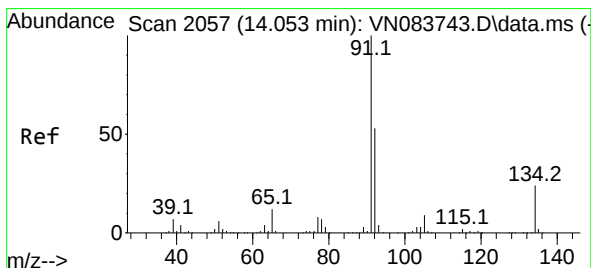
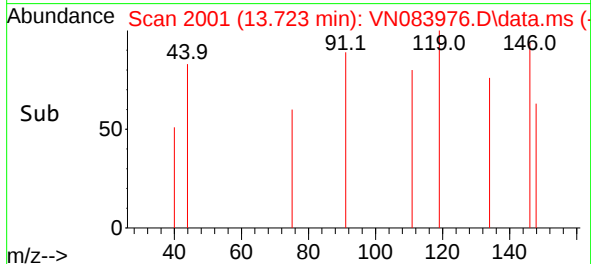
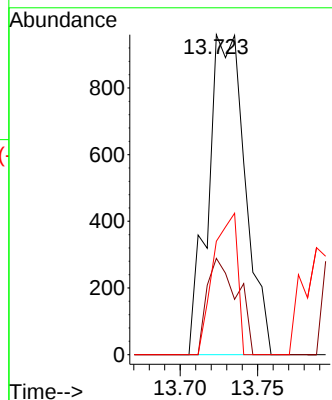
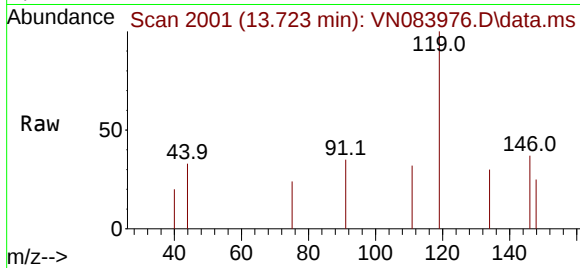




#86  
p-Isopropyltoluene  
Concen: 0.233 ug/l  
RT: 13.723 min Scan# 2001  
Delta R.T. -0.006 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

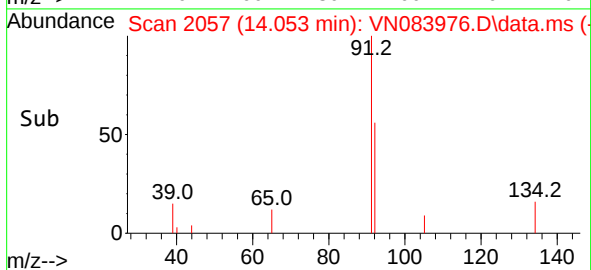
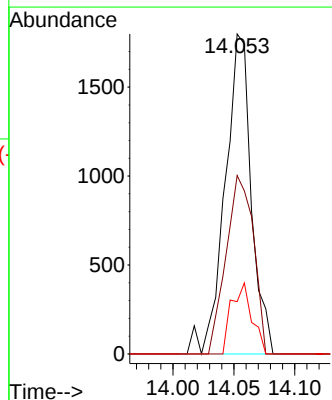
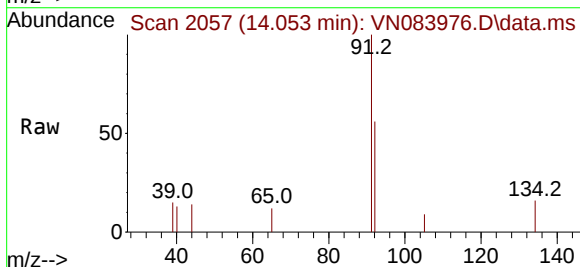
Instrument :  
MSVOA\_N  
ClientSampleId :

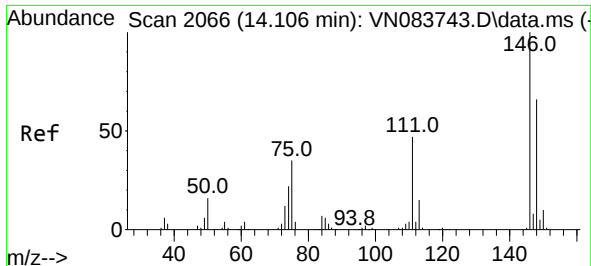
Tgt Ion:119 Resp: 1593  
Ion Ratio Lower Upper  
119 100  
134 24.8 12.8 38.3  
91 28.8 12.9 38.7



#89  
n-Butylbenzene  
Concen: 0.441 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Tgt Ion: 91 Resp: 2703  
Ion Ratio Lower Upper  
91 100  
92 58.2 26.7 80.1  
134 17.3 12.2 36.4





#91

1,2-Dichlorobenzene

Concen: 0.244 ug/l

RT: 14.106 min Scan# 2066

Delta R.T. -0.000 min

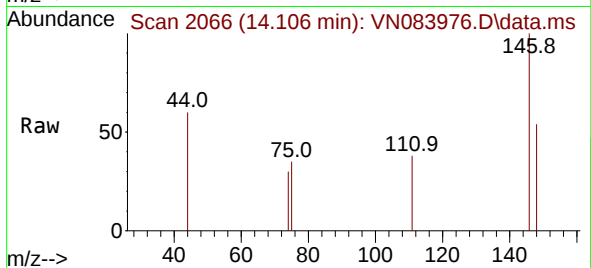
Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

Instrument :

MSVOA\_N

ClientSampleId :



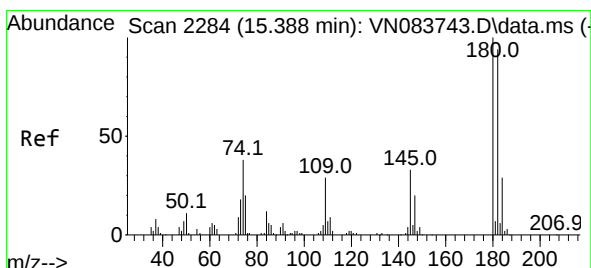
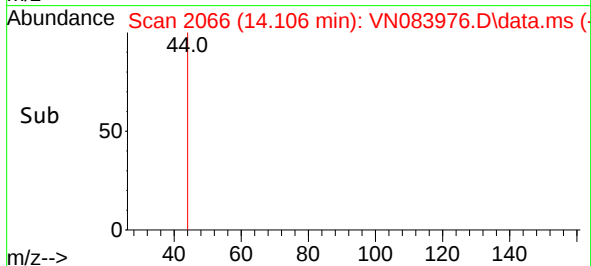
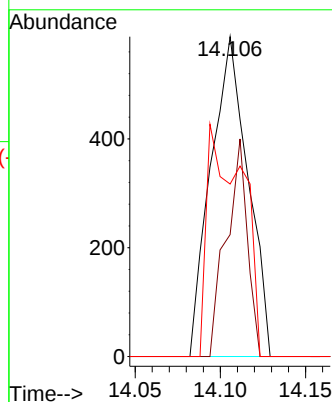
Tgt Ion:146 Resp: 889

Ion Ratio Lower Upper

146 100

111 38.6 22.8 68.3

148 69.2 32.1 96.5



#93

1,2,4-Trichlorobenzene

Concen: 0.927 ug/l

RT: 15.400 min Scan# 2286

Delta R.T. 0.012 min

Lab File: VN083976.D

Acq: 18 Sep 2024 12:29

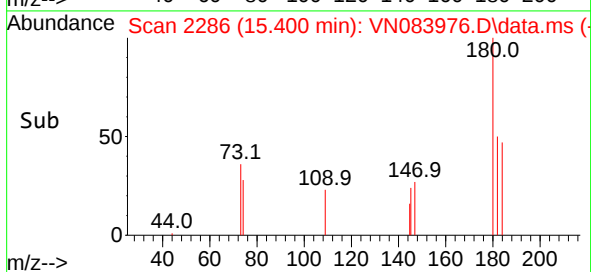
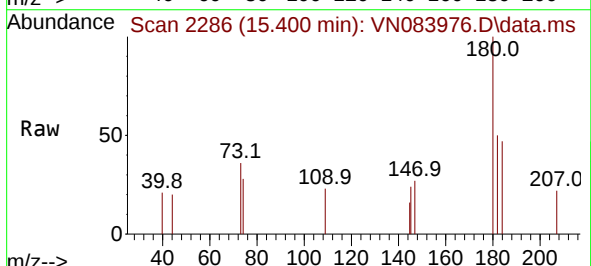
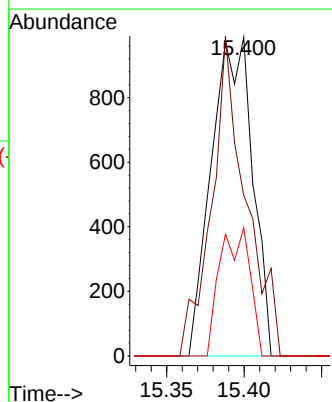
Tgt Ion:180 Resp: 1815

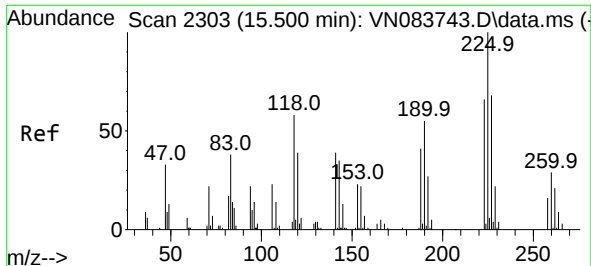
Ion Ratio Lower Upper

180 100

182 83.7 48.1 144.3

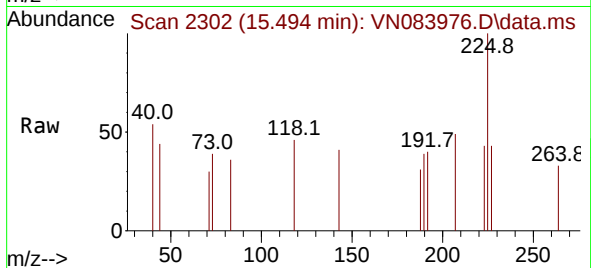
145 29.4 16.9 50.7



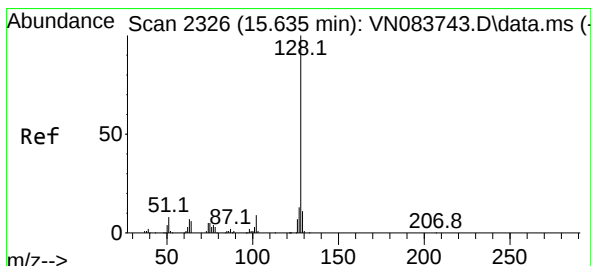
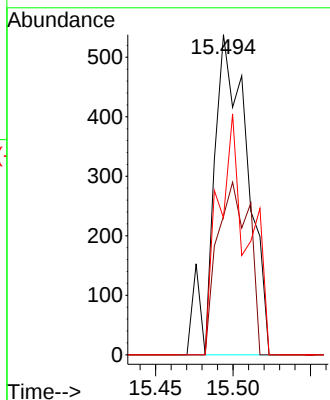
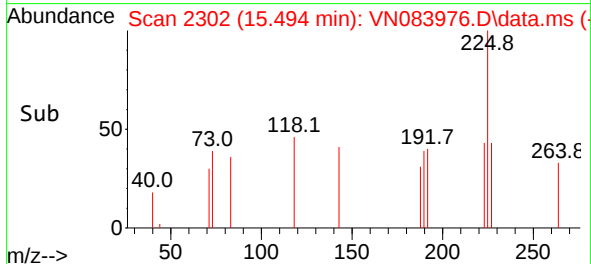


#94  
Hexachlorobutadiene  
Concen: 0.995 ug/l  
RT: 15.494 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

Instrument :  
MSVOA\_N  
ClientSampleId :

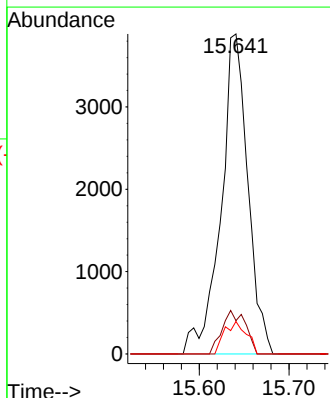
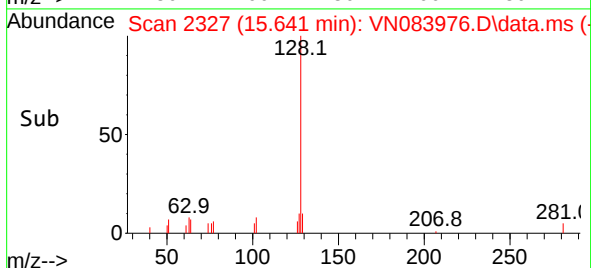
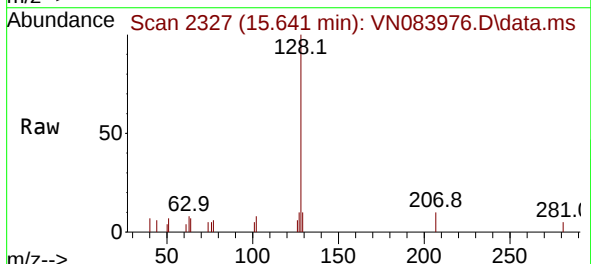


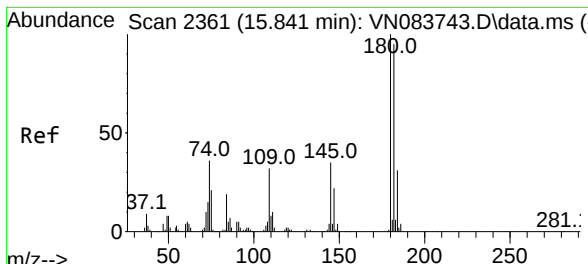
Tgt Ion:225 Resp: 827  
Ion Ratio Lower Upper  
225 100  
223 50.1 31.9 95.5  
227 64.7 32.0 96.2



#95  
Naphthalene  
Concen: 1.357 ug/l  
RT: 15.641 min Scan# 2327  
Delta R.T. 0.006 min  
Lab File: VN083976.D  
Acq: 18 Sep 2024 12:29

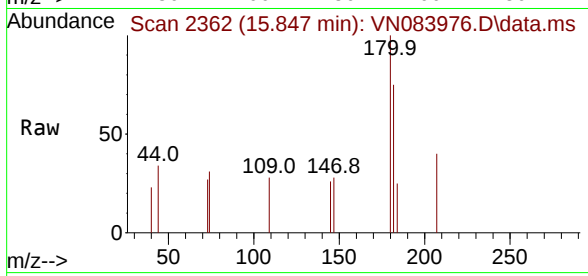
Tgt Ion:128 Resp: 8084  
Ion Ratio Lower Upper  
128 100  
127 11.8 10.2 15.2  
129 8.3 8.7 13.1#





#96  
 1,2,3-Trichlorobenzene  
 Concen: 1.023 ug/l  
 RT: 15.847 min Scan# 21  
 Delta R.T. 0.006 min  
 Lab File: VN083976.D  
 Acq: 18 Sep 2024 12:29

Instrument :  
 MSVOA\_N  
 ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 1915  |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 95.0  | 47.1  | 141.4 |
| 145      | 36.1  | 17.8  | 53.5  |

