

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN092524\  
 Data File : VN084155.D  
 Acq On : 25 Sep 2024 13:23  
 Operator : JC\MD  
 Sample : P4116-10RE  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TT15811-20240916

Quant Time: Sep 26 01:33:11 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

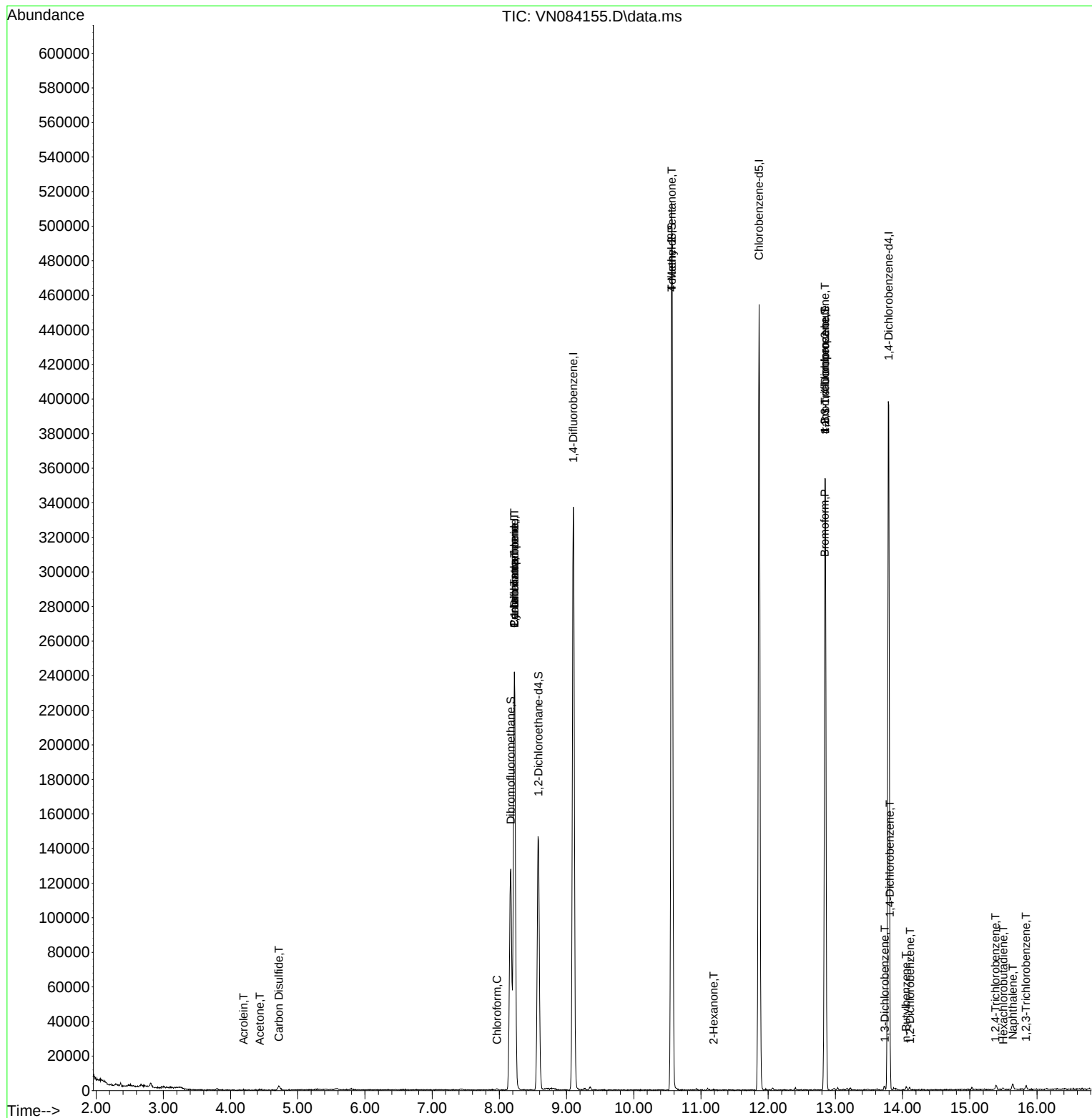
| Compound                      | R.T.   | QIon  | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|--------|----------|
| -----                         |        |       |          |           |        |          |
| Internal Standards            |        |       |          |           |        |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 166393   | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 286124   | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 247589   | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.794 | 152   | 104875   | 50.000    | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.583  | 65    | 124291   | 49.539    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery  | =      | 99.080%  |
| 35) Dibromofluoromethane      | 8.171  | 113   | 92868    | 50.700    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery  | =      | 101.400% |
| 50) Toluene-d8                | 10.565 | 98    | 349747   | 55.231    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery  | =      | 110.460% |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 122060   | 46.720    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery  | =      | 93.440%  |
| Target Compounds              |        |       |          |           |        |          |
|                               |        |       |          |           | Qvalue |          |
| 3) Chloromethane              | 2.365  | 50    | 1011     | Below Cal |        | 91       |
| 13) Acrolein                  | 4.195  | 56    | 180      | 0.543     | ug/l # | 13       |
| 16) Acetone                   | 4.436  | 43    | 400      | 0.398     | ug/l # | 45       |
| 17) Carbon Disulfide          | 4.718  | 76    | 1204     | 0.239     | ug/l # | 75       |
| 18) Methyl Acetate            | 4.765  | 43    | 119      | Below Cal | #      | 52       |
| 30) Chloroform                | 7.965  | 83    | 921      | 0.228     | ug/l # | 83       |
| 31) Cyclohexane               | 8.224  | 56    | 4244     | 1.170     | ug/l # | 1        |
| 36) 1,1-Dichloropropene       | 8.224  | 75    | 15391    | 5.582     | ug/l # | 51       |
| 38) Carbon Tetrachloride      | 8.224  | 117   | 19478    | 6.227     | ug/l # | 17       |
| 51) 4-Methyl-2-Pentanone      | 10.565 | 43    | 1772     | 0.718     | ug/l # | 1        |
| 59) 2-Hexanone                | 11.188 | 43    | 369      | 0.202     | ug/l   | 66       |
| 71) Bromoform                 | 12.841 | 173   | 1037     | 0.807     | ug/l # | 1        |
| 76) 1,2,3-Trichloropropane    | 12.847 | 75    | 67213    | 31.762    | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847 | 75    | 67213    | 83.186    | ug/l # | 9        |
| 87) 1,3-Dichlorobenzene       | 13.735 | 146   | 974      | 0.264     | ug/l # | 35       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146   | 1197     | 0.321     | ug/l # | 5        |
| 89) n-Butylbenzene            | 14.053 | 91    | 1376     | 0.230     | ug/l   | 91       |
| 91) 1,2-Dichlorobenzene       | 14.112 | 146   | 976      | 0.274     | ug/l   | 78       |
| 93) 1,2,4-Trichlorobenzene    | 15.382 | 180   | 1059     | 0.555     | ug/l # | 76       |
| 94) Hexachlorobutadiene       | 15.500 | 225   | 282      | 0.348     | ug/l # | 53       |
| 95) Naphthalene               | 15.641 | 128   | 4038     | 0.695     | ug/l # | 86       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180   | 1040     | 0.570     | ug/l   | 84       |
| -----                         |        |       |          |           |        |          |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN092524\  
Data File : VN084155.D  
Acq On : 25 Sep 2024 13:23  
Operator : JC\MD  
Sample : P4116-10RE  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
TT15811-20240916

Quant Time: Sep 26 01:33:11 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

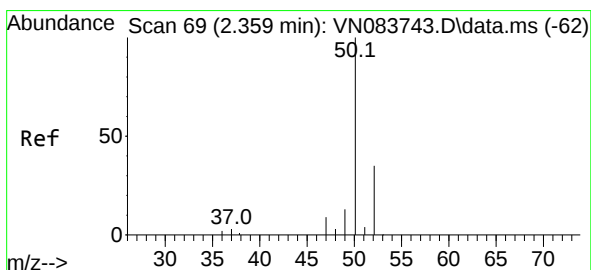
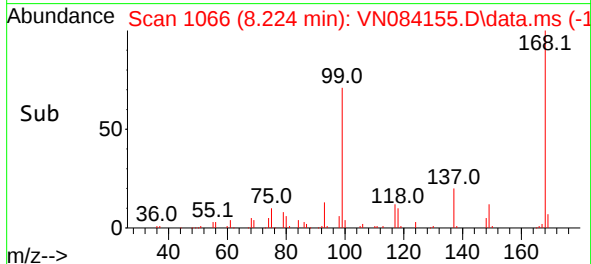
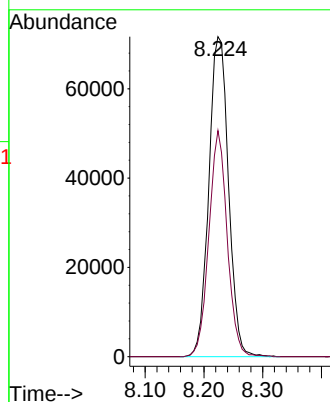
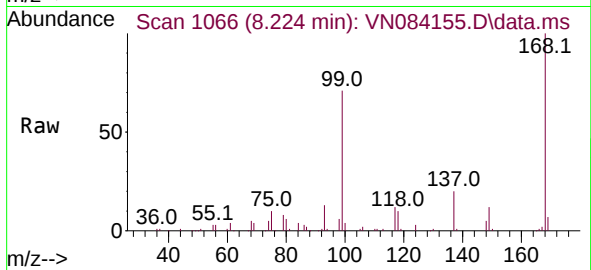




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

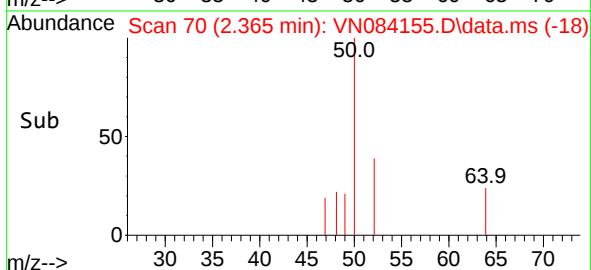
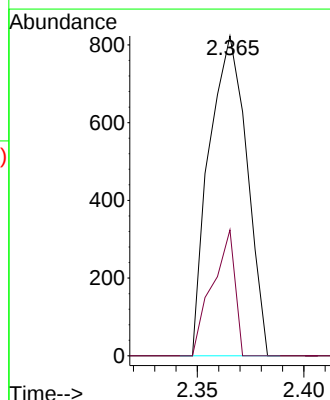
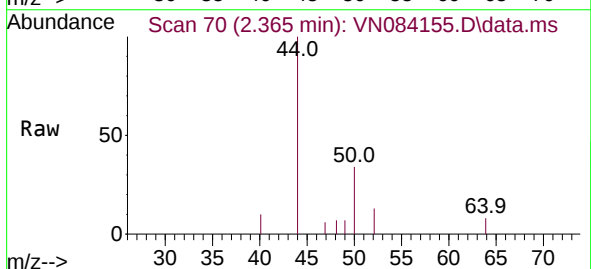
Instrument :  
MSVOA\_N  
ClientSampleId :  
TT15811-20240916

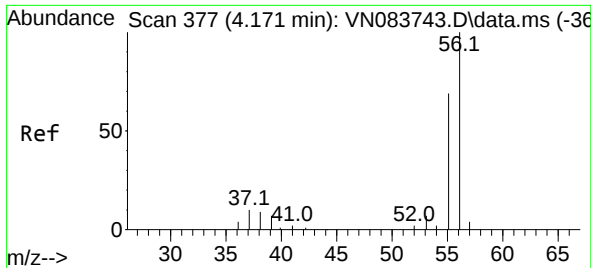
Tgt Ion:168 Resp: 166393  
Ion Ratio Lower Upper  
168 100  
99 70.6 54.2 81.2



#3  
Chloromethane  
Concen: Below Cal  
RT: 2.365 min Scan# 70  
Delta R.T. 0.006 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

Tgt Ion: 50 Resp: 1011  
Ion Ratio Lower Upper  
50 100  
52 39.4 27.2 40.8





#13

Acrolein

Concen: 0.543 ug/l

RT: 4.195 min Scan# 381

Delta R.T. 0.024 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

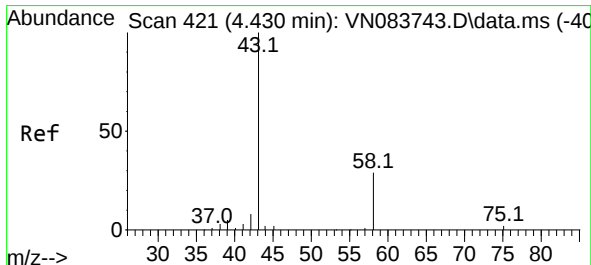
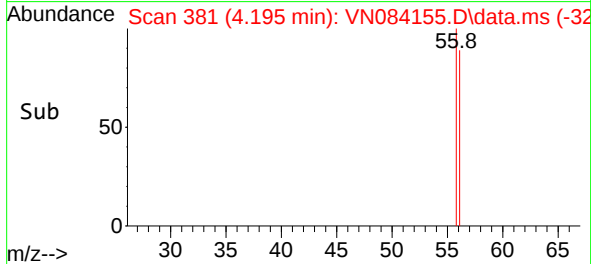
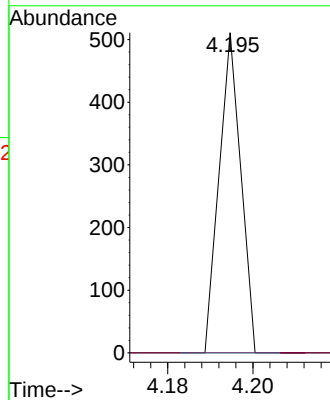
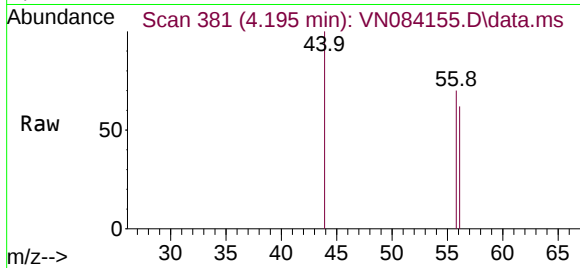
TT15811-20240916

Tgt Ion: 56 Resp: 180

Ion Ratio Lower Upper

56 100

55 0.0 58.2 87.2#



#16

Acetone

Concen: 0.398 ug/l

RT: 4.436 min Scan# 422

Delta R.T. 0.006 min

Lab File: VN084155.D

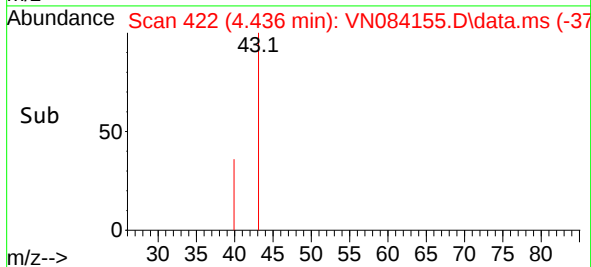
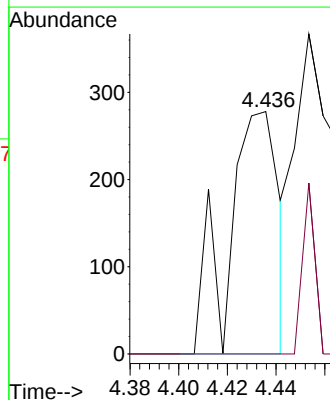
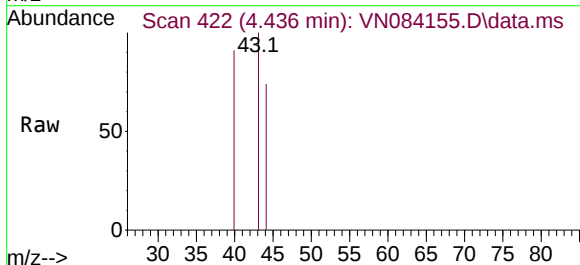
Acq: 25 Sep 2024 13:23

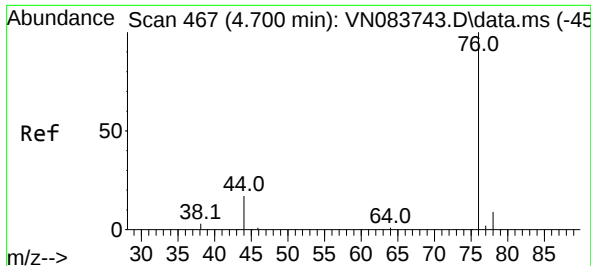
Tgt Ion: 43 Resp: 400

Ion Ratio Lower Upper

43 100

58 0.0 23.7 35.5#





#17

Carbon Disulfide

Concen: 0.239 ug/l

RT: 4.718 min Scan# 41

Delta R.T. 0.018 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

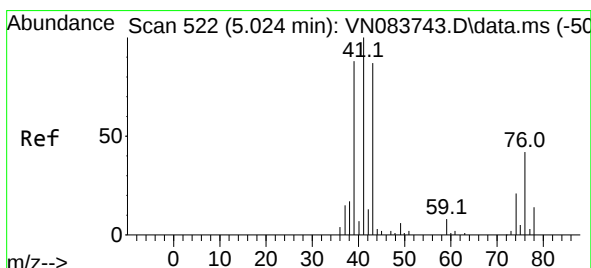
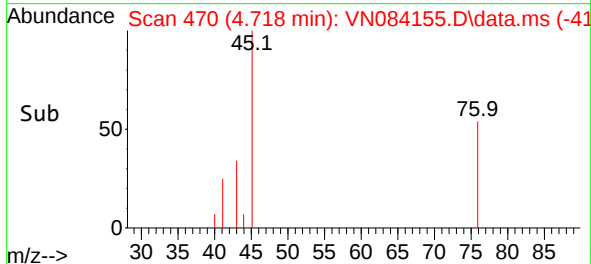
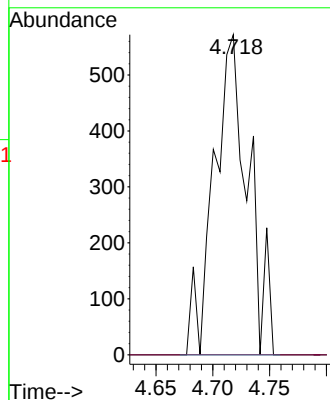
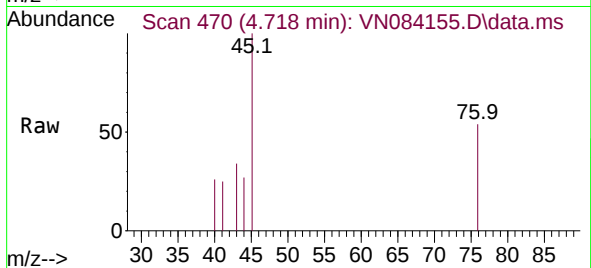
TT15811-20240916

Tgt Ion: 76 Resp: 1204

Ion Ratio Lower Upper

76 100

78 0.0 7.1 10.7#



#18

Methyl Acetate

Concen: Below Cal

RT: 4.765 min Scan# 478

Delta R.T. -0.259 min

Lab File: VN084155.D

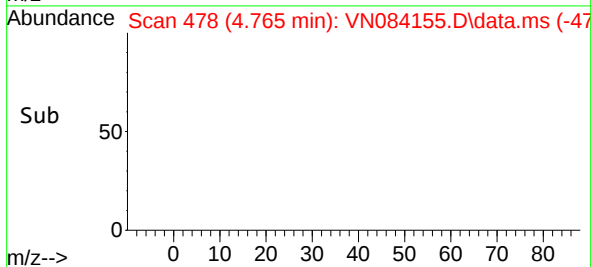
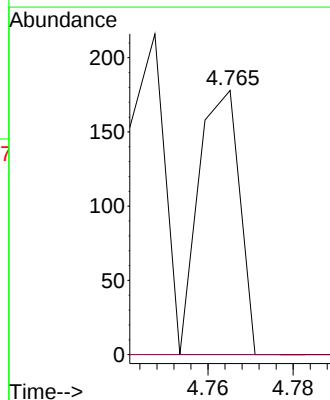
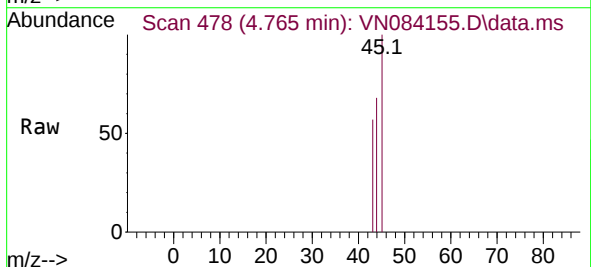
Acq: 25 Sep 2024 13:23

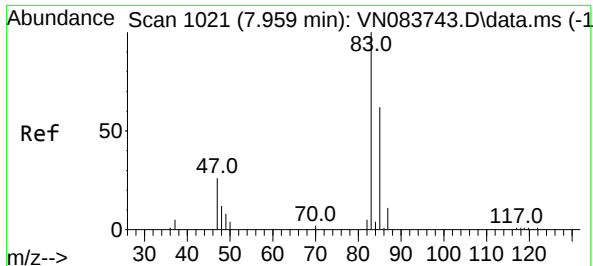
Tgt Ion: 43 Resp: 119

Ion Ratio Lower Upper

43 100

74 0.0 19.0 28.4#





#30

Chloroform

Concen: 0.228 ug/l

RT: 7.965 min Scan# 1021

Delta R.T. 0.006 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

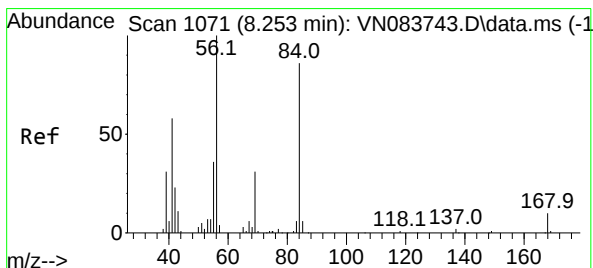
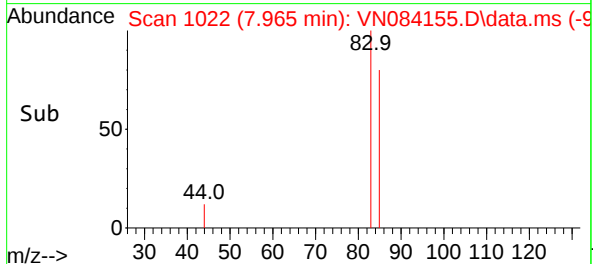
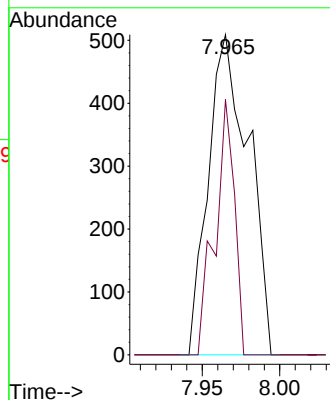
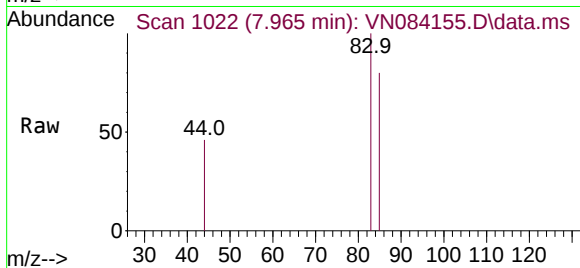
TT15811-20240916

Tgt Ion: 83 Resp: 921

Ion Ratio Lower Upper

83 100

85 79.8 52.8 79.2#



#31

Cyclohexane

Concen: 1.170 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.029 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

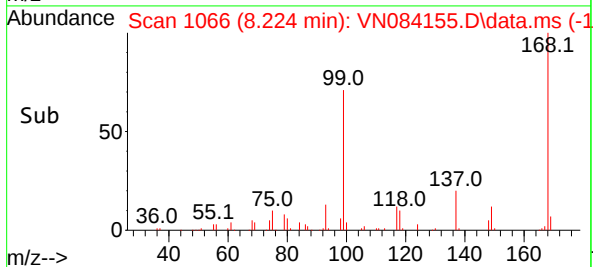
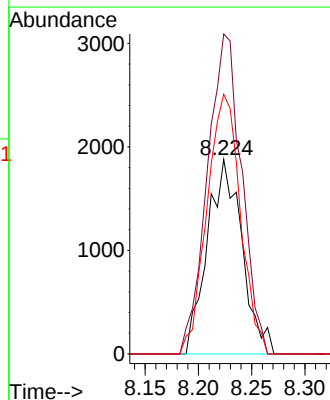
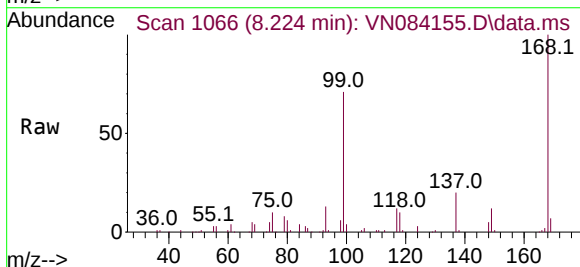
Tgt Ion: 56 Resp: 4244

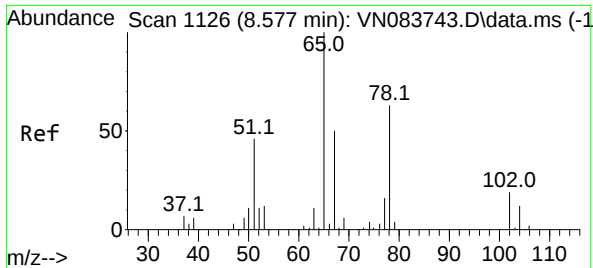
Ion Ratio Lower Upper

56 100

69 164.5 26.9 40.3#

84 133.5 69.2 103.8#

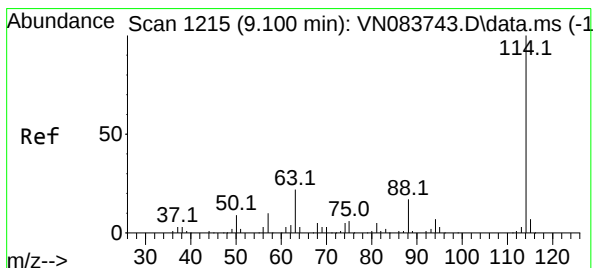
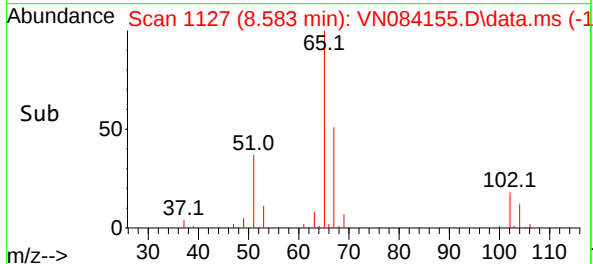
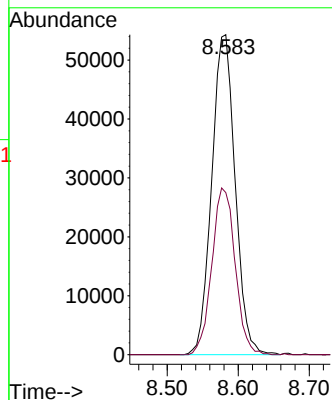
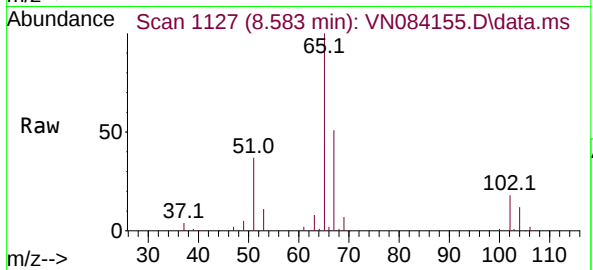




#33  
 1,2-Dichloroethane-d4  
 Concen: 49.539 ug/l  
 RT: 8.583 min Scan# 1127  
 Delta R.T. 0.006 min  
 Lab File: VN084155.D  
 Acq: 25 Sep 2024 13:23

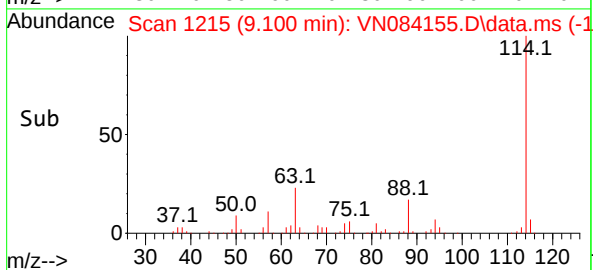
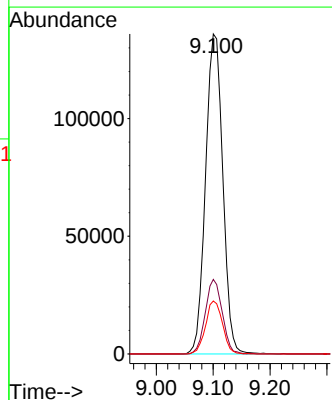
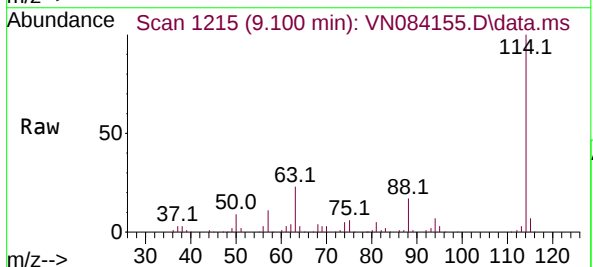
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TT15811-20240916

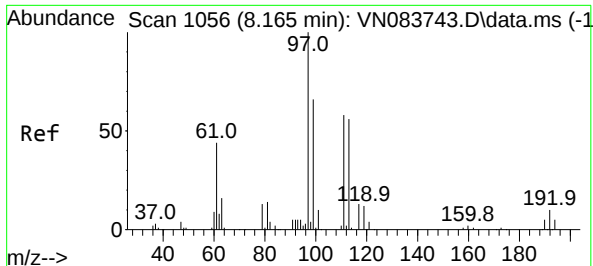
Tgt Ion: 65 Resp: 124291  
 Ion Ratio Lower Upper  
 65 100  
 67 51.9 0.0 100.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 9.100 min Scan# 1215  
 Delta R.T. 0.000 min  
 Lab File: VN084155.D  
 Acq: 25 Sep 2024 13:23

Tgt Ion: 114 Resp: 286124  
 Ion Ratio Lower Upper  
 114 100  
 63 23.3 0.0 43.4  
 88 16.6 0.0 32.6

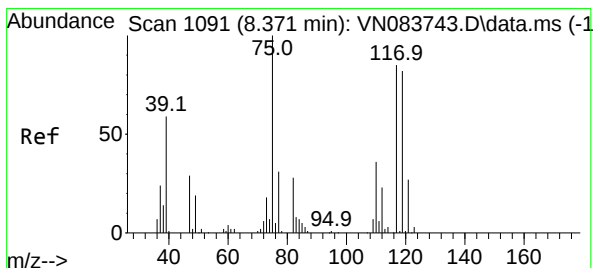
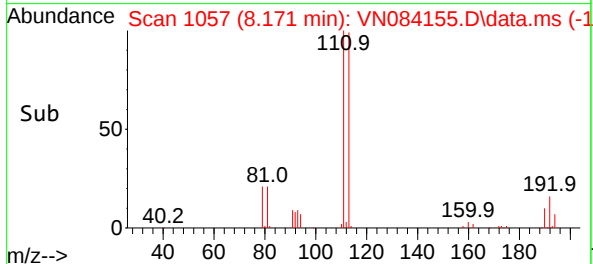
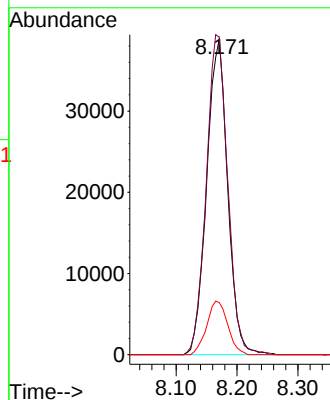
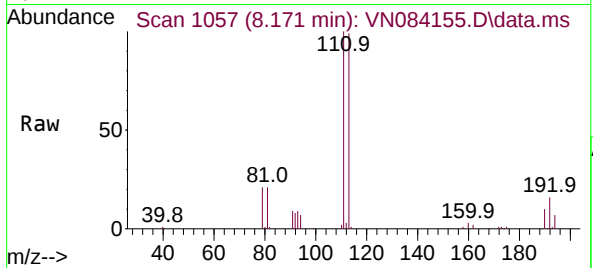




#35  
Dibromofluoromethane  
Concen: 50.700 ug/l  
RT: 8.171 min Scan# 1056  
Delta R.T. 0.006 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

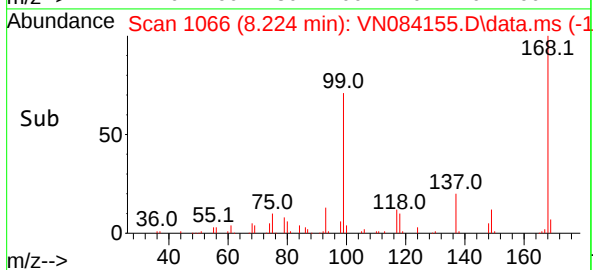
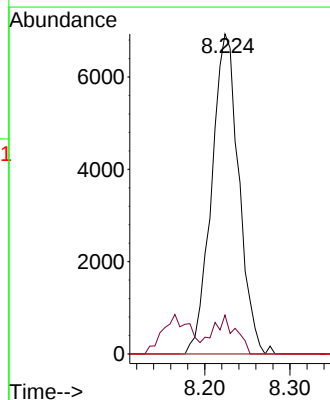
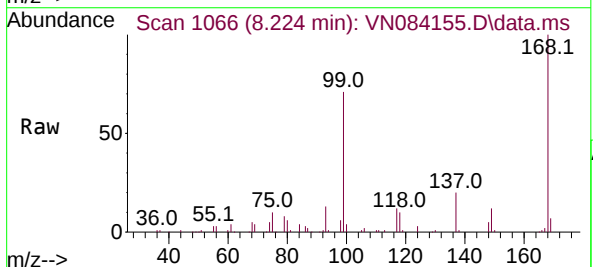
Instrument :  
MSVOA\_N  
ClientSampleId :  
TT15811-20240916

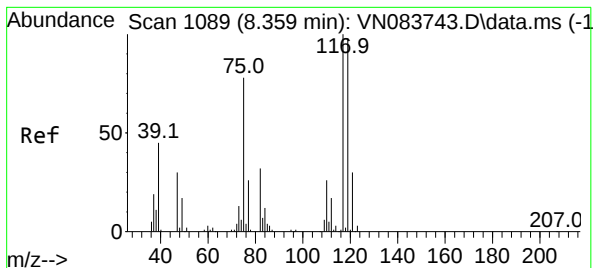
Tgt Ion:113 Resp: 92868  
Ion Ratio Lower Upper  
113 100  
111 103.8 82.6 124.0  
192 17.0 14.3 21.5



#36  
1,1-Dichloropropene  
Concen: 5.582 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.147 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

Tgt Ion: 75 Resp: 15391  
Ion Ratio Lower Upper  
75 100  
110 10.3 16.7 50.1#  
77 0.0 25.2 37.8#





#38

Carbon Tetrachloride

Concen: 6.227 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.135 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

TT15811-20240916

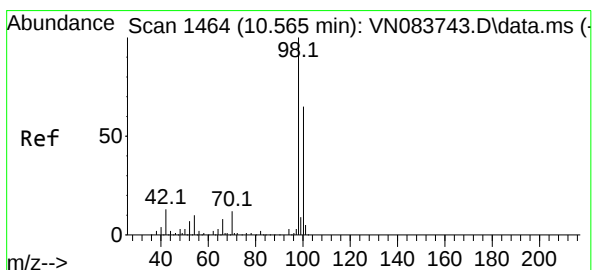
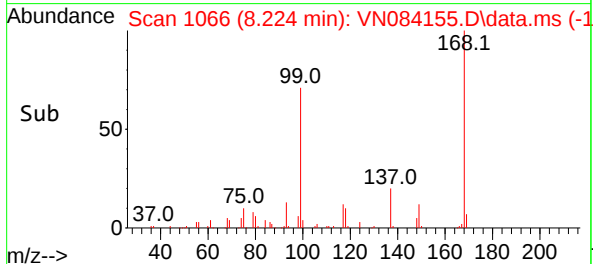
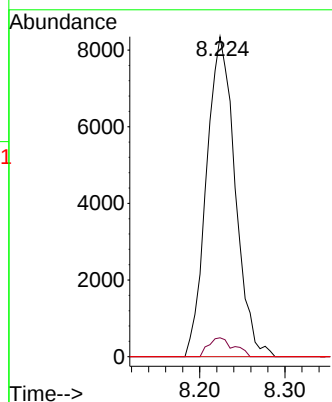
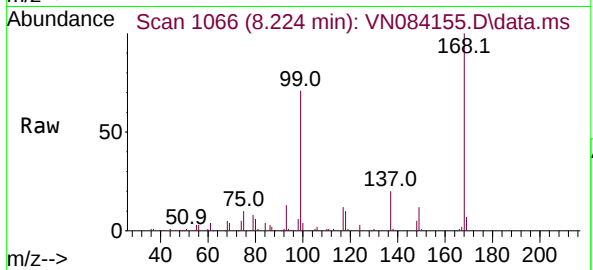
Tgt Ion:117 Resp: 19478

Ion Ratio Lower Upper

117 100

119 5.9 76.1 114.1#

121 0.0 24.1 36.1#



#50

Toluene-d8

Concen: 55.231 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.000 min

Lab File: VN084155.D

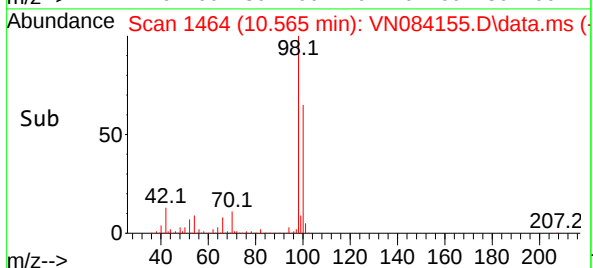
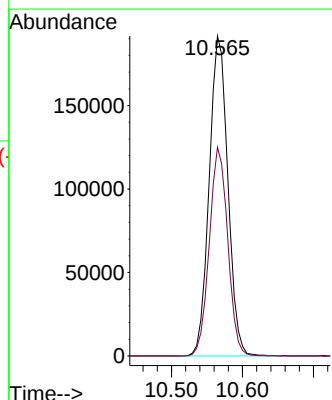
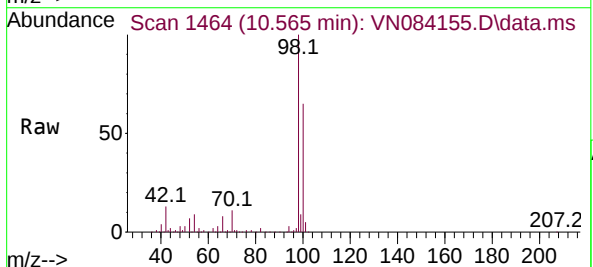
Acq: 25 Sep 2024 13:23

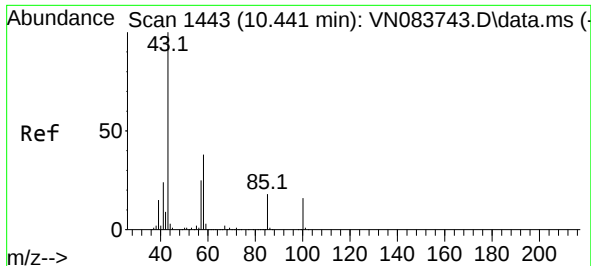
Tgt Ion: 98 Resp: 349747

Ion Ratio Lower Upper

98 100

100 64.4 52.0 78.0

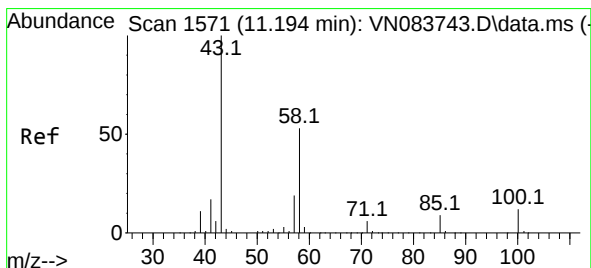
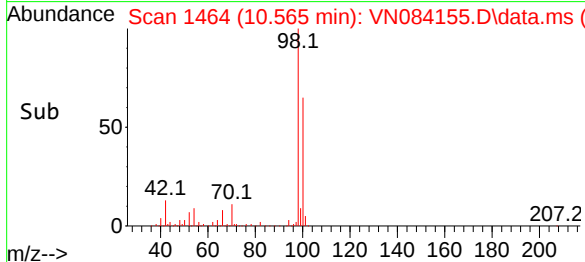
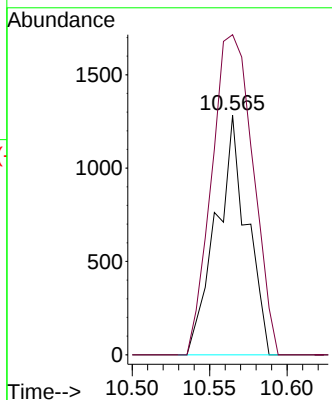
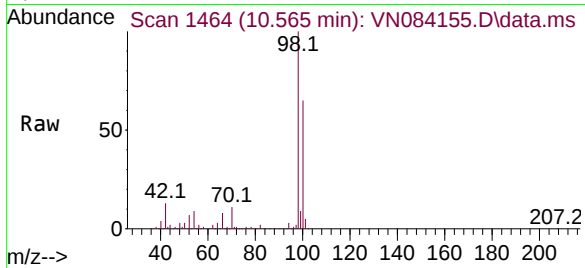




#51  
4-Methyl-2-Pentanone  
Concen: 0.718 ug/l  
RT: 10.565 min Scan# 1443  
Delta R.T. 0.124 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

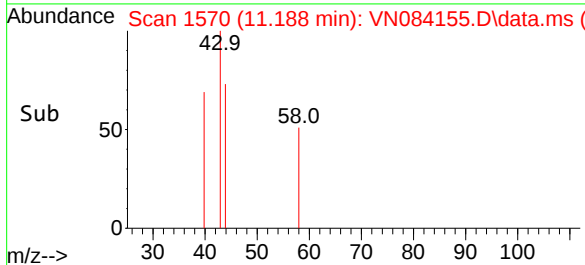
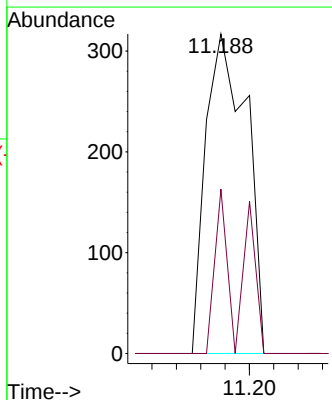
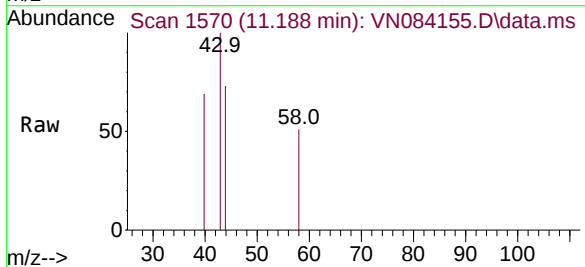
Instrument :  
MSVOA\_N  
ClientSampleId :  
TT15811-20240916

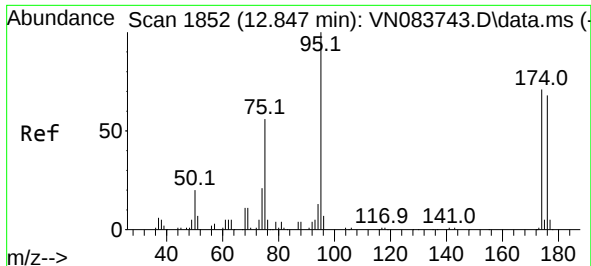
Tgt Ion: 43 Resp: 1772  
Ion Ratio Lower Upper  
43 100  
58 179.6 31.6 47.4#



#59  
2-Hexanone  
Concen: 0.202 ug/l  
RT: 11.188 min Scan# 1570  
Delta R.T. -0.006 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

Tgt Ion: 43 Resp: 369  
Ion Ratio Lower Upper  
43 100  
58 30.1 27.2 81.5

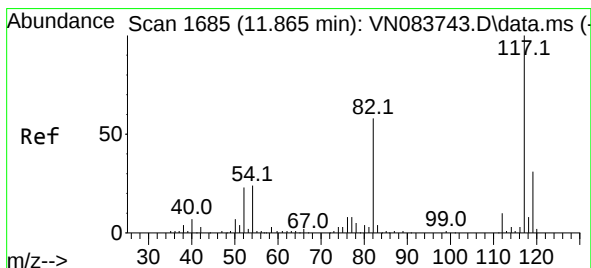
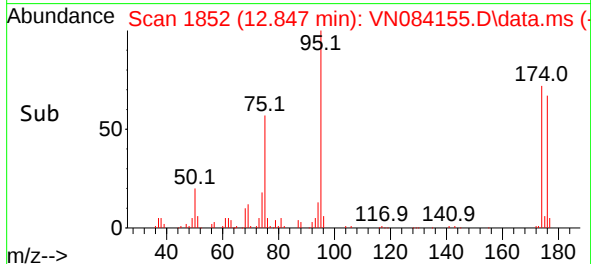
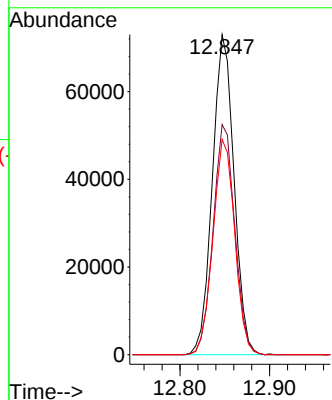
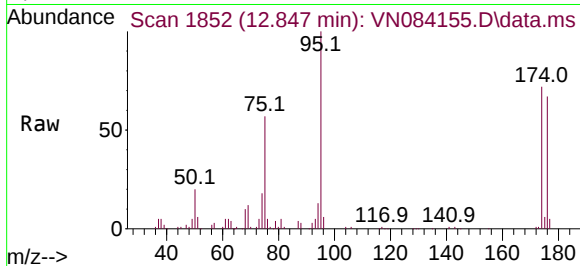




#62  
4-Bromofluorobenzene  
Concen: 46.720 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.000 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

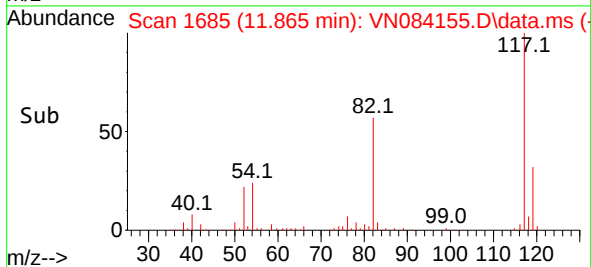
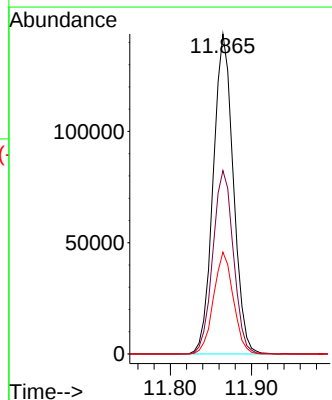
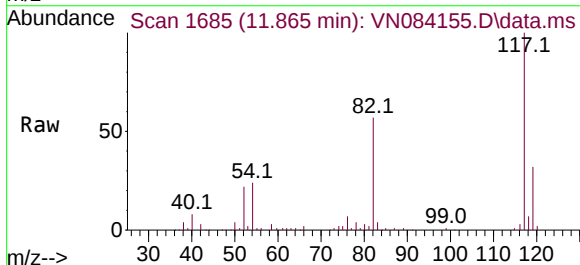
Instrument :  
MSVOA\_N  
ClientSampleId :  
TT15811-20240916

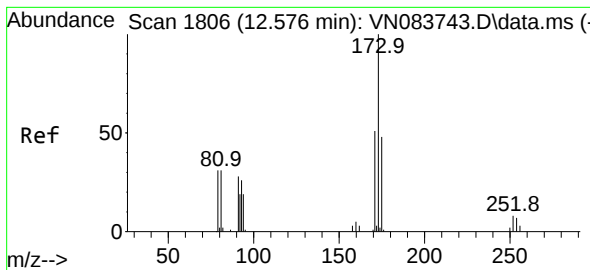
Tgt Ion: 95 Resp: 122060  
Ion Ratio Lower Upper  
95 100  
174 72.1 0.0 139.8  
176 67.8 0.0 131.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. 0.000 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

Tgt Ion: 117 Resp: 247589  
Ion Ratio Lower Upper  
117 100  
82 57.3 47.4 71.0  
119 31.8 26.3 39.5





#71

Bromoform

Concen: 0.807 ug/l

RT: 12.841 min Scan# 11

Delta R.T. 0.265 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

TT15811-20240916

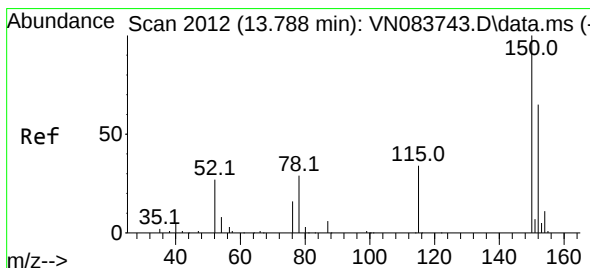
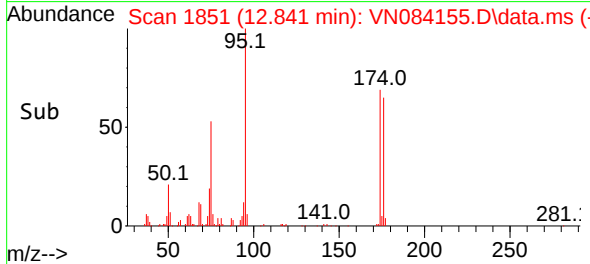
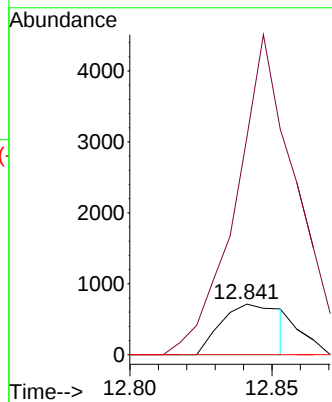
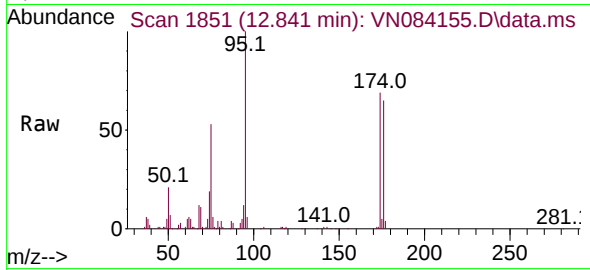
Tgt Ion:173 Resp: 1037

Ion Ratio Lower Upper

173 100

175 478.4 24.1 72.2#

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. 0.006 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

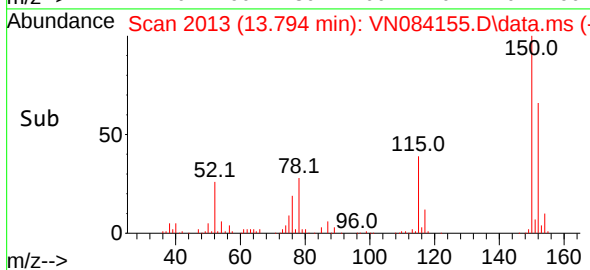
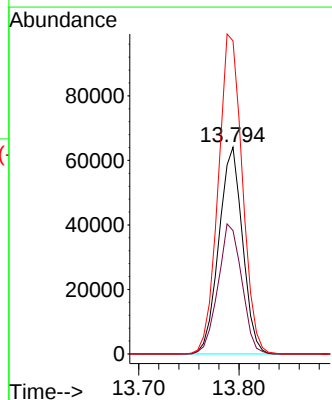
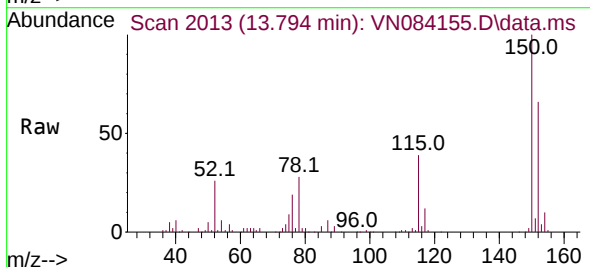
Tgt Ion:152 Resp: 104875

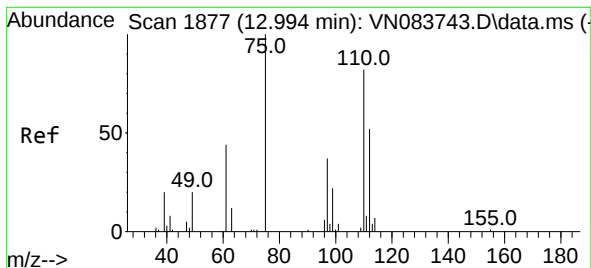
Ion Ratio Lower Upper

152 100

115 63.2 32.2 96.6

150 157.7 0.0 348.6





#76

1,2,3-Trichloropropane

Concen: 31.762 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.147 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

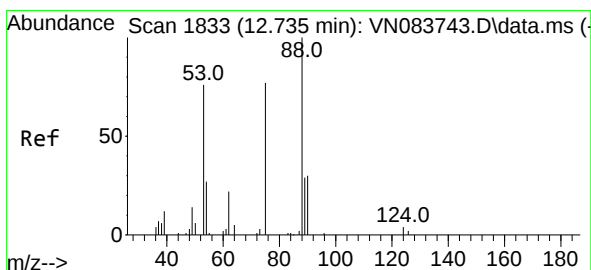
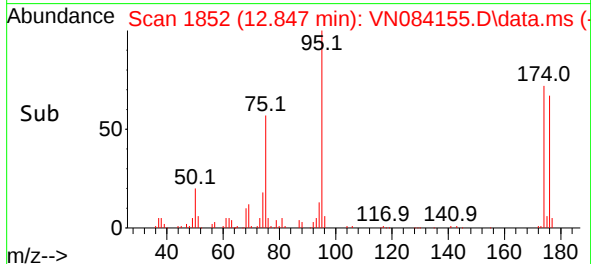
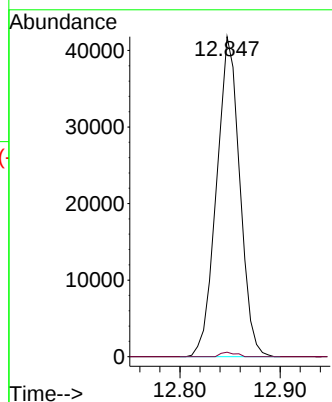
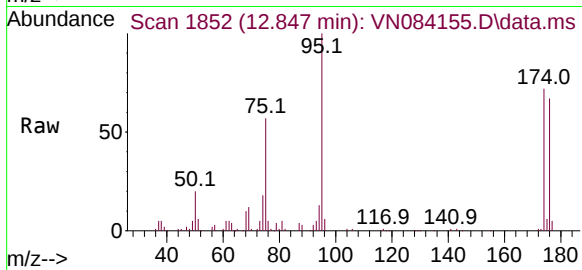
TT15811-20240916

Tgt Ion: 75 Resp: 67213

Ion Ratio Lower Upper

75 100

77 0.9 95.2 285.6#



#81

trans-1,4-Dichloro-2-butene

Concen: 83.186 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.112 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

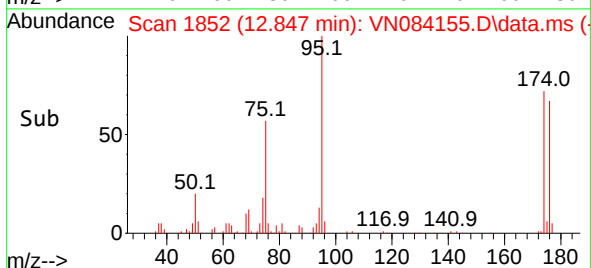
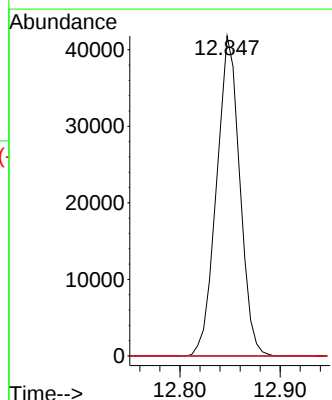
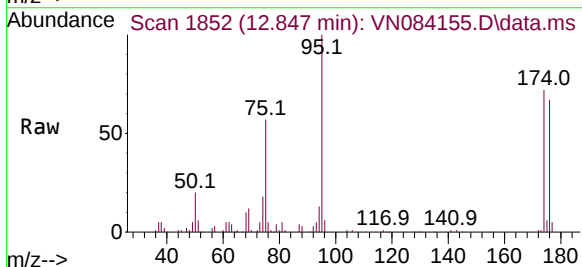
Tgt Ion: 75 Resp: 67213

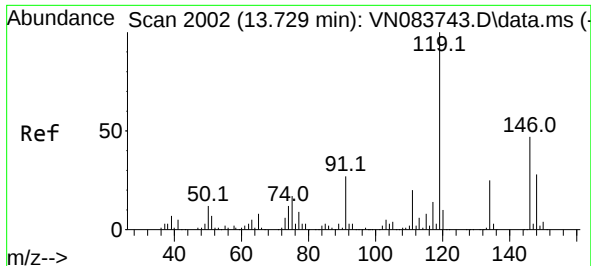
Ion Ratio Lower Upper

75 100

53 0.0 81.2 121.8#

89 0.0 35.7 53.5#





#87

1,3-Dichlorobenzene

Concen: 0.264 ug/l

RT: 13.735 min Scan# 2002

Delta R.T. 0.006 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

TT15811-20240916

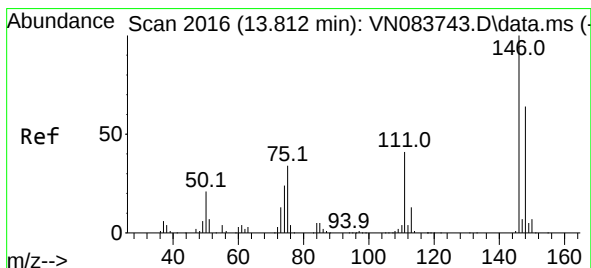
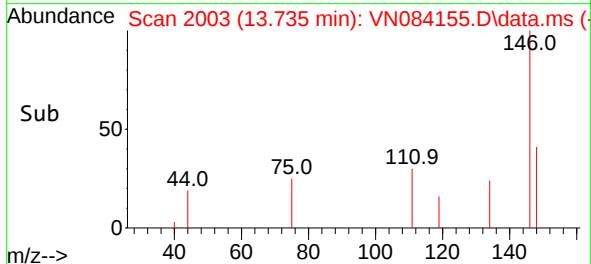
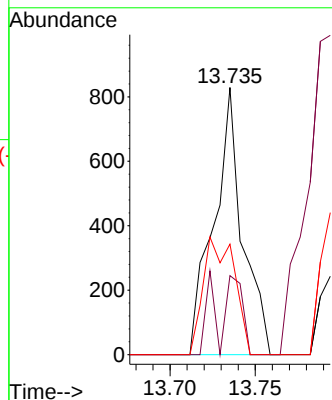
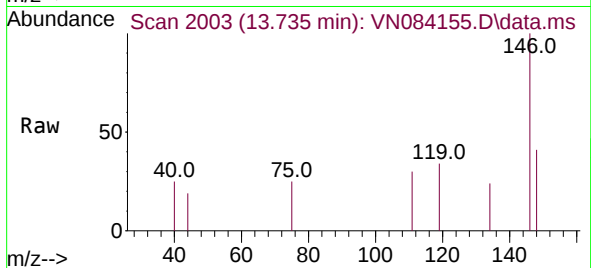
Tgt Ion:146 Resp: 974

Ion Ratio Lower Upper

146 100

111 16.8 21.7 65.1#

148 0.0 31.7 95.1#



#88

1,4-Dichlorobenzene

Concen: 0.321 ug/l

RT: 13.812 min Scan# 2016

Delta R.T. 0.000 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

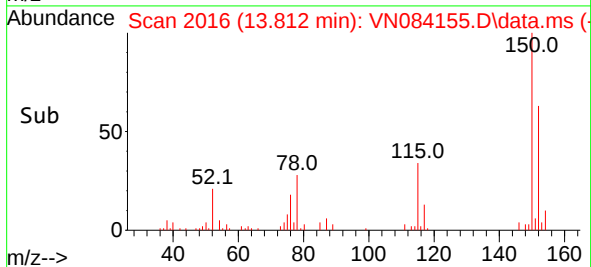
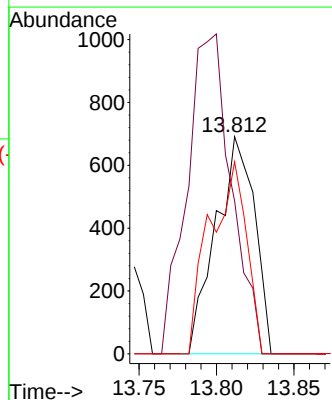
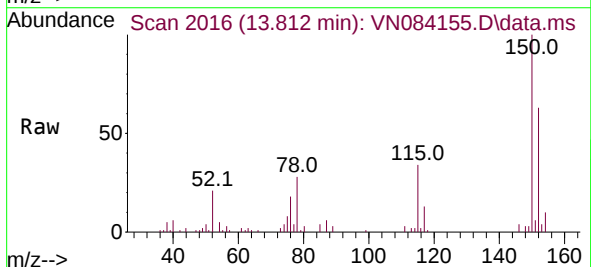
Tgt Ion:146 Resp: 1197

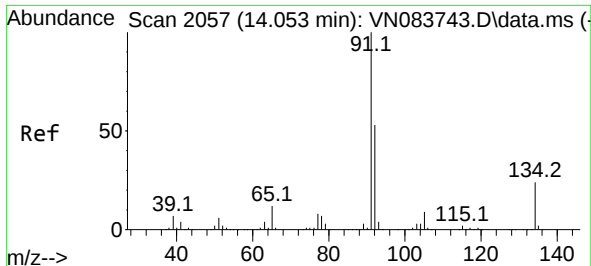
Ion Ratio Lower Upper

146 100

111 169.6 21.3 64.0#

148 83.9 32.0 96.2

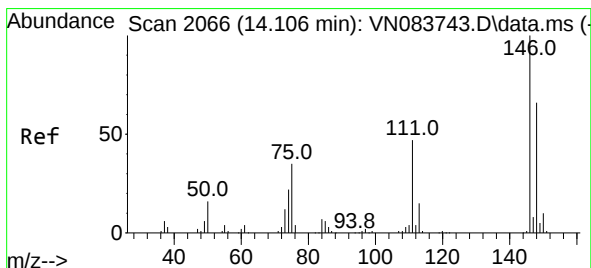
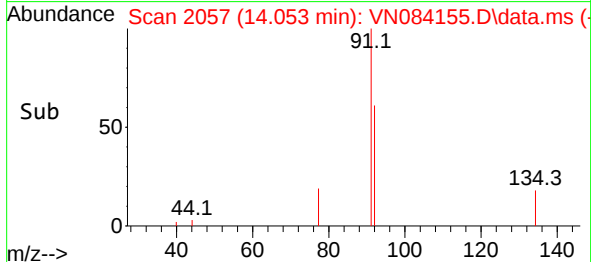
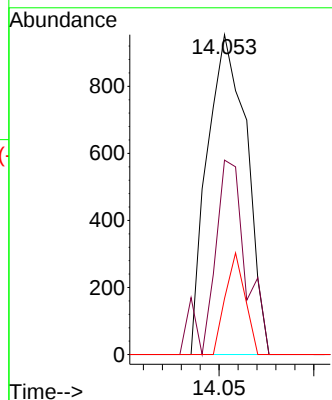
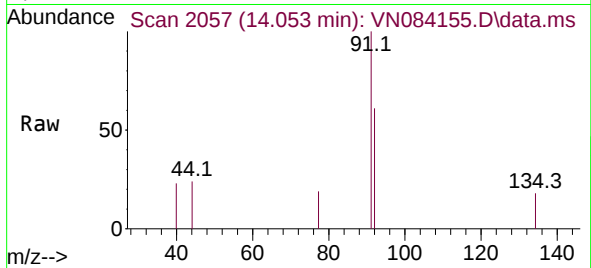




#89  
n-Butylbenzene  
Concen: 0.230 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. 0.000 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

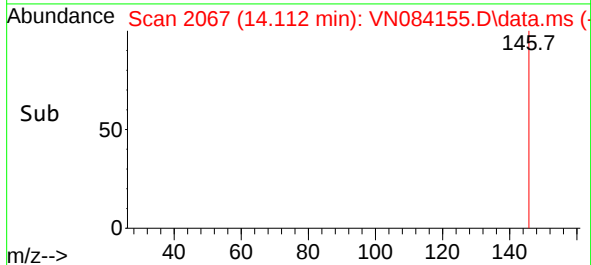
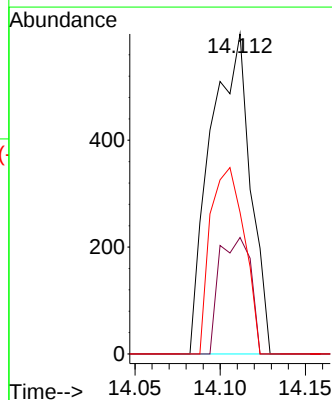
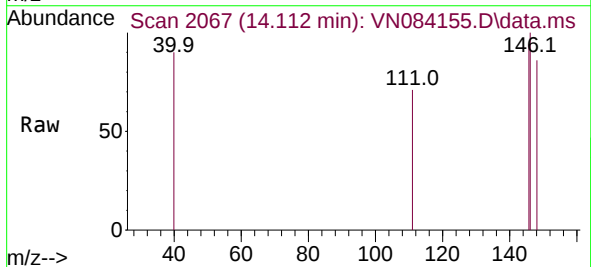
Instrument :  
MSVOA\_N  
ClientSampleId :  
TT15811-20240916

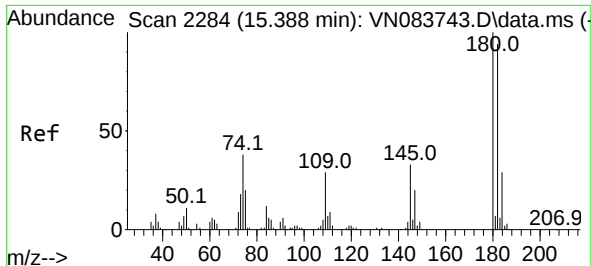
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 91    | Resp: | 1376  |
| Ion      | Ratio | Lower | Upper |
| 91       | 100   |       |       |
| 92       | 49.8  | 26.7  | 80.1  |
| 134      | 15.9  | 12.2  | 36.4  |



#91  
1,2-Dichlorobenzene  
Concen: 0.274 ug/l  
RT: 14.112 min Scan# 2067  
Delta R.T. 0.006 min  
Lab File: VN084155.D  
Acq: 25 Sep 2024 13:23

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 976   |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 28.6  | 22.8  | 68.3  |
| 148      | 49.4  | 32.1  | 96.5  |

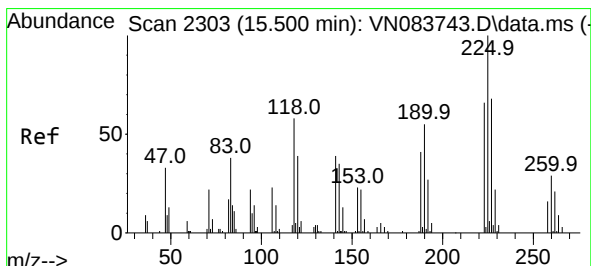
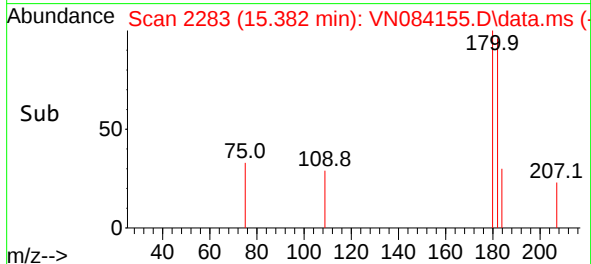
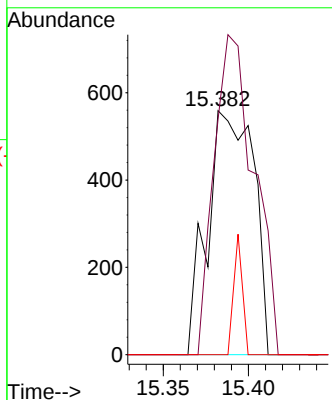
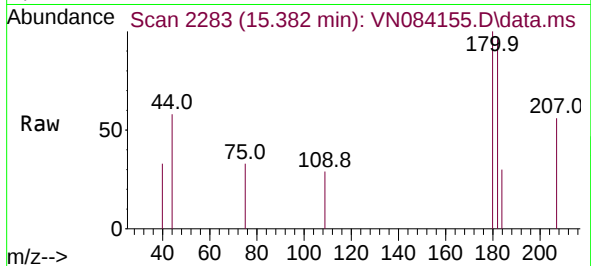




#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.555 ug/l  
 RT: 15.382 min Scan# 21  
 Delta R.T. -0.006 min  
 Lab File: VN084155.D  
 Acq: 25 Sep 2024 13:23

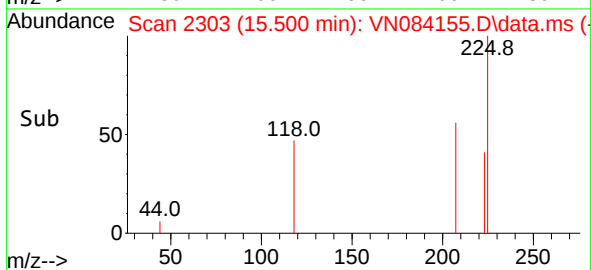
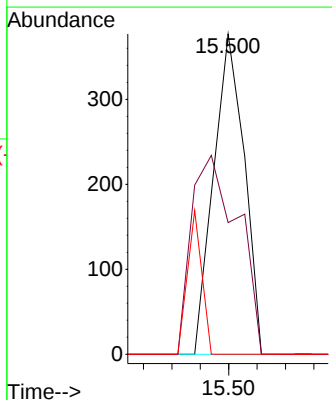
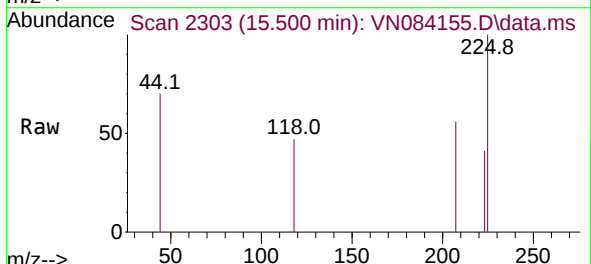
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TT15811-20240916

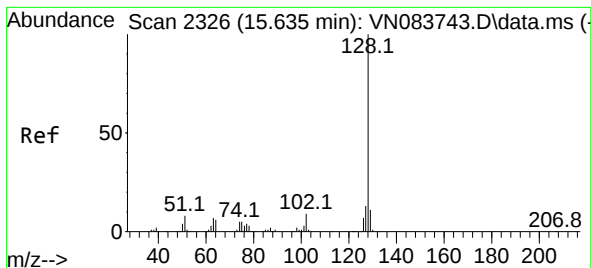
Tgt Ion:180 Resp: 1059  
 Ion Ratio Lower Upper  
 180 100  
 182 113.0 48.1 144.3  
 145 9.2 16.9 50.7#



#94  
 Hexachlorobutadiene  
 Concen: 0.348 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. 0.000 min  
 Lab File: VN084155.D  
 Acq: 25 Sep 2024 13:23

Tgt Ion:225 Resp: 282  
 Ion Ratio Lower Upper  
 225 100  
 223 94.3 31.9 95.5  
 227 21.3 32.0 96.2#





#95

Naphthalene

Concen: 0.695 ug/l

RT: 15.641 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Instrument :

MSVOA\_N

ClientSampleId :

TT15811-20240916

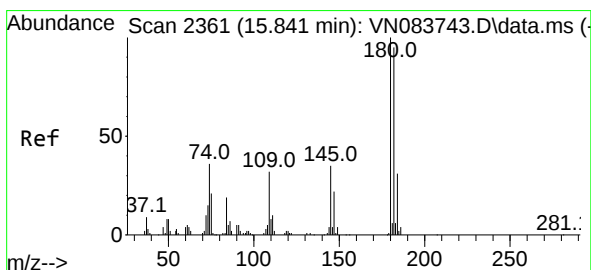
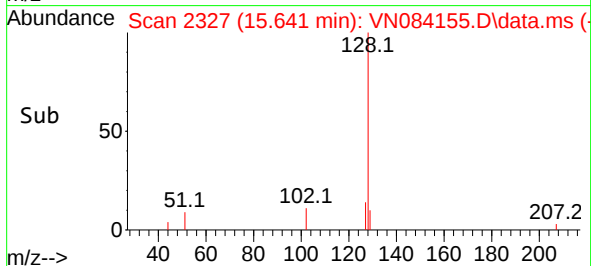
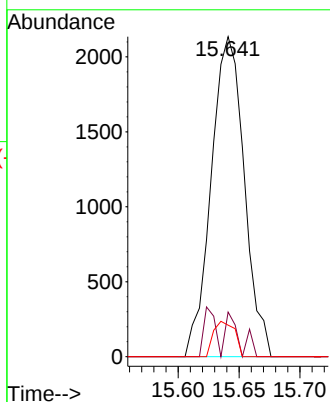
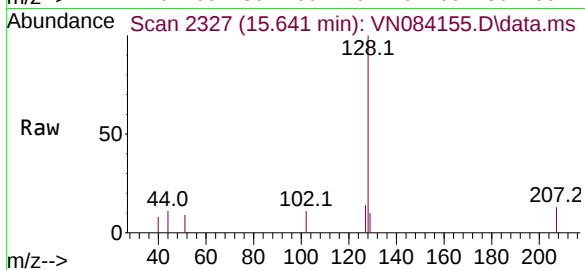
Tgt Ion:128 Resp: 4038

Ion Ratio Lower Upper

128 100

127 6.1 10.2 15.2#

129 7.1 8.7 13.1#



#96

1,2,3-Trichlorobenzene

Concen: 0.570 ug/l

RT: 15.835 min Scan# 2360

Delta R.T. -0.006 min

Lab File: VN084155.D

Acq: 25 Sep 2024 13:23

Tgt Ion:180 Resp: 1040

Ion Ratio Lower Upper

180 100

182 82.3 47.1 141.4

145 20.1 17.8 53.5

