

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090624\  
 Data File : VN083699.D  
 Acq On : 06 Sep 2024 16:24  
 Operator : JC\MD  
 Sample : VV0906WBL01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Sep 06 23:48:45 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090624W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 06 23:42:47 2024  
 Response via : Initial Calibration

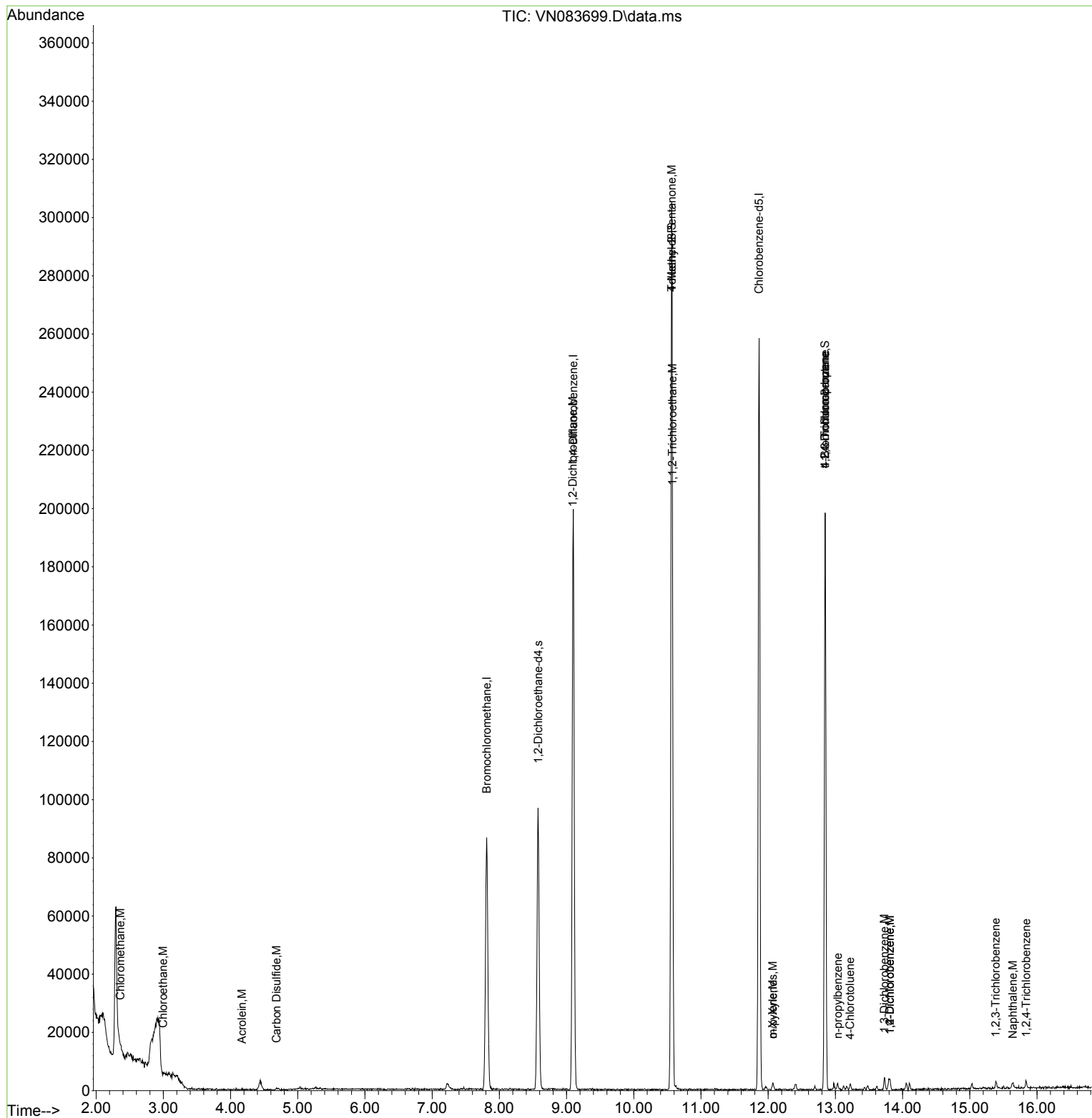
| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 7.812  | 128   | 29066    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene     | 9.100  | 114   | 165560   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 11.865 | 117   | 141967   | 30.000   | ug/l   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4   | 8.577  | 65    | 81933    | 30.838   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =      | 102.800% |
| 60) 4-Bromofluorobenzene    | 12.847 | 95    | 65267    | 26.675   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =      | 88.900%  |
| 63) Toluene-d8              | 10.565 | 98    | 199729   | 30.384   | ug/l   | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =      | 101.267% |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 3) Chloromethane            | 2.359  | 50    | 620      | 0.307    | ug/l # | 43       |
| 6) Chloroethane             | 2.995  | 64    | 336      | 0.241    | ug/l   | 94       |
| 13) Acrolein                | 4.171  | 56    | 81       | 0.255    | ug/l # | 15       |
| 16) Carbon Disulfide        | 4.683  | 76    | 1101     | 0.216    | ug/l # | 78       |
| 36) 1,2-Dichloroethane      | 9.094  | 62    | 6650     | 2.245    | ug/l # | 72       |
| 50) 1,1,2-Trichloroethane   | 10.576 | 97    | 6134     | 3.477    | ug/l # | 1        |
| 58) 4-Methyl-2-Pentanone    | 10.565 | 43    | 985      | 0.438    | ug/l # | 1        |
| 67) m/p-Xylenes             | 12.070 | 106   | 729      | 0.214    | ug/l # | 51       |
| 68) o-Xylene                | 12.070 | 106   | 729      | 0.221    | ug/l   | 60       |
| 72) 1,2,3-Trichloropropane  | 12.847 | 75    | 36849    | 17.647   | ug/l   | 1        |
| 74) n-propylbenzene         | 13.035 | 91    | 2223     | 0.218    | ug/l   | 80       |
| 77) t-1,4-Dichloro-2-butene | 12.847 | 75    | 36849    | 41.751   | ug/l # | 12       |
| 78) 4-Chlorotoluene         | 13.217 | 91    | 1951     | 0.302    | ug/l   | 96       |
| 83) 1,3-Dichlorobenzene     | 13.729 | 146   | 1383     | 0.359    | ug/l   | 88       |
| 84) 1,4-Dichlorobenzene     | 13.811 | 146   | 1584     | 0.411    | ug/l   | 79       |
| 87) 1,2-Dichlorobenzene     | 13.811 | 146   | 1584     | 0.423    | ug/l   | 82       |
| 89) 1,2,4-Trichlorobenzene  | 15.841 | 180   | 809      | 0.395    | ug/l # | 80       |
| 91) Naphthalene             | 15.641 | 128   | 2817     | 0.420    | ug/l # | 84       |
| 92) 1,2,3-Trichlorobenzene  | 15.388 | 180   | 1239     | 0.605    | ug/l   | 89       |
| -----                       |        |       |          |          |        |          |

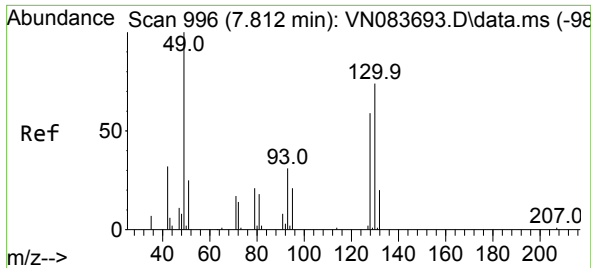
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090624\  
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Sample : VV0906WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

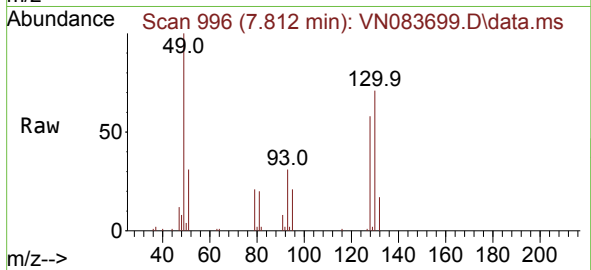
Quant Time: Sep 06 23:48:45 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090624W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Fri Sep 06 23:42:47 2024  
Response via : Initial Calibration



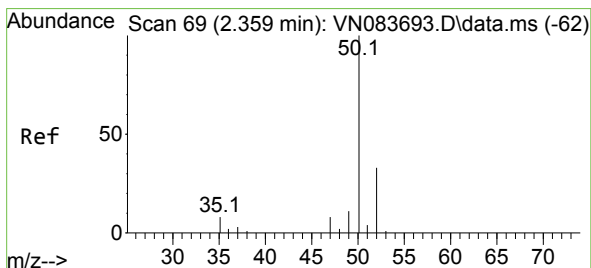
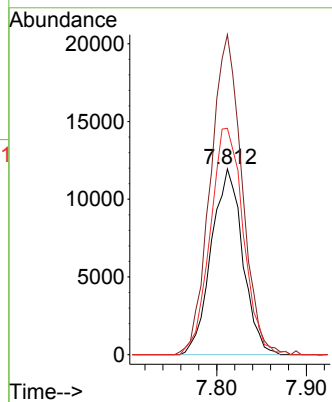
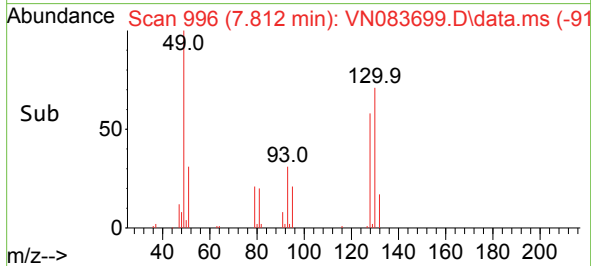


#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.812 min Scan# 996  
Delta R.T. -0.000 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Instrument :  
MSVOA\_N  
ClientSampleId :

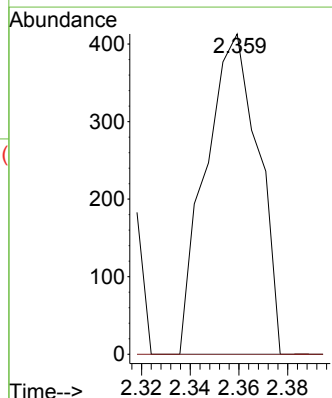
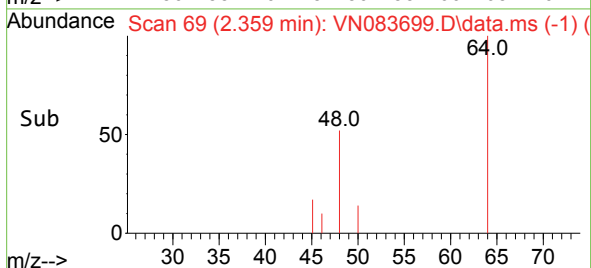
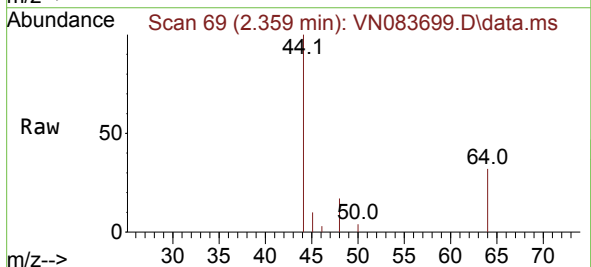


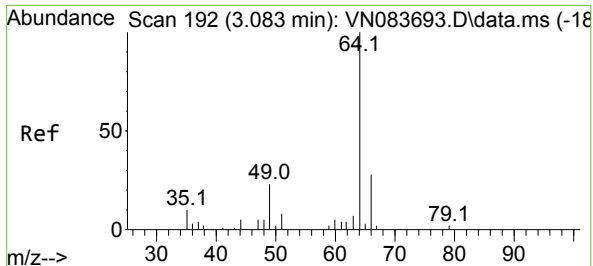
Tgt Ion:128 Resp: 29066  
Ion Ratio Lower Upper  
128 100  
49 172.7 0.0 403.7  
130 128.3 0.0 323.3



#3  
Chloromethane  
Concen: 0.307 ug/l  
RT: 2.359 min Scan# 69  
Delta R.T. -0.000 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

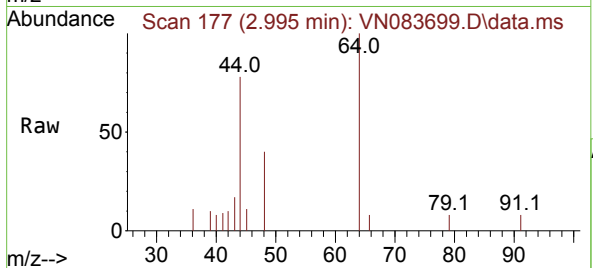
Tgt Ion: 50 Resp: 620  
Ion Ratio Lower Upper  
50 100  
52 0.0 25.4 38.0#



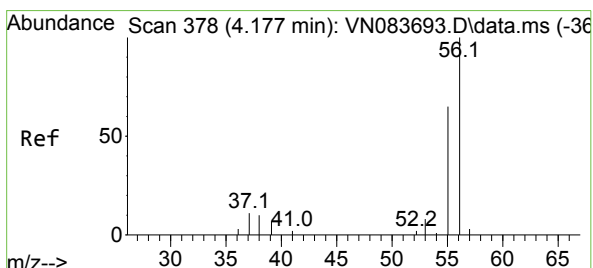
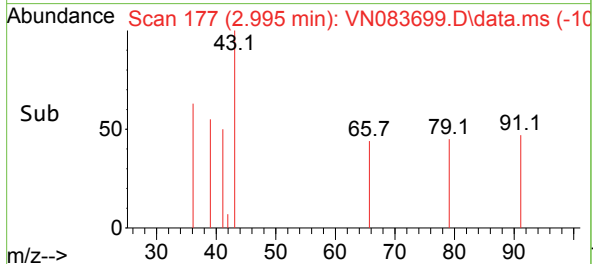
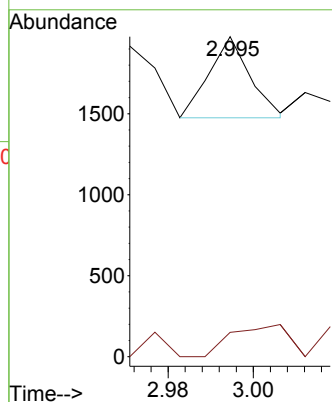


#6  
Chloroethane  
Concen: 0.241 ug/l  
RT: 2.995 min Scan# 11  
Delta R.T. -0.088 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Instrument :  
MSVOA\_N  
ClientSampleId :

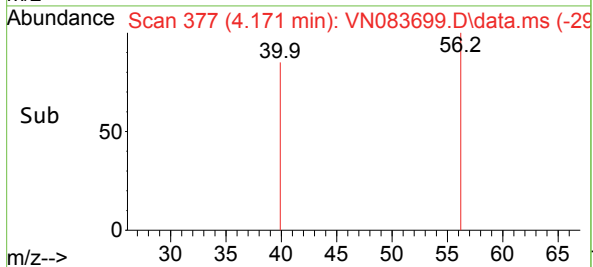
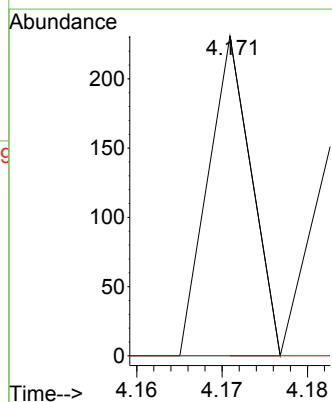
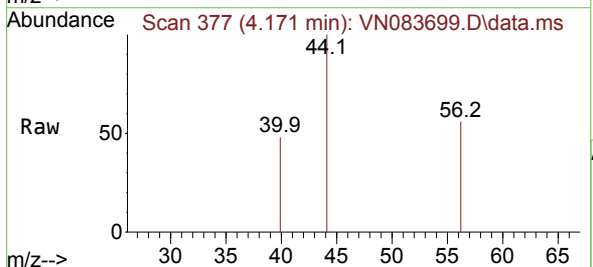


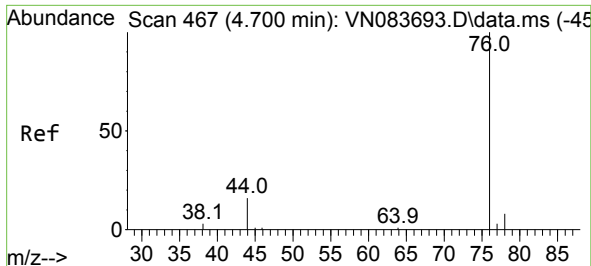
Tgt Ion: 64 Resp: 336  
Ion Ratio Lower Upper  
64 100  
66 29.9 26.7 40.1



#13  
Acrolein  
Concen: 0.255 ug/l  
RT: 4.171 min Scan# 377  
Delta R.T. -0.006 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

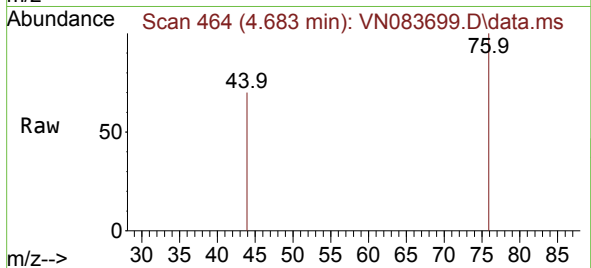
Tgt Ion: 56 Resp: 81  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.5 83.3#



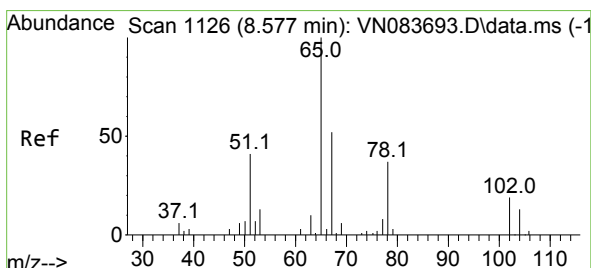
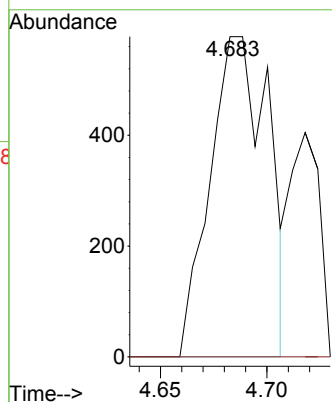
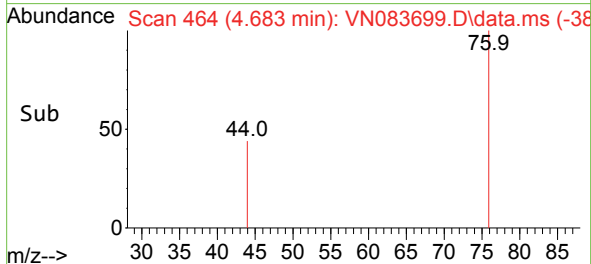


#16  
Carbon Disulfide  
Concen: 0.216 ug/l  
RT: 4.683 min Scan# 464  
Delta R.T. -0.018 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Instrument :  
MSVOA\_N  
ClientSampleId :

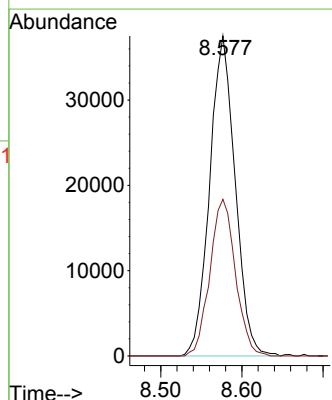
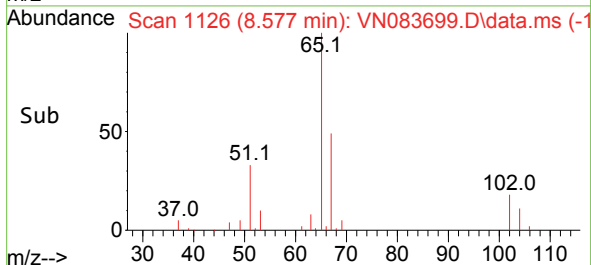
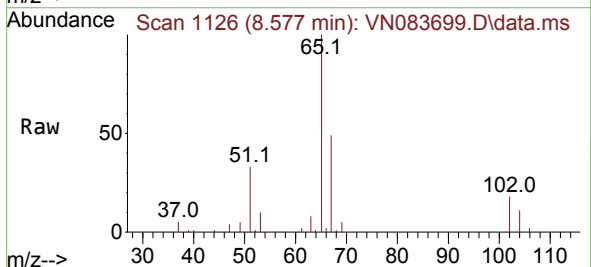


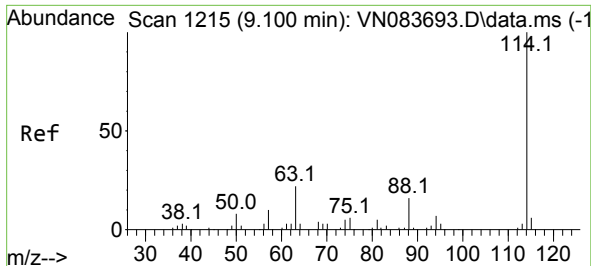
Tgt Ion: 76 Resp: 1101  
Ion Ratio Lower Upper  
76 100  
78 0.0 6.3 9.5#



#27  
1,2-Dichloroethane-d4  
Concen: 30.838 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. -0.000 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Tgt Ion: 65 Resp: 81933  
Ion Ratio Lower Upper  
65 100  
67 49.0 43.2 64.8





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 11

Delta R.T. -0.000 min

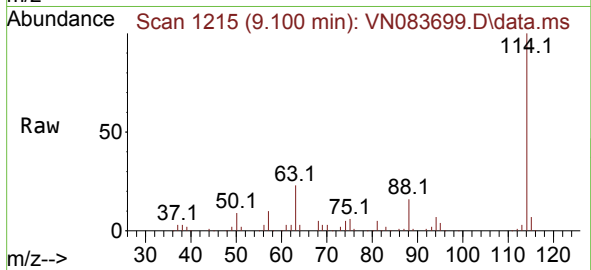
Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

Instrument :

MSVOA\_N

ClientSampleId :



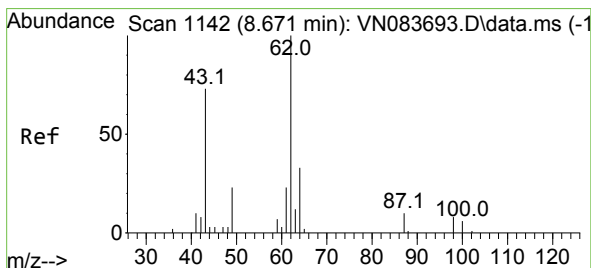
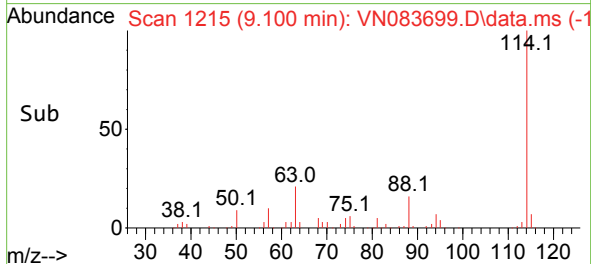
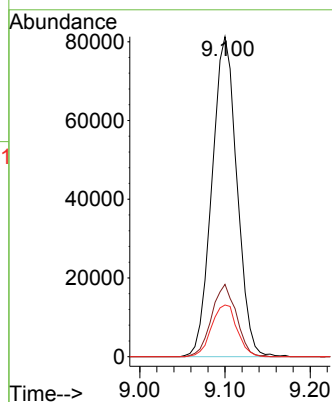
Tgt Ion:114 Resp: 165560

Ion Ratio Lower Upper

114 100

63 22.4 15.9 23.9

88 16.5 12.7 19.1



#36

1,2-Dichloroethane

Concen: 2.245 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. 0.423 min

Lab File: VN083699.D

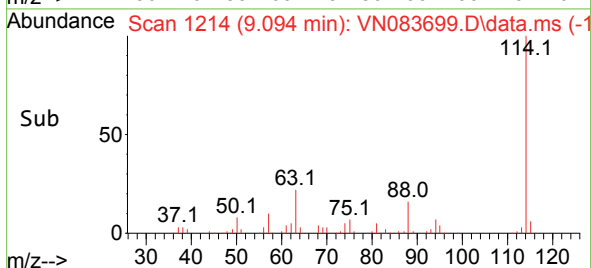
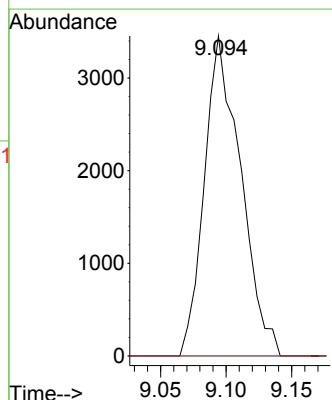
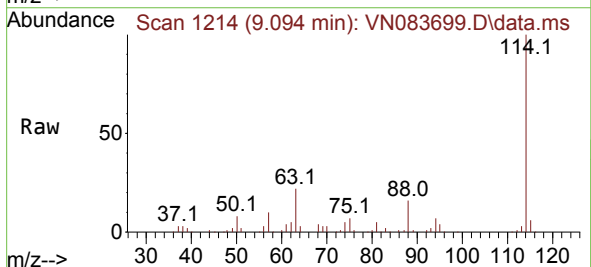
Acq: 06 Sep 2024 16:24

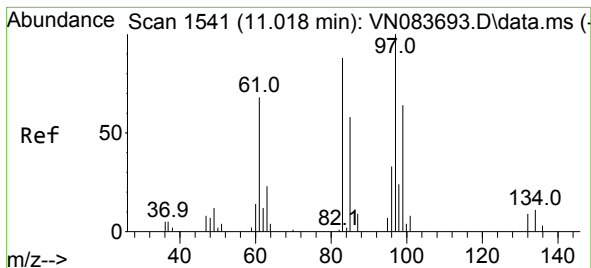
Tgt Ion: 62 Resp: 6650

Ion Ratio Lower Upper

62 100

98 0.0 8.2 12.4#





#50

1,1,2-Trichloroethane

Concen: 3.477 ug/l

RT: 10.576 min Scan# 1466

Delta R.T. -0.441 min

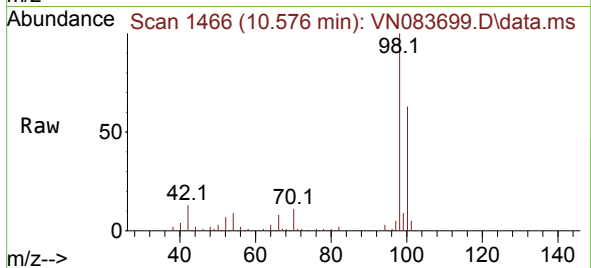
Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

Instrument :

MSVOA\_N

ClientSampleId :



Tgt Ion: 97 Resp: 6134

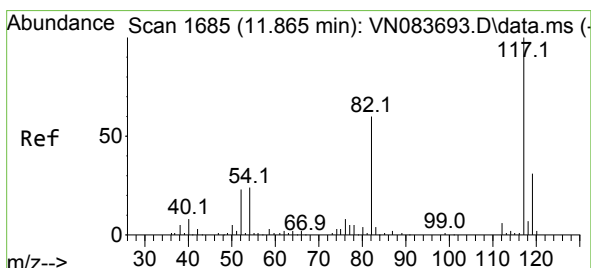
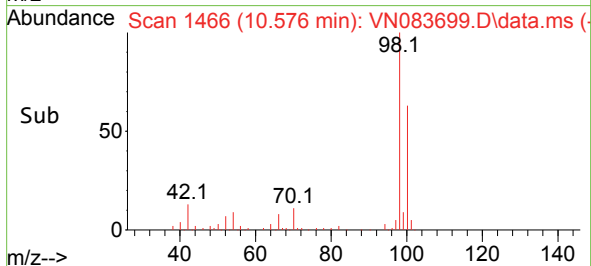
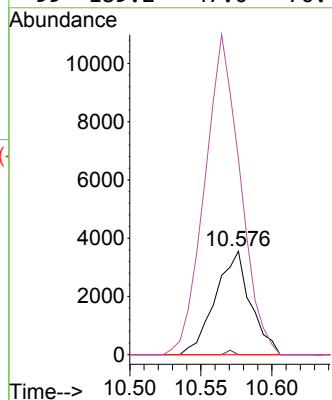
Ion Ratio Lower Upper

97 100

83 0.0 68.1 102.1#

85 0.0 41.8 62.6#

99 189.2 47.0 70.4#



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.865 min Scan# 1685

Delta R.T. -0.000 min

Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

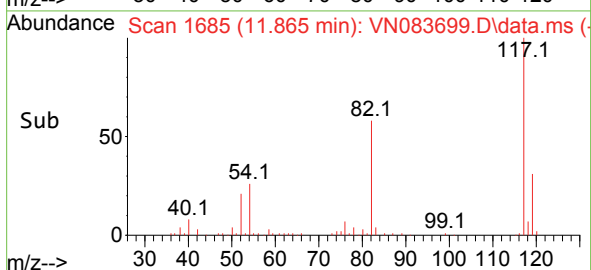
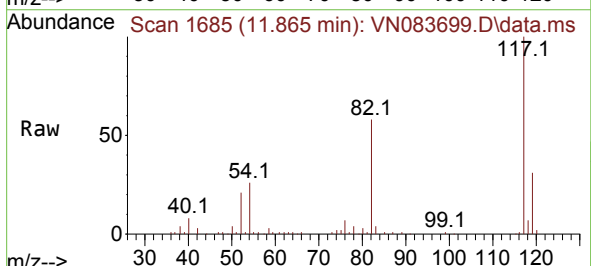
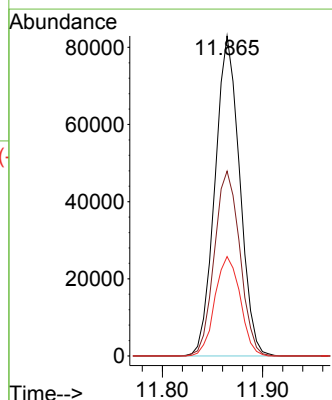
Tgt Ion: 117 Resp: 141967

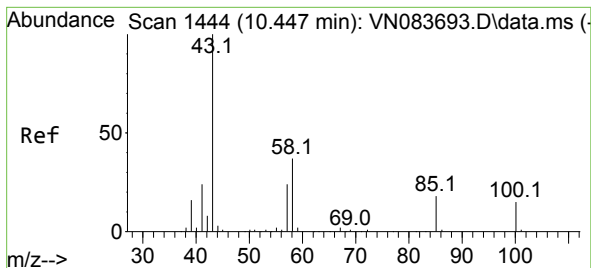
Ion Ratio Lower Upper

117 100

82 59.6 46.6 69.8

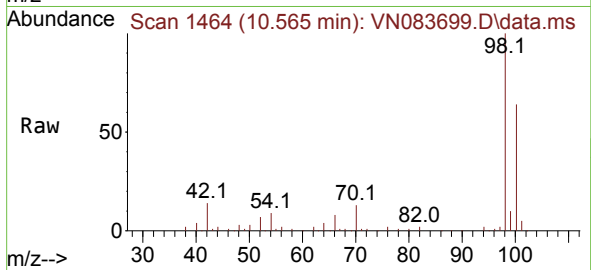
119 31.9 25.4 38.2



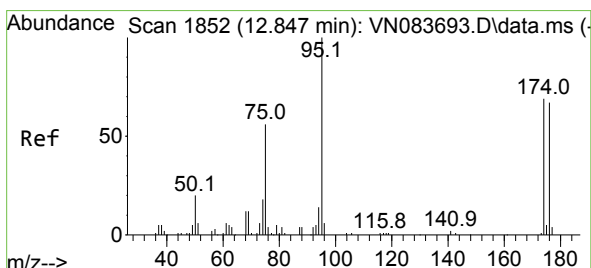
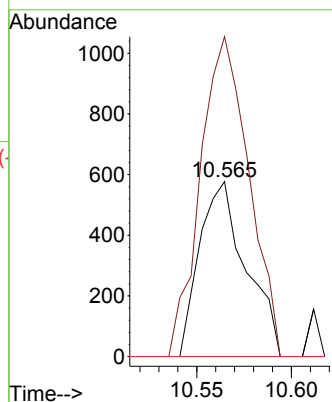
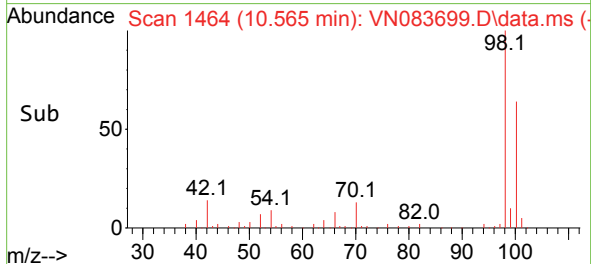


#58  
4-Methyl-2-Pentanone  
Concen: 0.438 ug/l  
RT: 10.565 min Scan# 1464  
Delta R.T. 0.118 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Instrument :  
MSVOA\_N  
ClientSampleId :

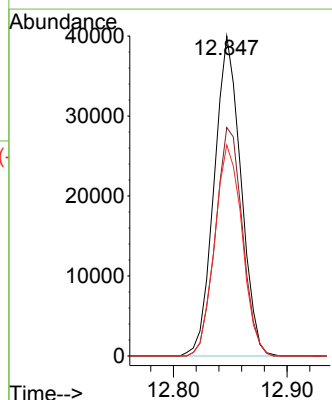
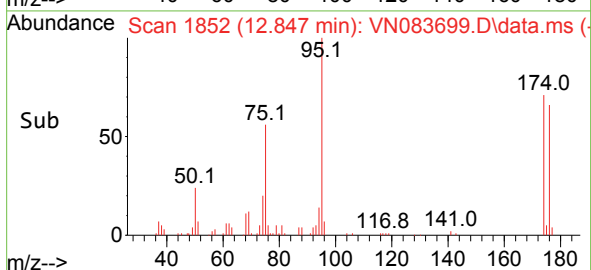
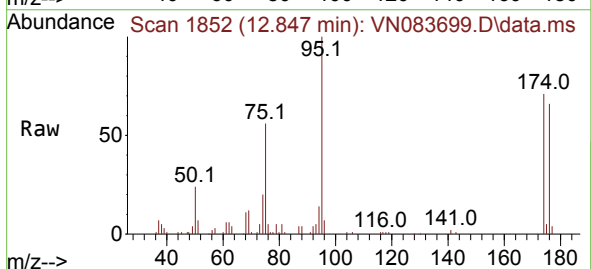


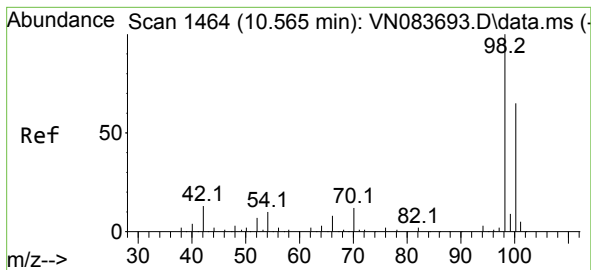
Tgt Ion: 43 Resp: 985  
Ion Ratio Lower Upper  
43 100  
58 191.4 36.5 54.7#  
85 0.0 19.5 29.3#



#60  
4-Bromofluorobenzene  
Concen: 26.675 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Tgt Ion: 95 Resp: 65267  
Ion Ratio Lower Upper  
95 100  
174 72.4 60.5 90.7  
176 68.1 57.8 86.6





#63

Toluene-d8

Concen: 30.384 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

Instrument :

MSVOA\_N

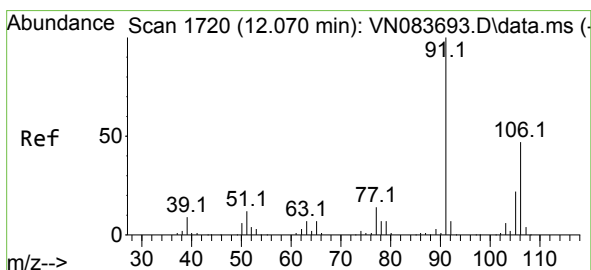
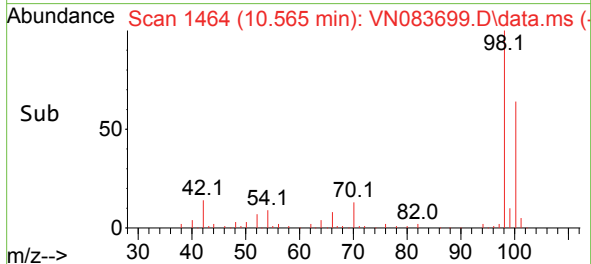
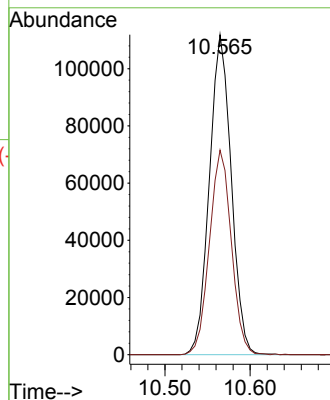
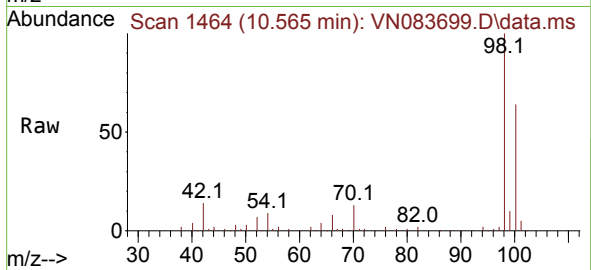
ClientSampleId :

Tgt Ion: 98 Resp: 199729

Ion Ratio Lower Upper

98 100

100 64.0 52.7 79.1



#67

m/p-Xylenes

Concen: 0.214 ug/l

RT: 12.070 min Scan# 1720

Delta R.T. -0.000 min

Lab File: VN083699.D

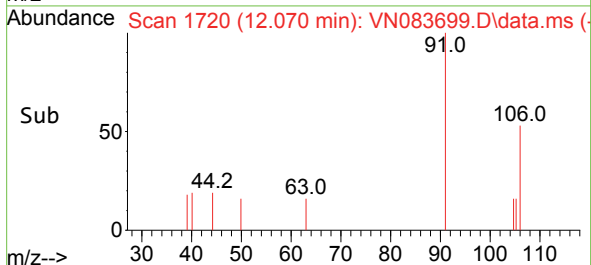
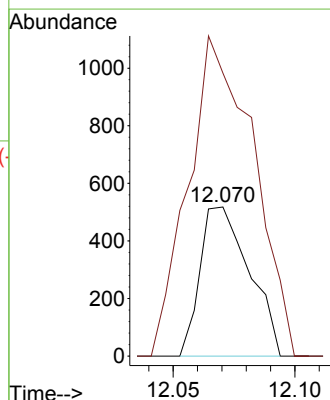
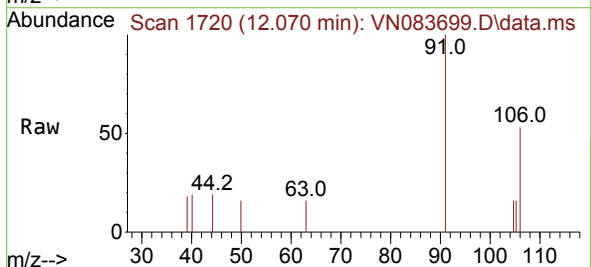
Acq: 06 Sep 2024 16:24

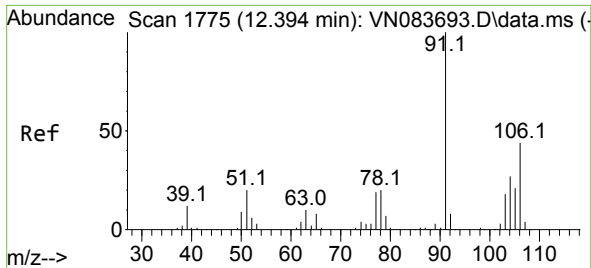
Tgt Ion:106 Resp: 729

Ion Ratio Lower Upper

106 100

91 283.8 166.6 249.8#

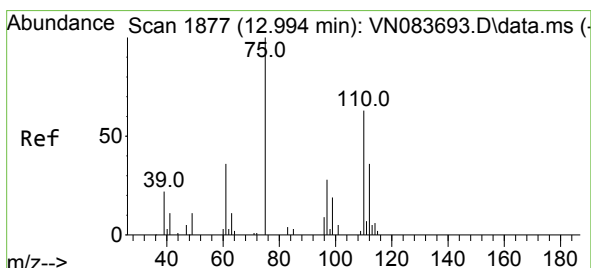
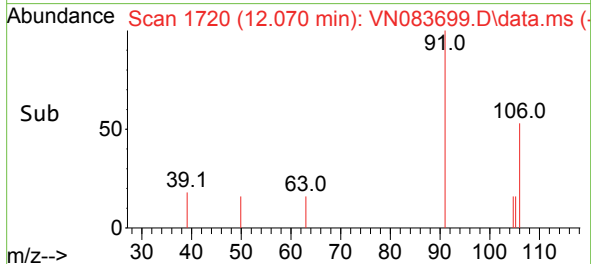
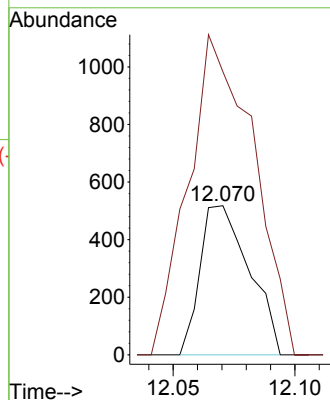
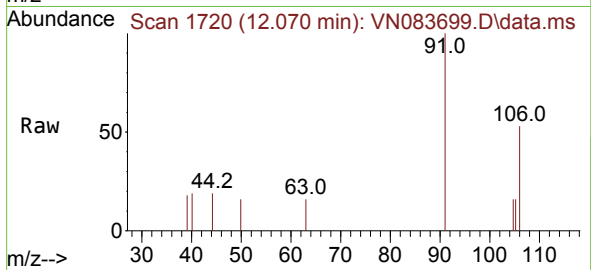




#68  
o-Xylene  
Concen: 0.221 ug/l  
RT: 12.070 min Scan# 11  
Delta R.T. -0.324 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

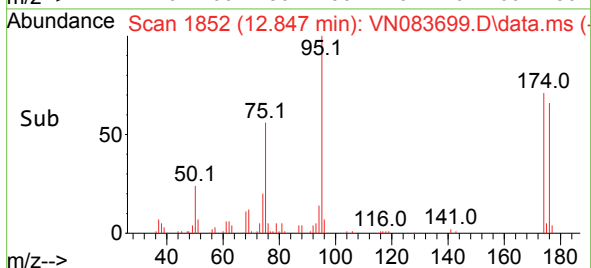
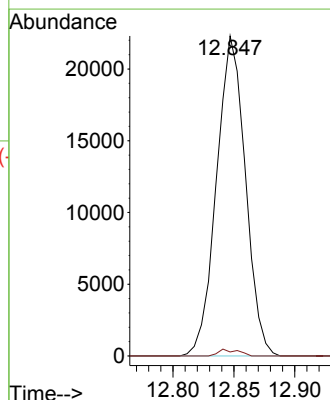
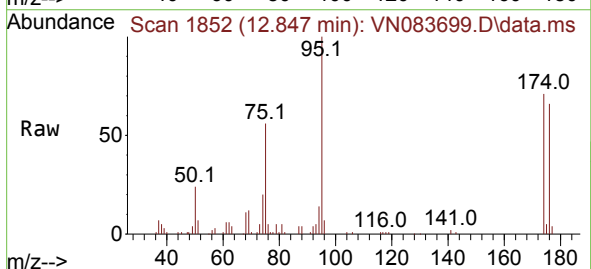
Instrument :  
MSVOA\_N  
ClientSampleId :

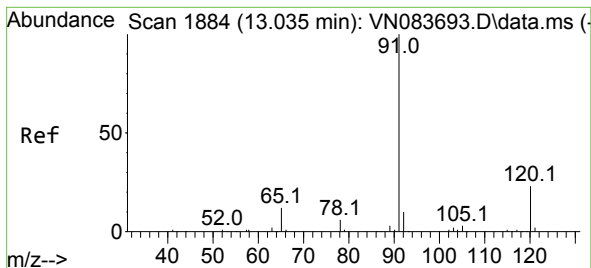
Tgt Ion:106 Resp: 729  
Ion Ratio Lower Upper  
106 100  
91 283.8 110.0 330.0



#72  
1,2,3-Trichloropropane  
Concen: 17.647 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.147 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Tgt Ion: 75 Resp: 36849  
Ion Ratio Lower Upper  
75 100  
77 1.4 0.0 367.6





#74

n-propylbenzene

Concen: 0.218 ug/l

RT: 13.035 min Scan# 1884

Delta R.T. -0.000 min

Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

Instrument :

MSVOA\_N

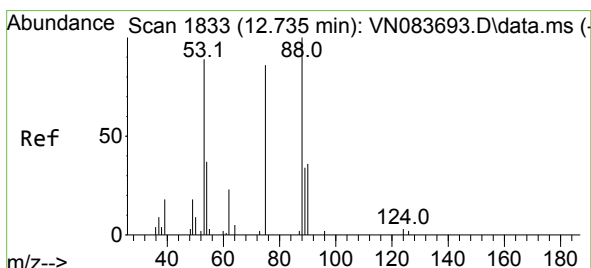
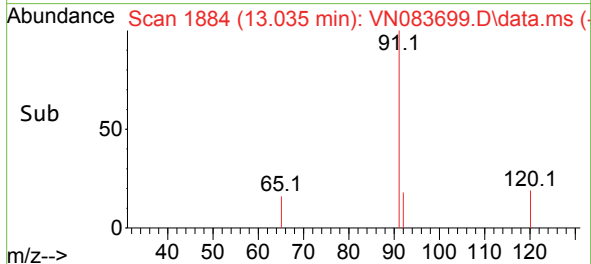
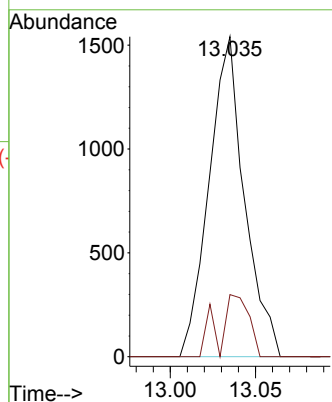
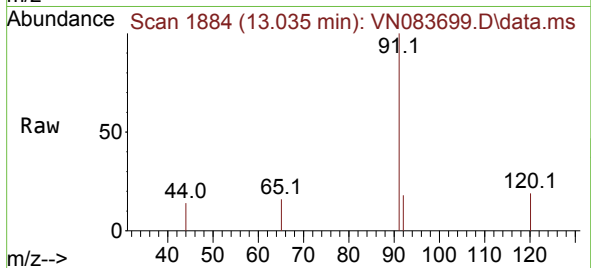
ClientSampleId :

Tgt Ion: 91 Resp: 2223

Ion Ratio Lower Upper

91 100

120 12.3 0.0 43.8



#77

t-1,4-Dichloro-2-butene

Concen: 41.751 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.112 min

Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

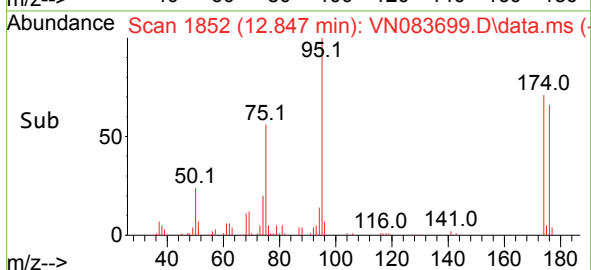
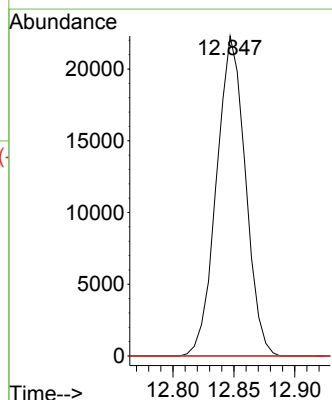
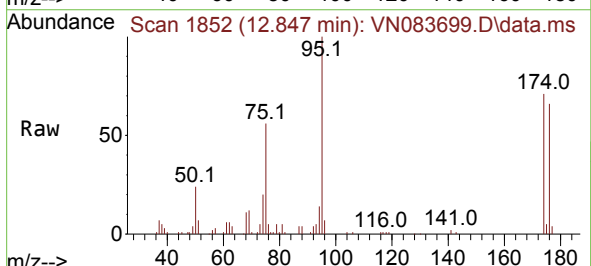
Tgt Ion: 75 Resp: 36849

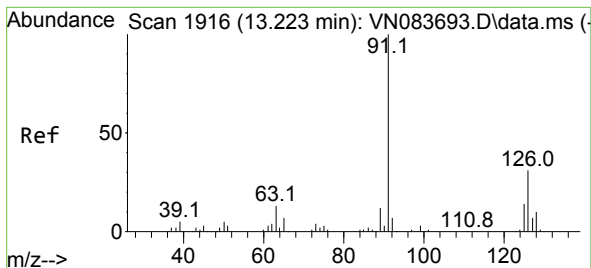
Ion Ratio Lower Upper

75 100

53 0.0 45.9 137.7#

89 0.0 25.9 77.7#

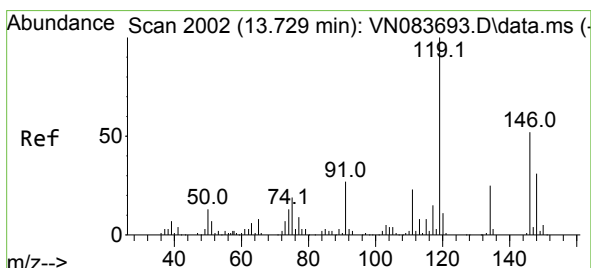
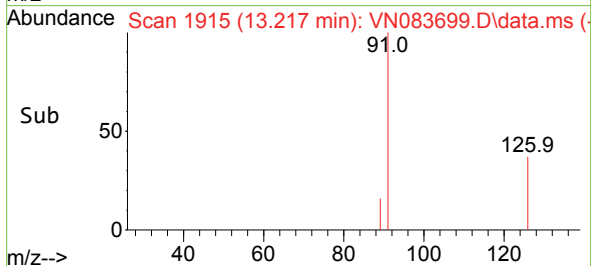
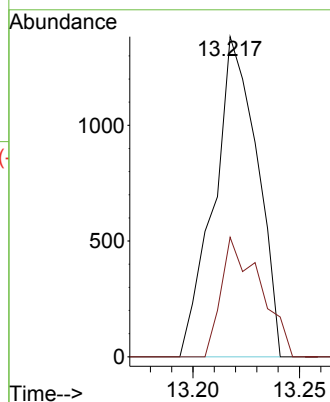
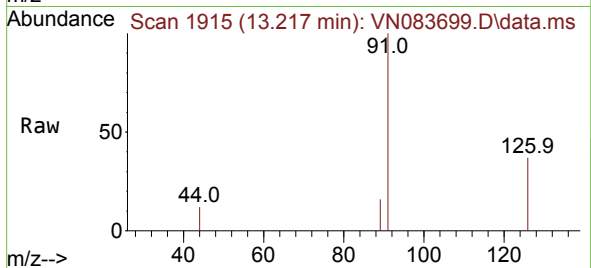




#78  
4-Chlorotoluene  
Concen: 0.302 ug/l  
RT: 13.217 min Scan# 1915  
Delta R.T. -0.006 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

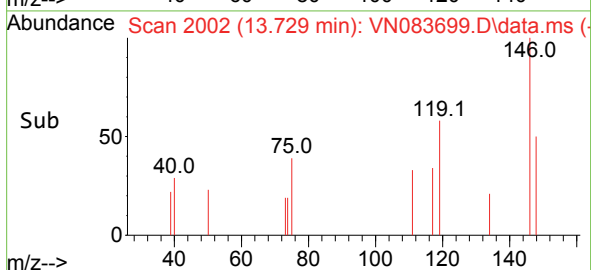
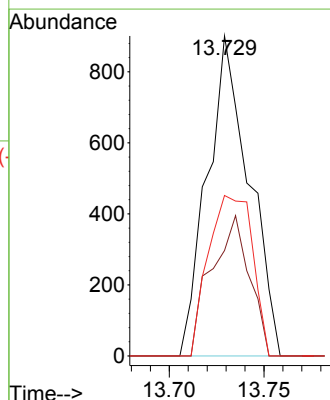
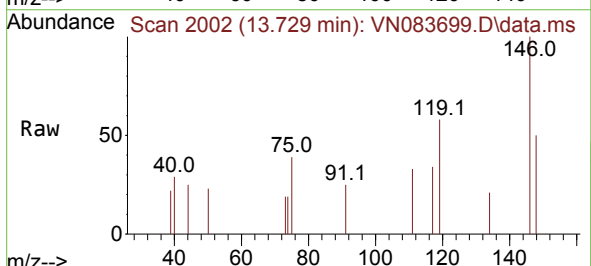
Instrument :  
MSVOA\_N  
ClientSampleId :

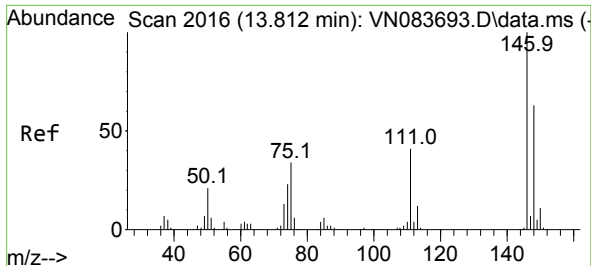
Tgt Ion: 91 Resp: 1951  
Ion Ratio Lower Upper  
91 100  
126 33.8 0.0 62.8



#83  
1,3-Dichlorobenzene  
Concen: 0.359 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. -0.000 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

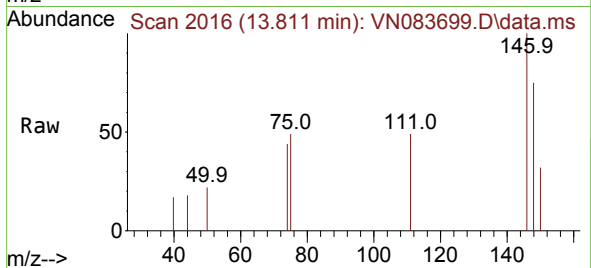
Tgt Ion: 146 Resp: 1383  
Ion Ratio Lower Upper  
146 100  
111 39.9 22.4 67.0  
148 53.0 32.1 96.5



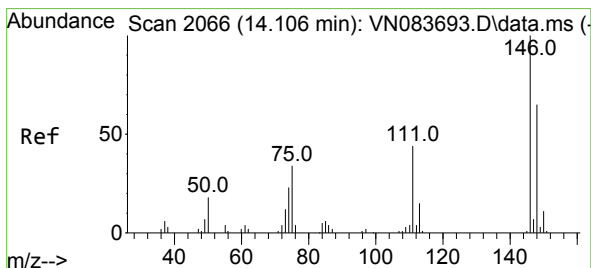
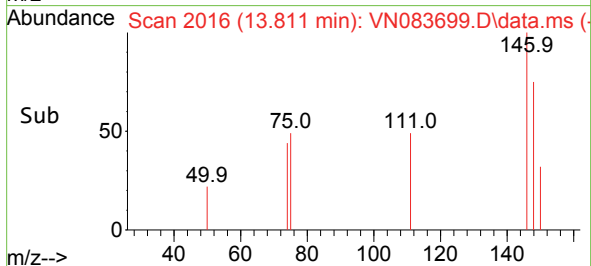
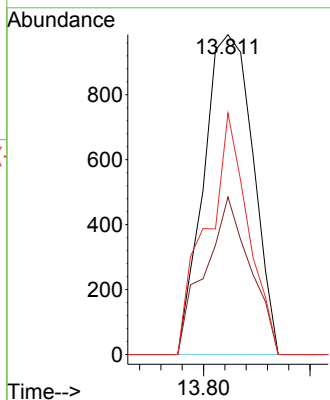


#84  
1,4-Dichlorobenzene  
Concen: 0.411 ug/l  
RT: 13.811 min Scan# 2016  
Delta R.T. -0.000 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Instrument :  
MSVOA\_N  
ClientSampleId :

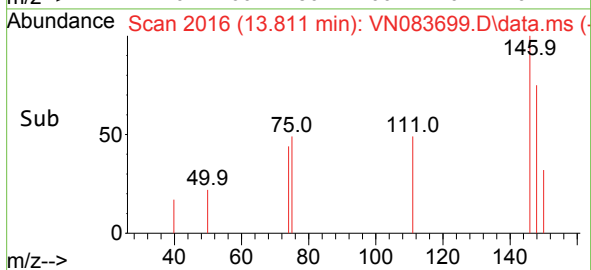
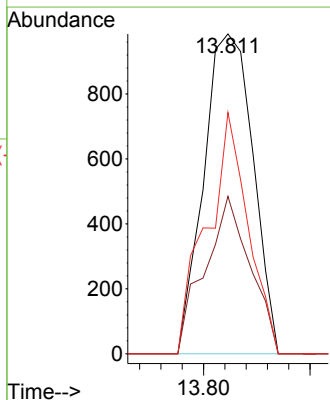
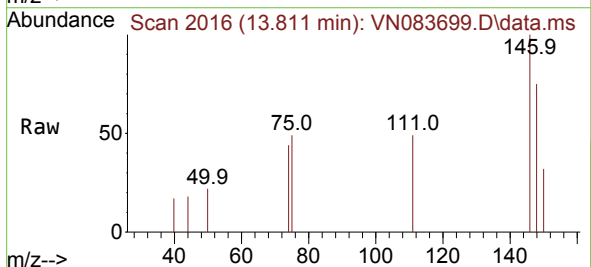


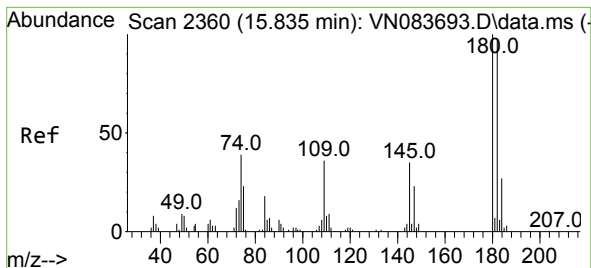
Tgt Ion:146 Resp: 1584  
Ion Ratio Lower Upper  
146 100  
111 45.3 21.3 63.9  
148 39.0 31.9 95.5



#87  
1,2-Dichlorobenzene  
Concen: 0.423 ug/l  
RT: 13.811 min Scan# 2016  
Delta R.T. -0.294 min  
Lab File: VN083699.D  
Acq: 06 Sep 2024 16:24

Tgt Ion:146 Resp: 1584  
Ion Ratio Lower Upper  
146 100  
111 45.3 22.6 67.8  
148 39.0 31.3 93.8





#89

1,2,4-Trichlorobenzene

Concen: 0.395 ug/l

RT: 15.841 min Scan# 2361

Delta R.T. 0.006 min

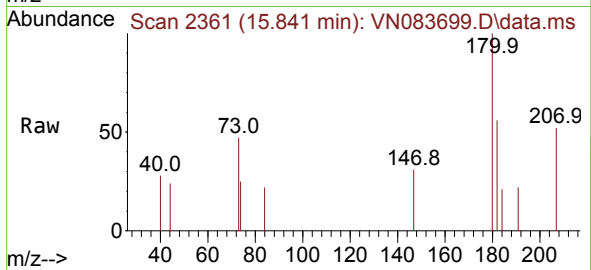
Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

Instrument :

MSVOA\_N

ClientSampleId :



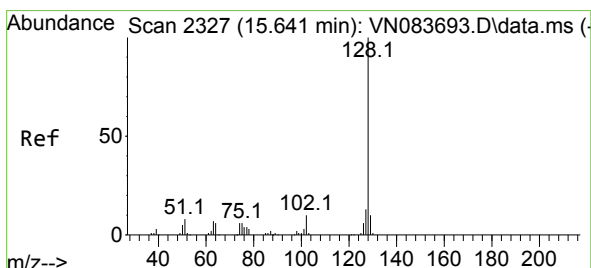
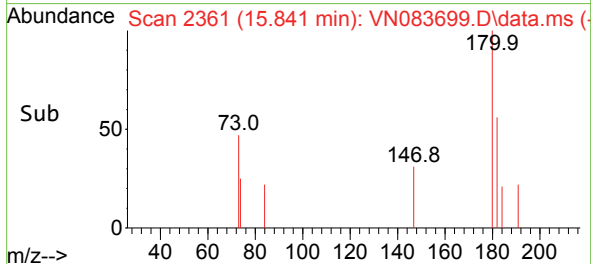
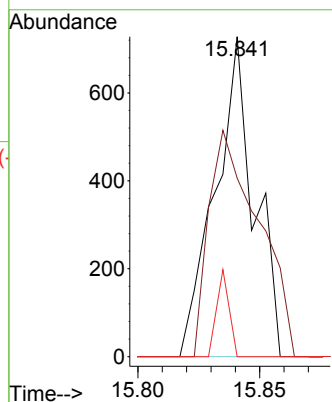
Tgt Ion:180 Resp: 809

Ion Ratio Lower Upper

180 100

182 90.7 76.4 114.6

145 0.0 28.4 42.6#



#91

Naphthalene

Concen: 0.420 ug/l

RT: 15.641 min Scan# 2327

Delta R.T. -0.000 min

Lab File: VN083699.D

Acq: 06 Sep 2024 16:24

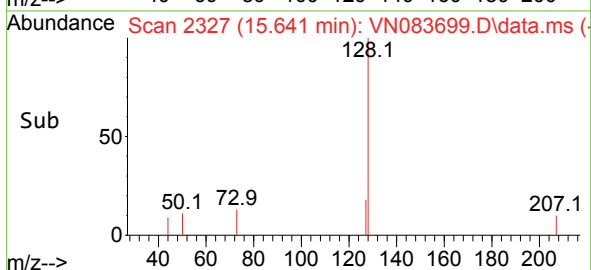
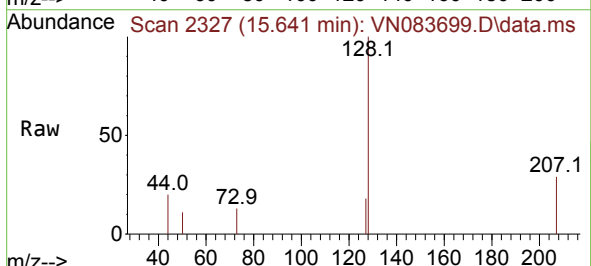
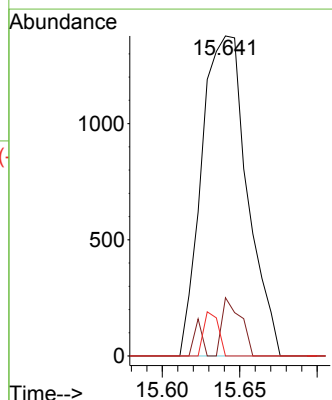
Tgt Ion:128 Resp: 2817

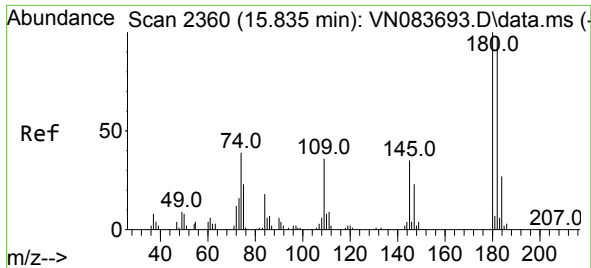
Ion Ratio Lower Upper

128 100

127 7.5 10.6 16.0#

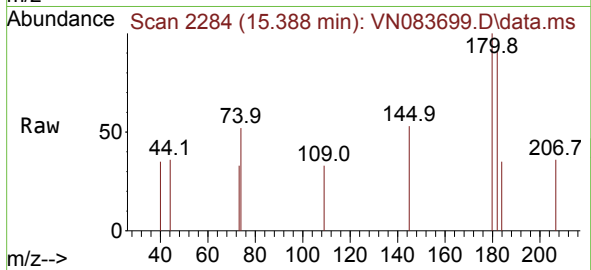
129 4.4 8.6 13.0#





#92  
 1,2,3-Trichlorobenzene  
 Concen: 0.605 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. -0.447 min  
 Lab File: VN083699.D  
 Acq: 06 Sep 2024 16:24

Instrument :  
 MSVOA\_N  
 ClientSampleId :



Tgt Ion:180 Resp: 1239  
 Ion Ratio Lower Upper  
 180 100  
 182 86.4 0.0 191.0  
 145 26.4 0.0 71.0

