

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN031025\  
 Data File : VN085919.D  
 Acq On : 10 Mar 2025 17:11  
 Operator : JC\MD  
 Sample : Q1514-07  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Mar 11 01:39:49 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N021825W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 19 03:43:32 2025  
 Response via : Initial Calibration

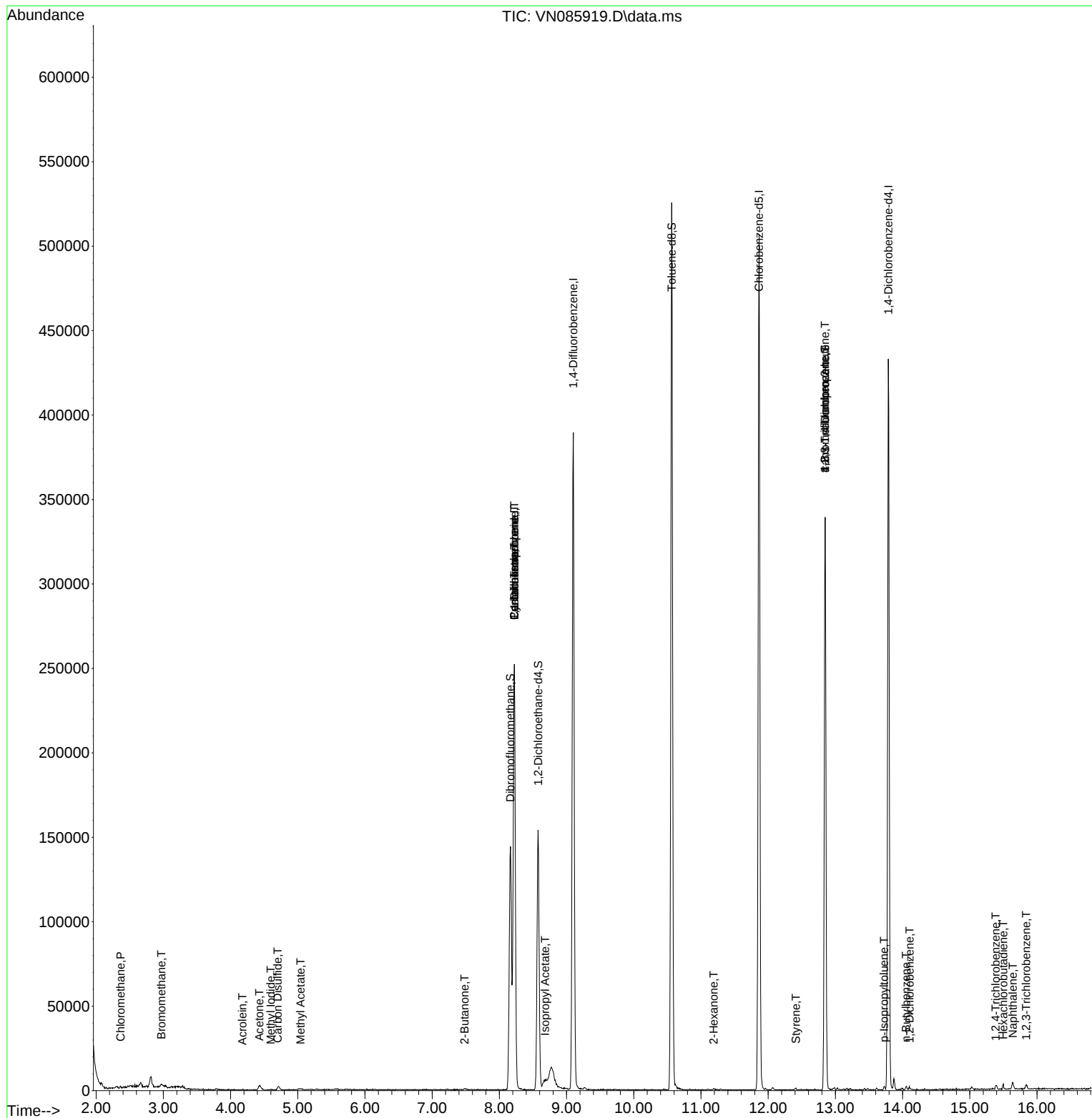
| Compound                      | R.T.   | QIon  | Response | Conc      | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|-----------|--------|----------|
| Internal Standards            |        |       |          |           |        |          |
| 1) Pentafluorobenzene         | 8.224  | 168   | 180602   | 50.000    | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.100  | 114   | 336697   | 50.000    | ug/l   | 0.00     |
| 63) Chlorobenzene-d5          | 11.865 | 117   | 290159   | 50.000    | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.788 | 152   | 119785   | 50.000    | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |           |        |          |
| 33) 1,2-Dichloroethane-d4     | 8.577  | 65    | 123756   | 52.855    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery  | =      | 105.700% |
| 35) Dibromofluoromethane      | 8.165  | 113   | 105753   | 48.000    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery  | =      | 96.000%  |
| 50) Toluene-d8                | 10.565 | 98    | 364171   | 45.431    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery  | =      | 90.860%  |
| 62) 4-Bromofluorobenzene      | 12.847 | 95    | 124468   | 47.128    | ug/l   | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery  | =      | 94.260%  |
| Target Compounds              |        |       |          |           |        | Qvalue   |
| 3) Chloromethane              | 2.365  | 50    | 682      | 0.277     | ug/l   | 89       |
| 5) Bromomethane               | 2.971  | 94    | 852      | 0.511     | ug/l # | 78       |
| 10) Methyl Iodide             | 4.600  | 142   | 663      | 0.246     | ug/l # | 38       |
| 13) Acrolein                  | 4.177  | 56    | 270      | 0.632     | ug/l # | 53       |
| 16) Acetone                   | 4.430  | 43    | 5327     | 7.190     | ug/l   | 96       |
| 17) Carbon Disulfide          | 4.700  | 76    | 3613     | 0.616     | ug/l # | 90       |
| 18) Methyl Acetate            | 5.041  | 43    | 1279     | 0.502     | ug/l # | 66       |
| 25) 2-Butanone                | 7.482  | 43    | 635      | 0.583     | ug/l # | 45       |
| 31) Cyclohexane               | 8.224  | 56    | 3928     | 1.175     | ug/l # | 1        |
| 36) 1,1-Dichloropropene       | 8.224  | 75    | 15039    | 4.823     | ug/l # | 50       |
| 38) Carbon Tetrachloride      | 8.224  | 117   | 19419    | 5.241     | ug/l # | 18       |
| 43) Isopropyl Acetate         | 8.682  | 43    | 4273     | 0.407     | ug/l # | 53       |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63    | 124      | Below Cal | #      | 46       |
| 59) 2-Hexanone                | 11.188 | 43    | 775      | 0.455     | ug/l # | 32       |
| 70) Styrene                   | 12.412 | 104   | 447      | 0.654     | ug/l # | 67       |
| 76) 1,2,3-Trichloropropane    | 12.847 | 75    | 61267    | 23.025    | ug/l # | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.847 | 75    | 61267    | 67.183    | ug/l # | 12       |
| 86) p-Isopropyltoluene        | 13.723 | 119   | 936      | 0.763     | ug/l # | 73       |
| 89) n-Butylbenzene            | 14.053 | 91    | 1416     | 0.251     | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146   | 813      | 0.204     | ug/l   | 96       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180   | 1057     | 0.555     | ug/l   | 87       |
| 94) Hexachlorobutadiene       | 15.500 | 225   | 954      | 0.825     | ug/l   | 72       |
| 95) Naphthalene               | 15.641 | 128   | 4950     | 0.947     | ug/l # | 87       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180   | 1272     | 0.666     | ug/l   | 87       |

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

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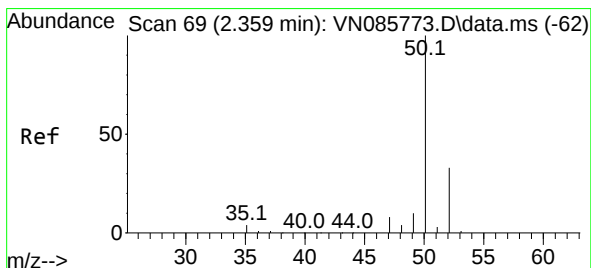
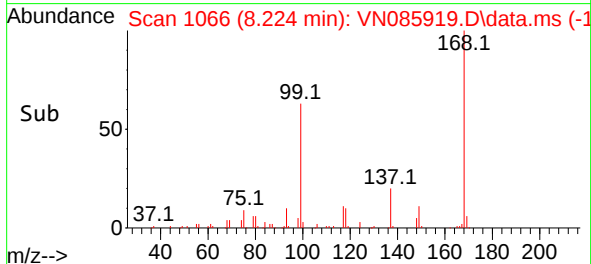
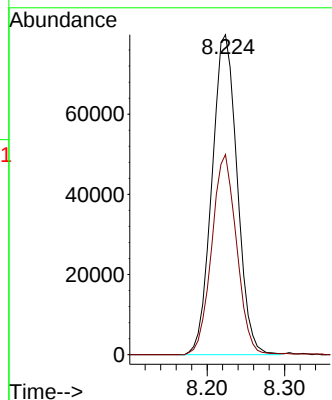
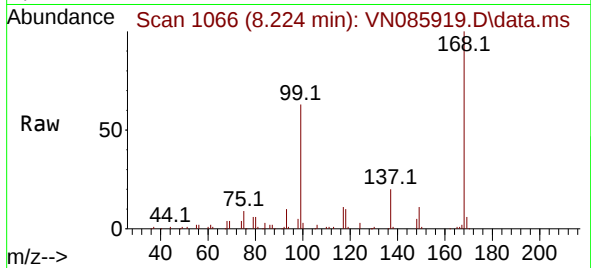




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.224 min Scan# 10  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

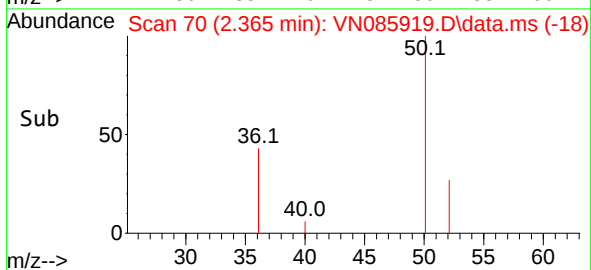
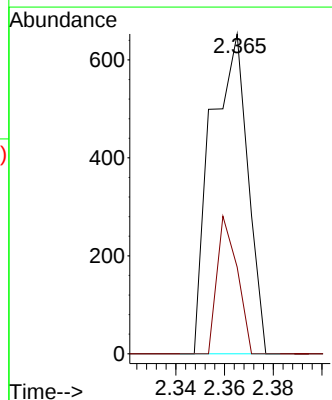
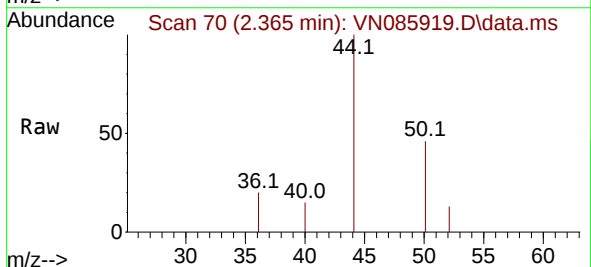
Instrument :  
MSVOA\_N  
ClientSampleId :

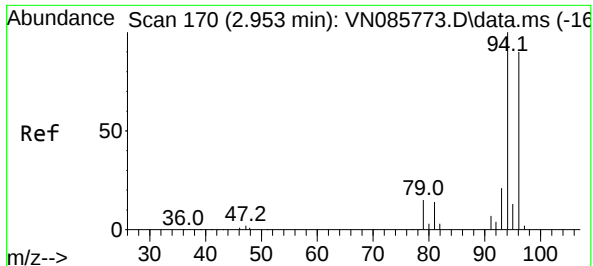
Tgt Ion:168 Resp: 180602  
Ion Ratio Lower Upper  
168 100  
99 62.6 47.9 71.9



#3  
Chloromethane  
Concen: 0.277 ug/l  
RT: 2.365 min Scan# 70  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Tgt Ion: 50 Resp: 682  
Ion Ratio Lower Upper  
50 100  
52 27.1 26.7 40.1

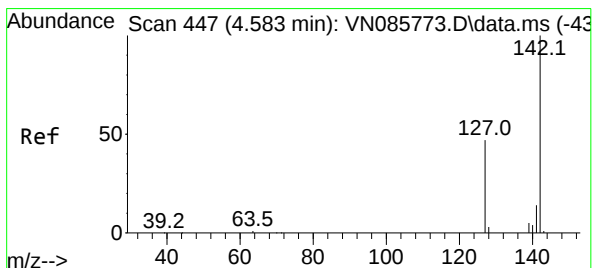
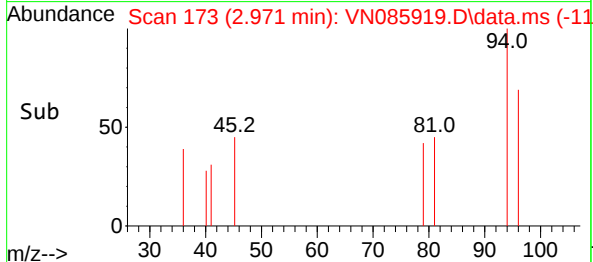
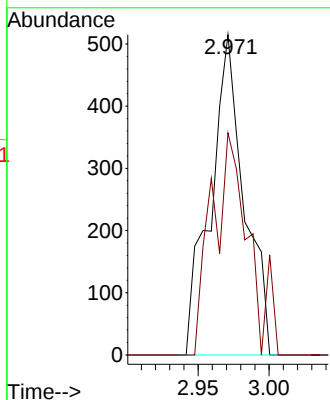
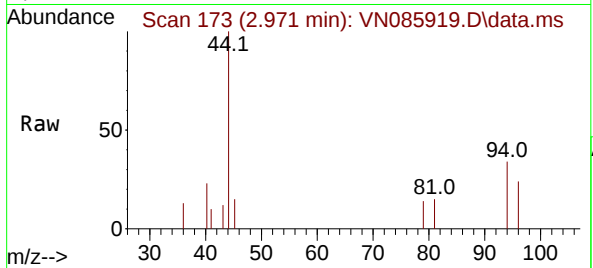




#5  
Bromomethane  
Concen: 0.511 ug/l  
RT: 2.971 min Scan# 11  
Delta R.T. 0.018 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

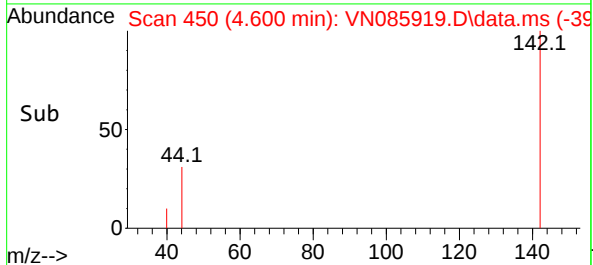
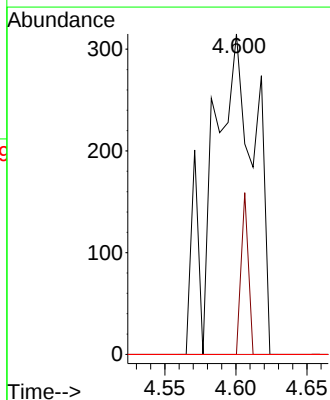
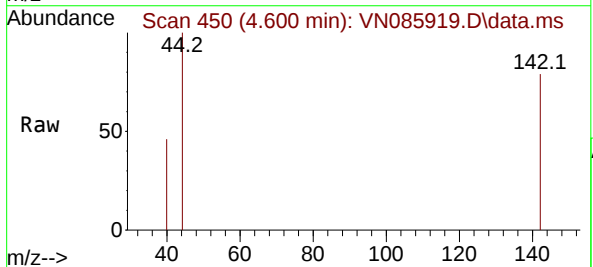
Instrument :  
MSVOA\_N  
ClientSampleId :

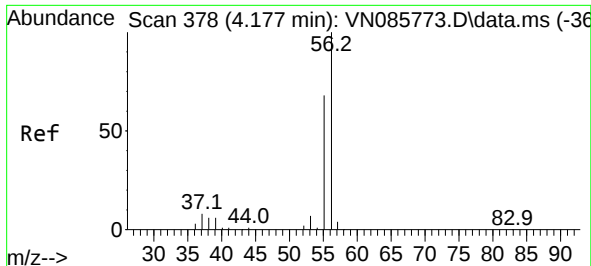
Tgt Ion: 94 Resp: 852  
Ion Ratio Lower Upper  
94 100  
96 69.3 71.7 107.5#



#10  
Methyl Iodide  
Concen: 0.246 ug/l  
RT: 4.600 min Scan# 450  
Delta R.T. 0.018 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

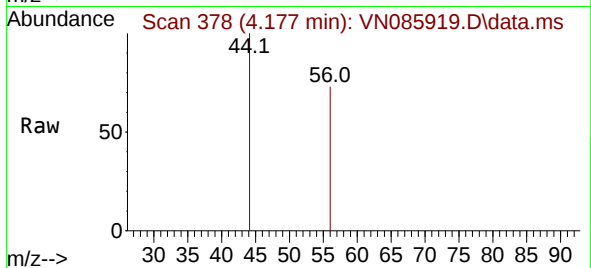
Tgt Ion:142 Resp: 663  
Ion Ratio Lower Upper  
142 100  
127 0.0 37.6 56.4#  
141 0.0 11.4 17.2#



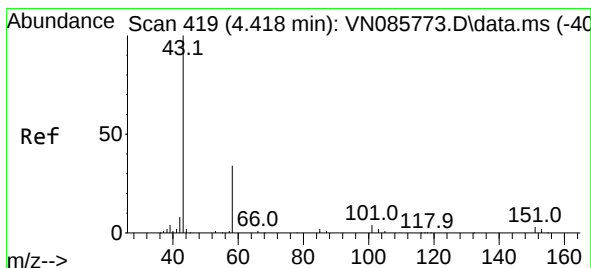
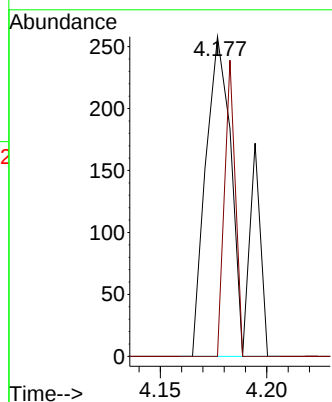


#13  
Acrolein  
Concen: 0.632 ug/l  
RT: 4.177 min Scan# 31  
Delta R.T. -0.000 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

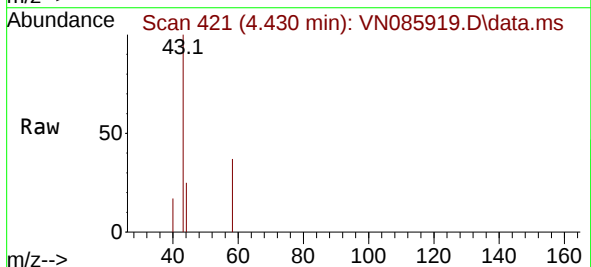
Instrument :  
MSVOA\_N  
ClientSampleId :



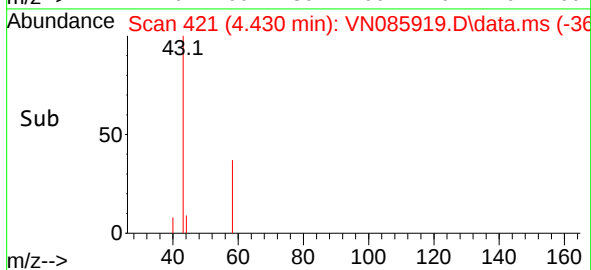
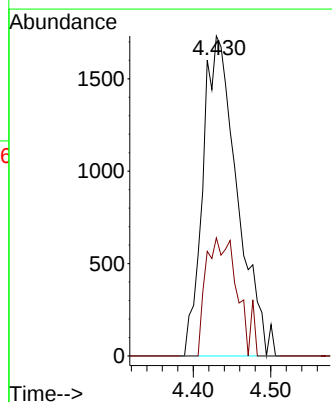
Tgt Ion: 56 Resp: 270  
Ion Ratio Lower Upper  
56 100  
55 31.1 55.3 82.9#

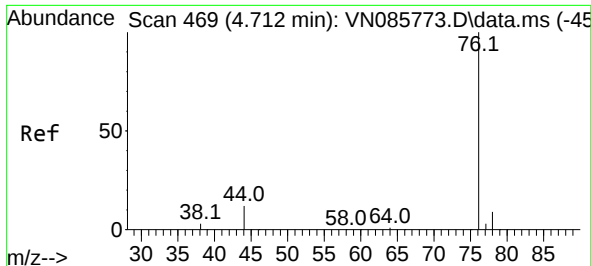


#16  
Acetone  
Concen: 7.190 ug/l  
RT: 4.430 min Scan# 421  
Delta R.T. 0.012 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11



Tgt Ion: 43 Resp: 5327  
Ion Ratio Lower Upper  
43 100  
58 36.9 27.5 41.3

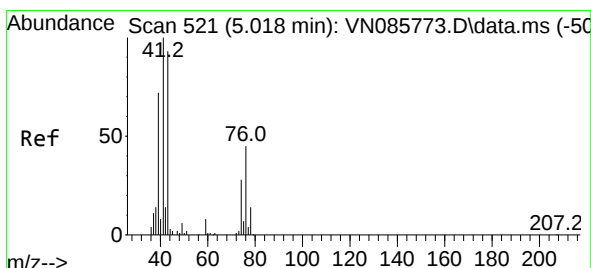
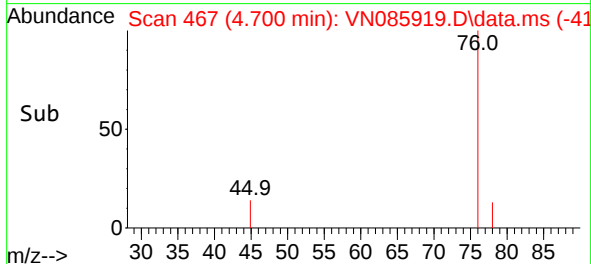
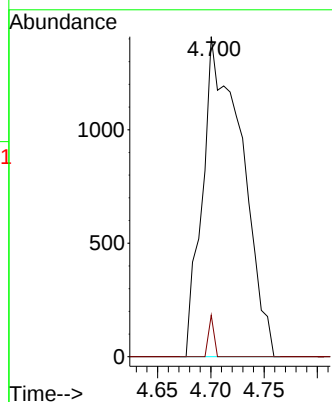
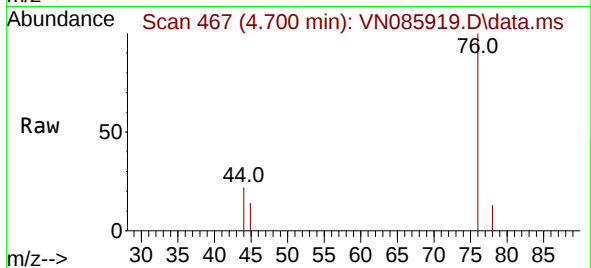




#17  
Carbon Disulfide  
Concen: 0.616 ug/l  
RT: 4.700 min Scan# 41  
Delta R.T. -0.012 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

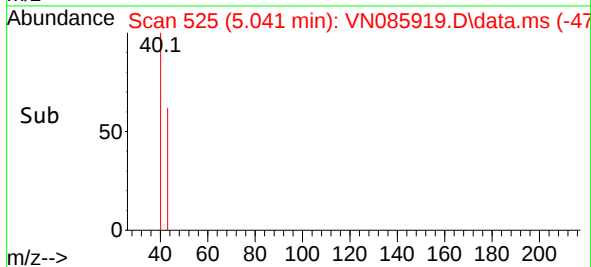
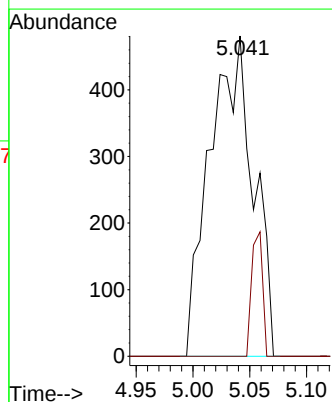
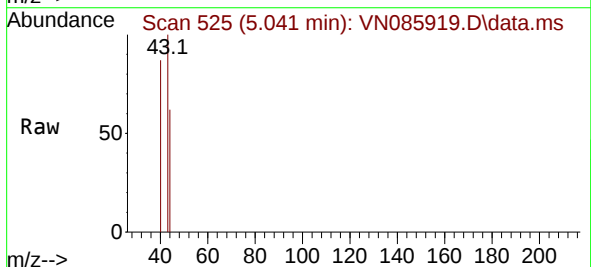
Instrument :  
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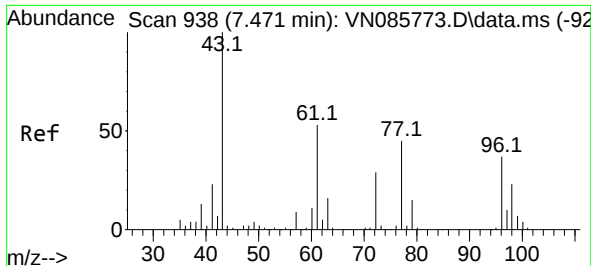
Tgt Ion: 76 Resp: 3613  
Ion Ratio Lower Upper  
76 100  
78 13.0 7.4 11.0#



#18  
Methyl Acetate  
Concen: 0.502 ug/l  
RT: 5.041 min Scan# 525  
Delta R.T. 0.023 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Tgt Ion: 43 Resp: 1279  
Ion Ratio Lower Upper  
43 100  
74 9.8 22.2 33.4#

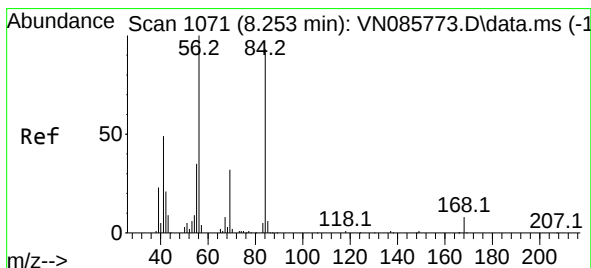
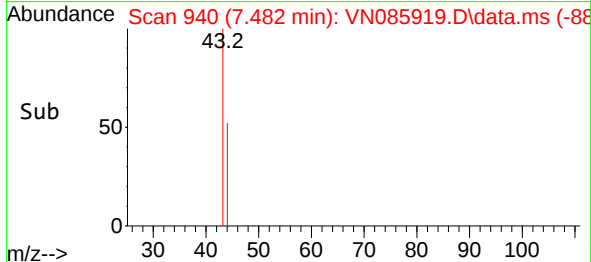
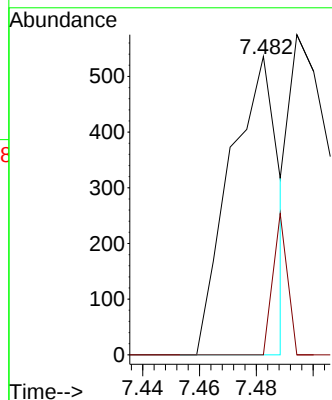
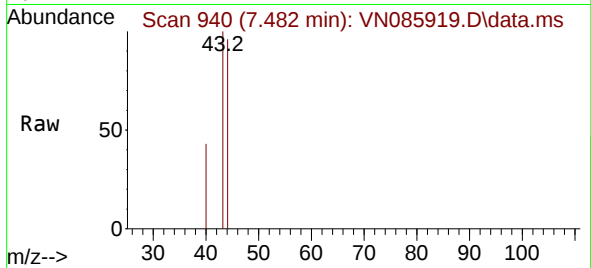




#25  
2-Butanone  
Concen: 0.583 ug/l  
RT: 7.482 min Scan# 94  
Delta R.T. 0.012 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

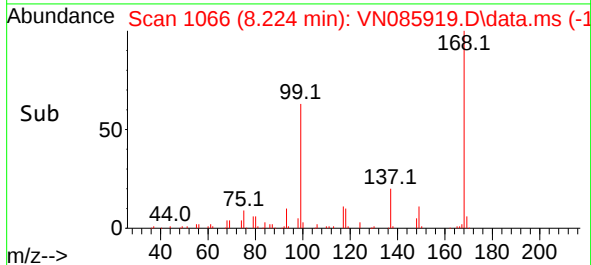
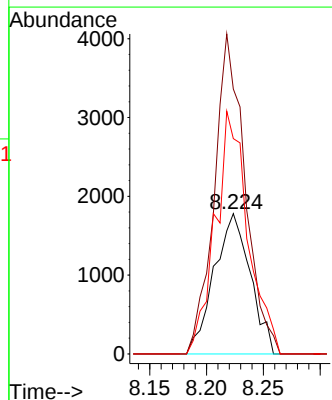
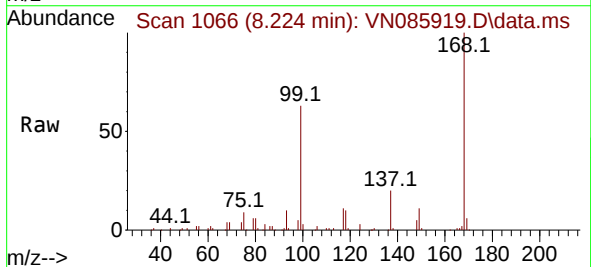
Instrument :  
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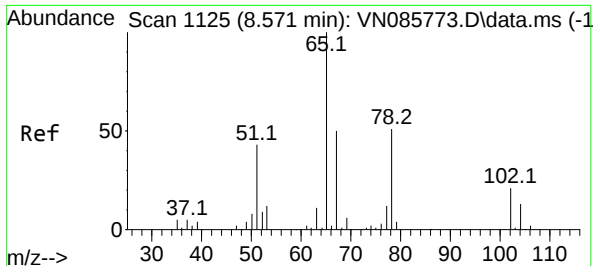
Tgt Ion: 43 Resp: 635  
Ion Ratio Lower Upper  
43 100  
72 0.0 23.6 35.4#



#31  
Cyclohexane  
Concen: 1.175 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.029 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Tgt Ion: 56 Resp: 3928  
Ion Ratio Lower Upper  
56 100  
69 188.7 25.8 38.6#  
84 153.4 74.5 111.7#





#33

1,2-Dichloroethane-d4

Concen: 52.855 ug/l

RT: 8.577 min Scan# 1125

Delta R.T. 0.006 min

Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

Instrument :

MSVOA\_N

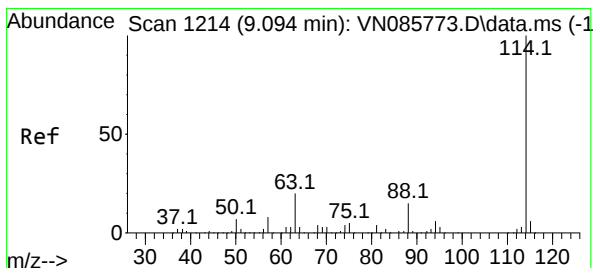
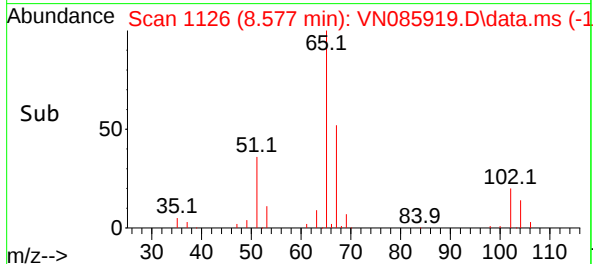
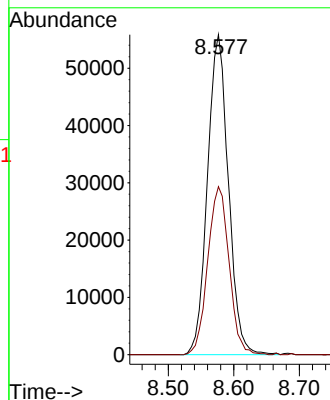
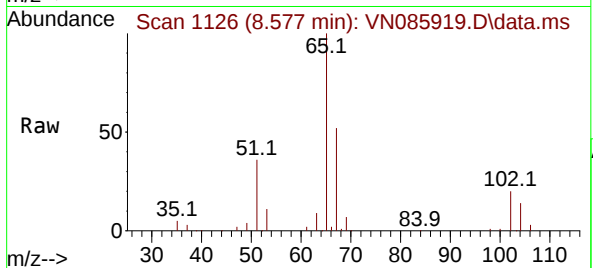
ClientSampleId :

Tgt Ion: 65 Resp: 123756

Ion Ratio Lower Upper

65 100

67 53.6 0.0 106.2



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.006 min

Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

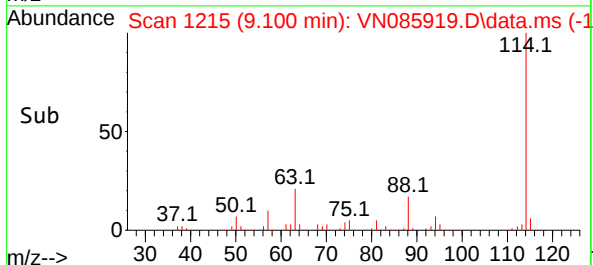
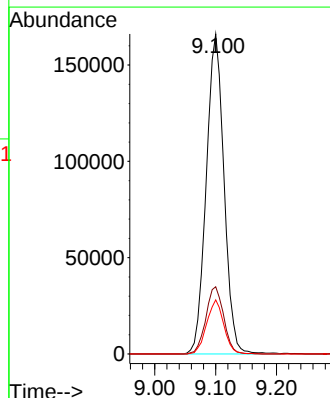
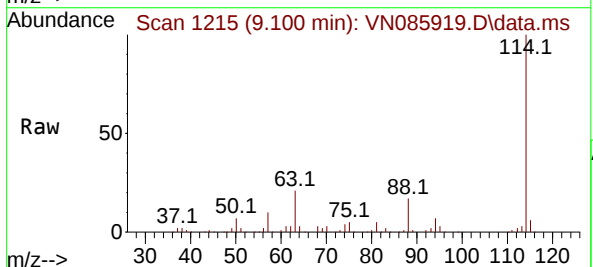
Tgt Ion: 114 Resp: 336697

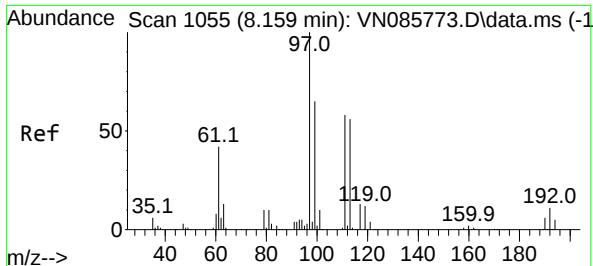
Ion Ratio Lower Upper

114 100

63 21.0 0.0 39.2

88 16.9 0.0 30.0





#35

Dibromofluoromethane

Concen: 48.000 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.006 min

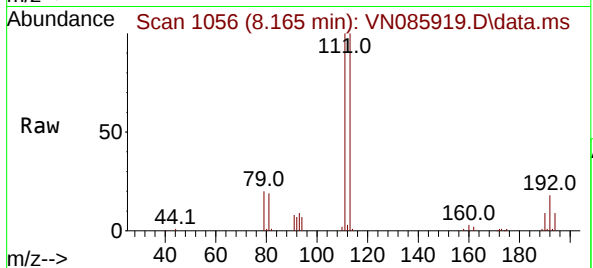
Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

Instrument :

MSVOA\_N

ClientSampleId :



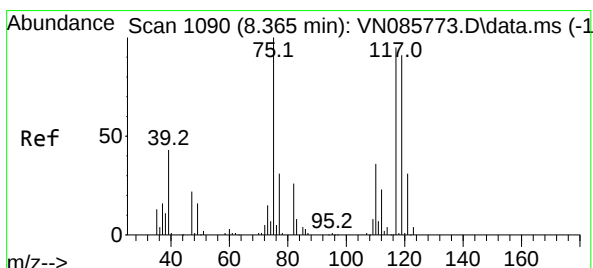
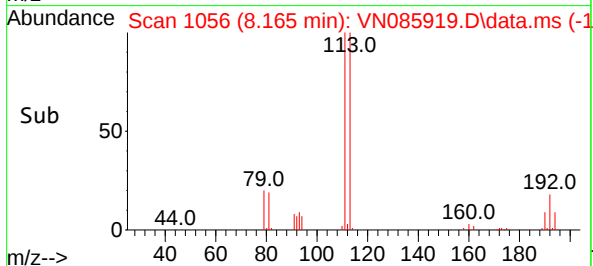
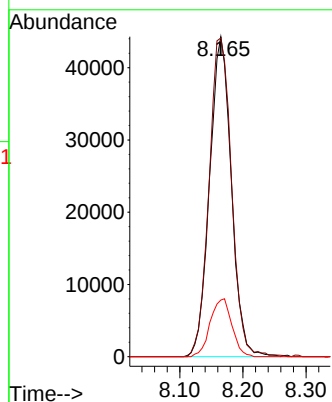
Tgt Ion:113 Resp: 105753

Ion Ratio Lower Upper

113 100

111 103.3 82.2 123.4

192 18.0 14.7 22.1



#36

1,1-Dichloropropene

Concen: 4.823 ug/l

RT: 8.224 min Scan# 1066

Delta R.T. -0.141 min

Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

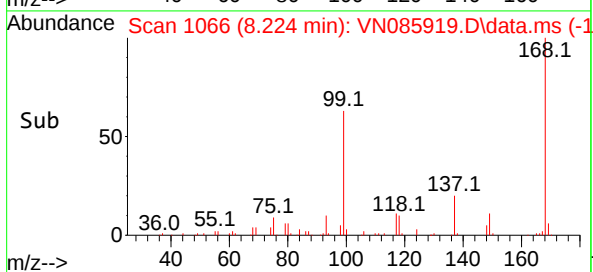
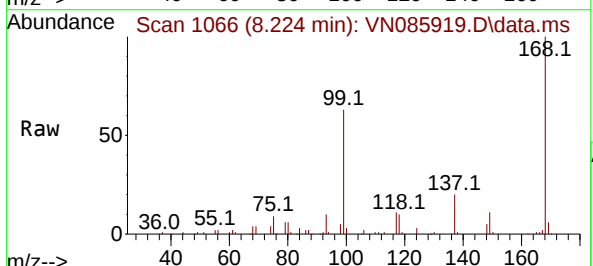
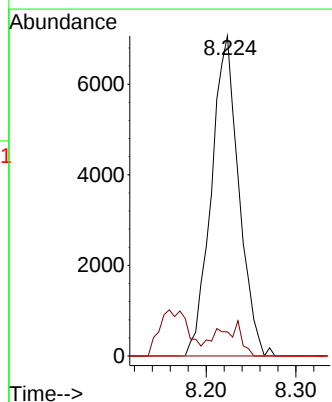
Tgt Ion: 75 Resp: 15039

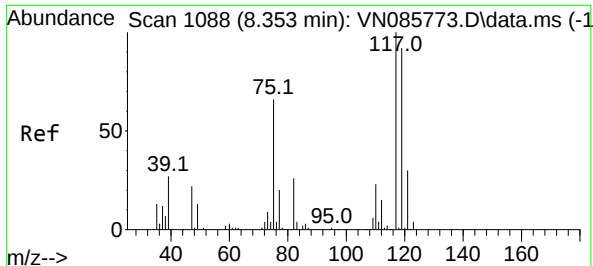
Ion Ratio Lower Upper

75 100

110 9.2 17.3 52.0#

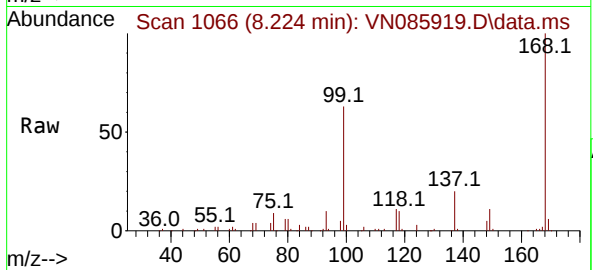
77 0.0 24.6 37.0#



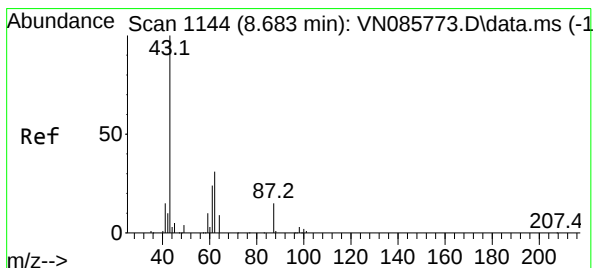
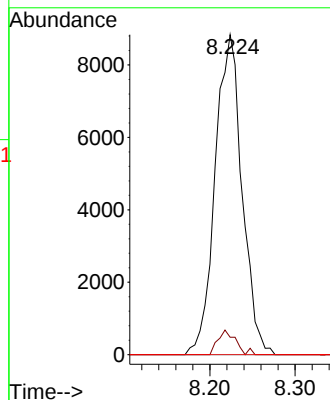
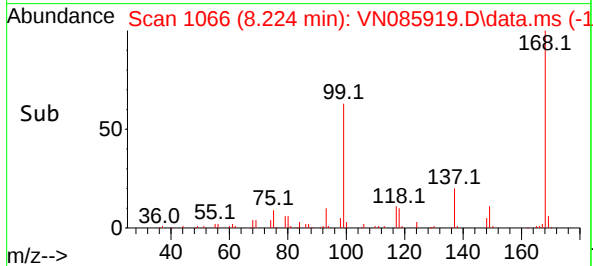


#38  
Carbon Tetrachloride  
Concen: 5.241 ug/l  
RT: 8.224 min Scan# 1066  
Delta R.T. -0.130 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

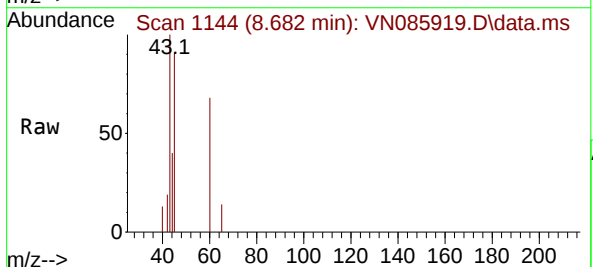
Instrument :  
MSVOA\_N  
ClientSampleId :



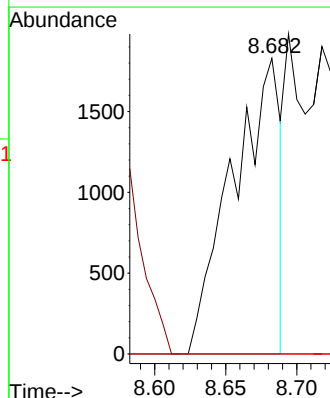
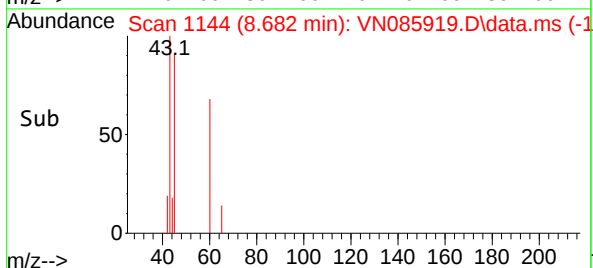
Tgt Ion:117 Resp: 19419  
Ion Ratio Lower Upper  
117 100  
119 5.5 73.8 110.6#  
121 0.0 24.3 36.5#

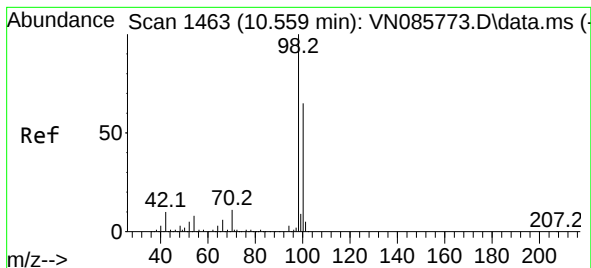


#43  
Isopropyl Acetate  
Concen: 0.407 ug/l  
RT: 8.682 min Scan# 1144  
Delta R.T. -0.001 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11



Tgt Ion: 43 Resp: 4273  
Ion Ratio Lower Upper  
43 100  
61 0.0 22.6 34.0#  
87 0.0 11.8 17.8#





#50

Toluene-d8

Concen: 45.431 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. 0.006 min

Lab File: VN085919.D

Acq: 10 Mar 2025 17:11

Instrument :

MSVOA\_N

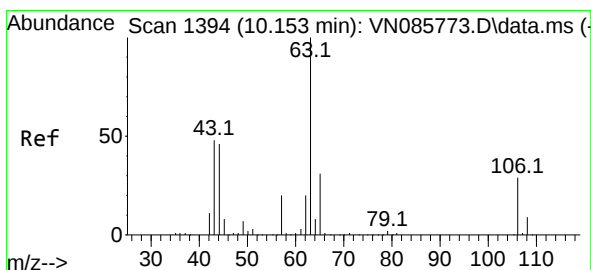
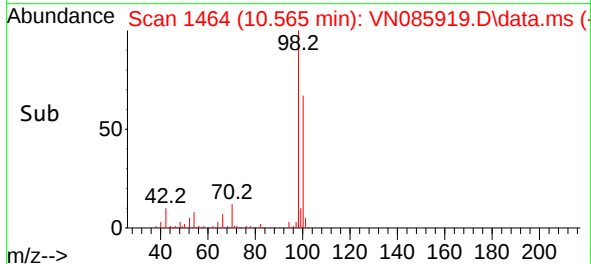
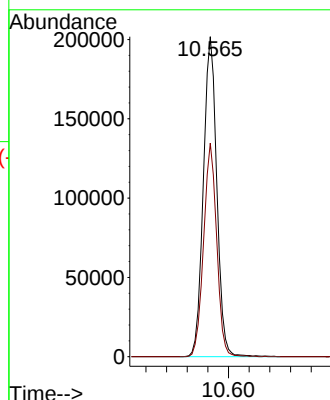
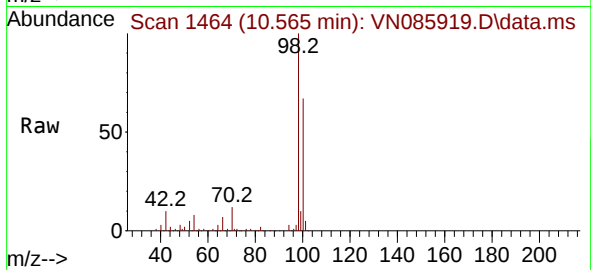
ClientSampleId :

Tgt Ion: 98 Resp: 364171

Ion Ratio Lower Upper

98 100

100 65.0 52.1 78.1



#58

2-Chloroethyl Vinyl ether

Concen: Below Cal

RT: 10.165 min Scan# 1396

Delta R.T. 0.012 min

Lab File: VN085919.D

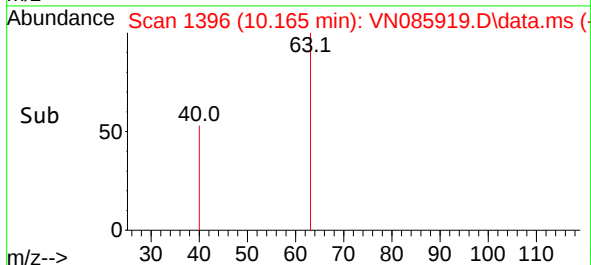
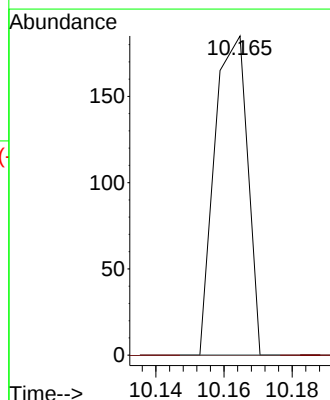
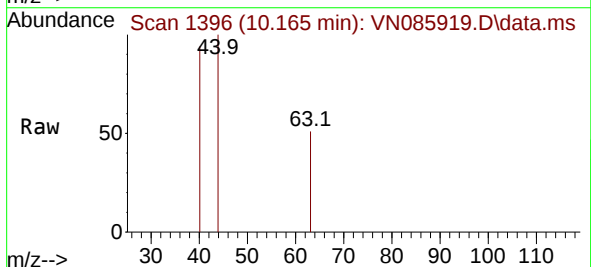
Acq: 10 Mar 2025 17:11

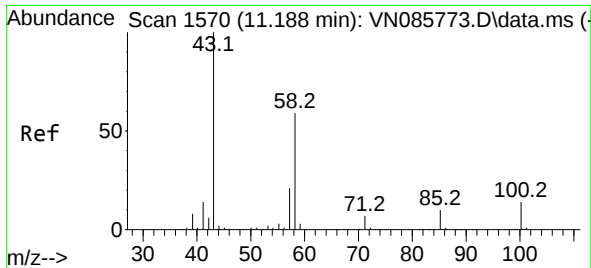
Tgt Ion: 63 Resp: 124

Ion Ratio Lower Upper

63 100

106 0.0 22.7 34.1#

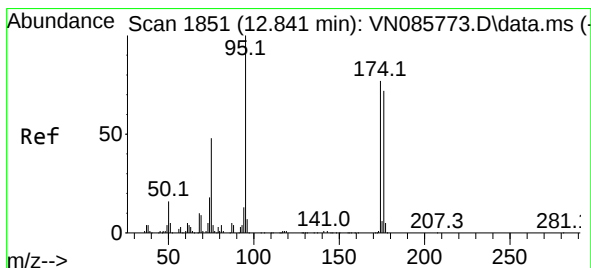
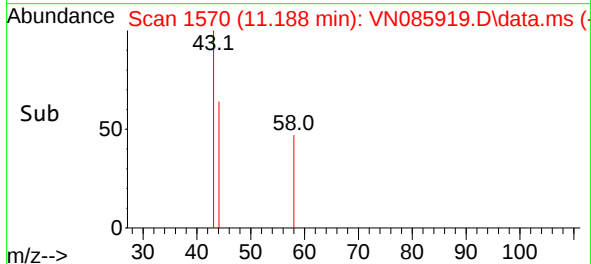
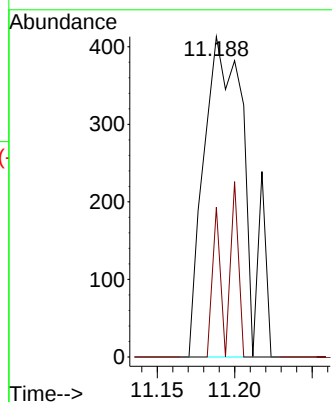
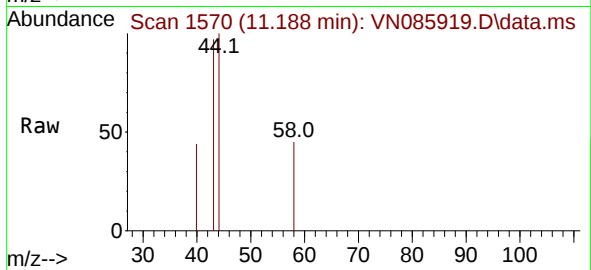




#59  
2-Hexanone  
Concen: 0.455 ug/l  
RT: 11.188 min Scan# 111  
Delta R.T. 0.000 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

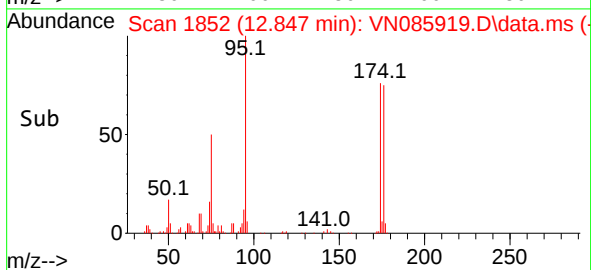
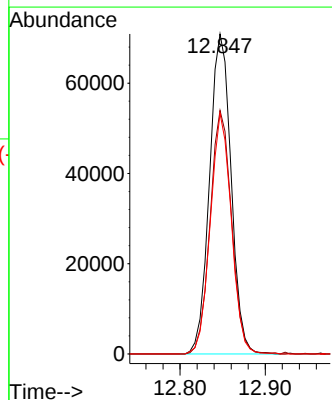
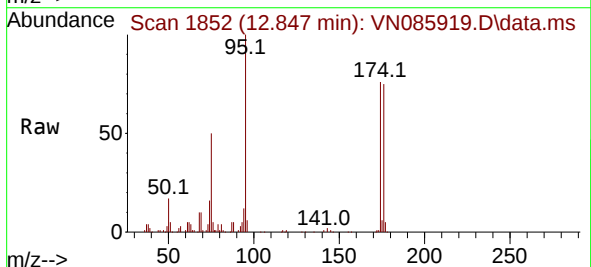
Instrument :  
MSVOA\_N  
ClientSampleId :

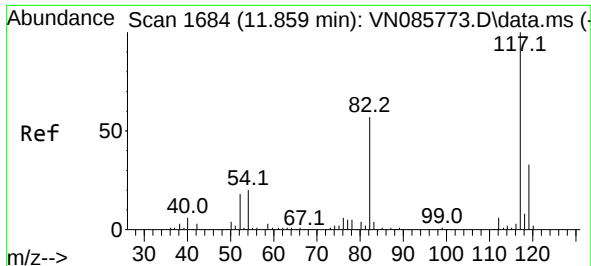
Tgt Ion: 43 Resp: 775  
Ion Ratio Lower Upper  
43 100  
58 8.8 29.8 89.5#



#62  
4-Bromofluorobenzene  
Concen: 47.128 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

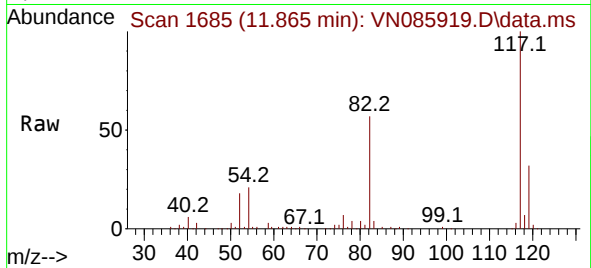
Tgt Ion: 95 Resp: 124468  
Ion Ratio Lower Upper  
95 100  
174 75.9 0.0 152.4  
176 73.3 0.0 146.6



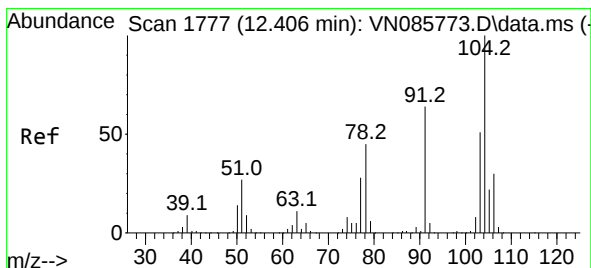
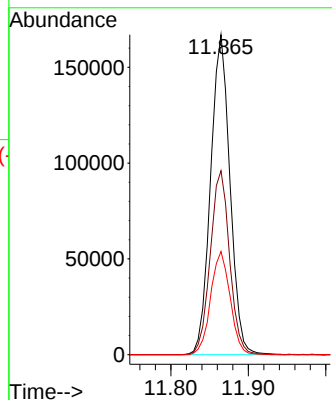
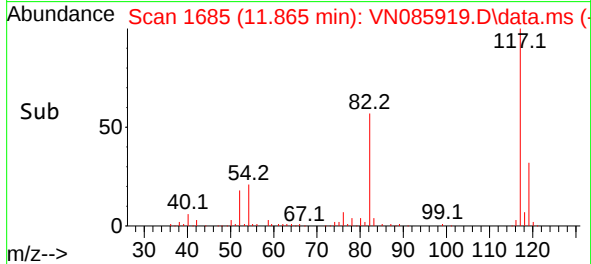


#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 117  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

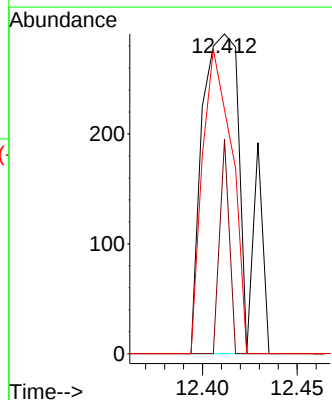
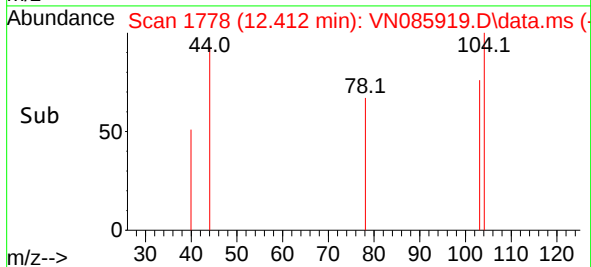
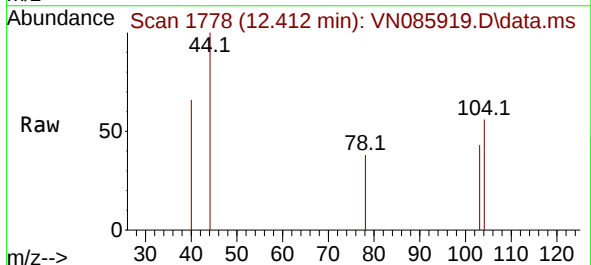


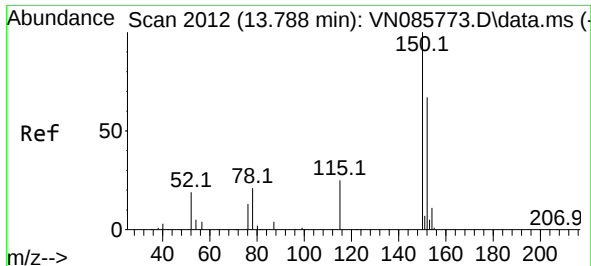
Tgt Ion:117 Resp: 290159  
Ion Ratio Lower Upper  
117 100  
82 57.5 45.7 68.5  
119 32.3 26.2 39.2



#70  
Styrene  
Concen: 0.654 ug/l  
RT: 12.412 min Scan# 1778  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

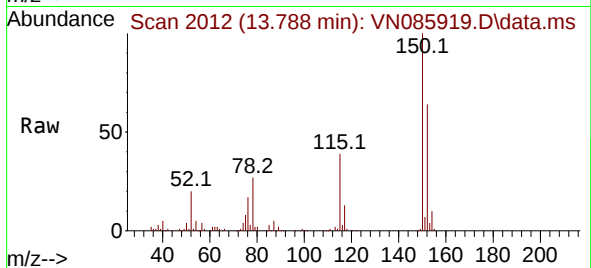
Tgt Ion:104 Resp: 447  
Ion Ratio Lower Upper  
104 100  
78 15.4 39.0 58.6#  
103 66.9 43.3 64.9#



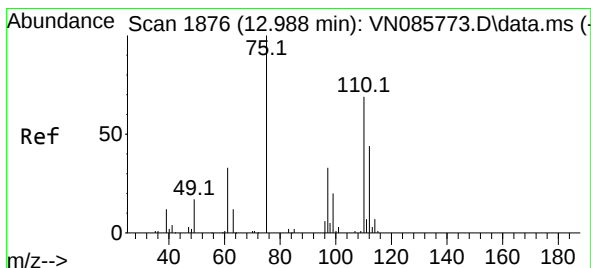
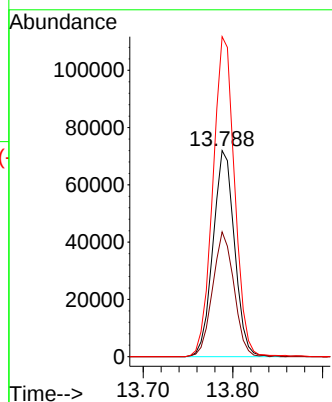
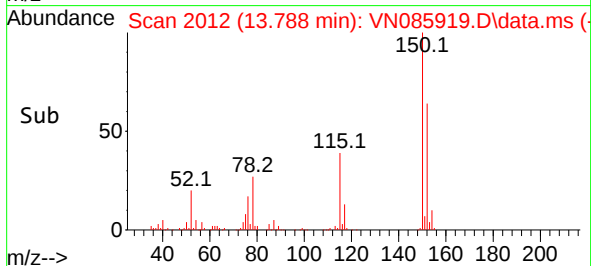


#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.000 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

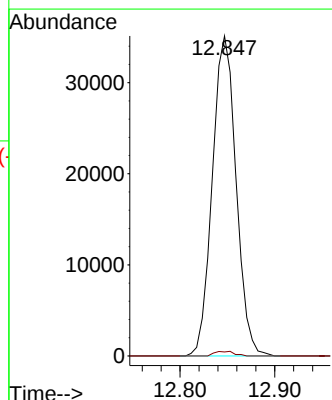
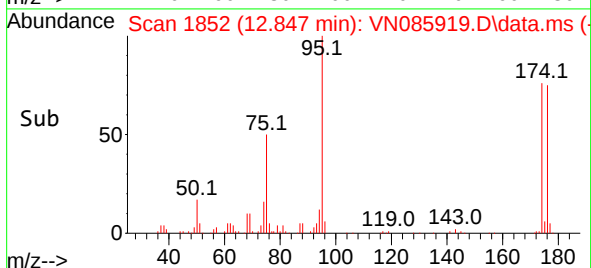
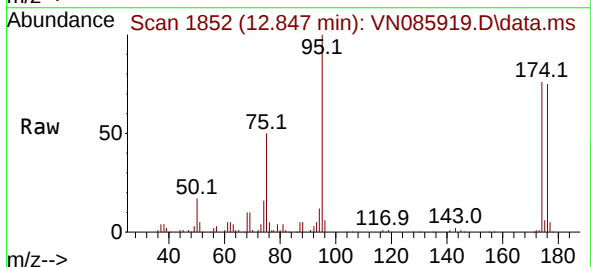


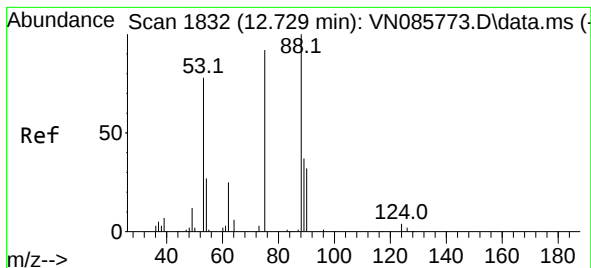
Tgt Ion:152 Resp: 119785  
Ion Ratio Lower Upper  
152 100  
115 60.4 30.4 91.3  
150 157.2 0.0 345.4



#76  
1,2,3-Trichloropropane  
Concen: 23.025 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.141 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

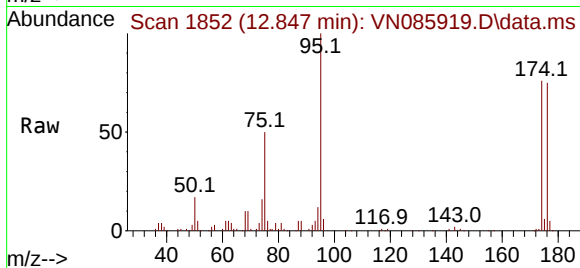
Tgt Ion: 75 Resp: 61267  
Ion Ratio Lower Upper  
75 100  
77 1.2 100.0 300.0#



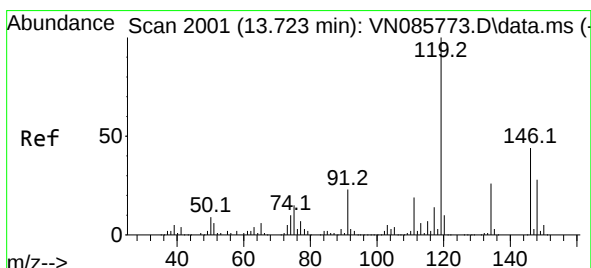
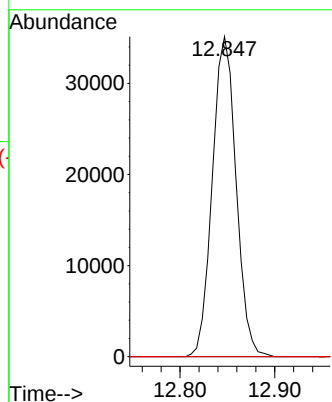
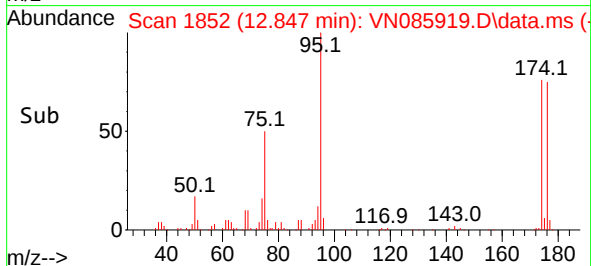


#81  
trans-1,4-Dichloro-2-butene  
Concen: 67.183 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. 0.118 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

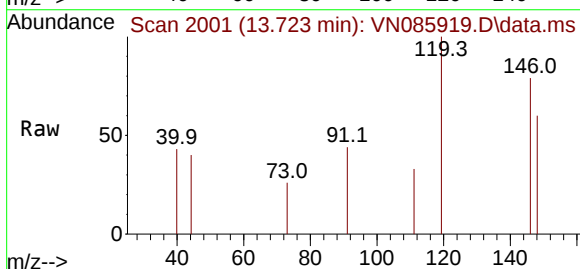
Instrument :  
MSVOA\_N  
ClientSampleId :



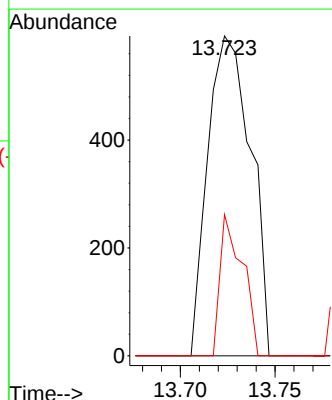
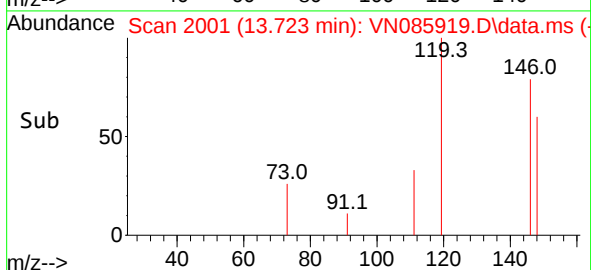
Tgt Ion: 75 Resp: 61267  
Ion Ratio Lower Upper  
75 100  
53 0.0 74.2 111.4#  
89 0.0 34.9 52.3#

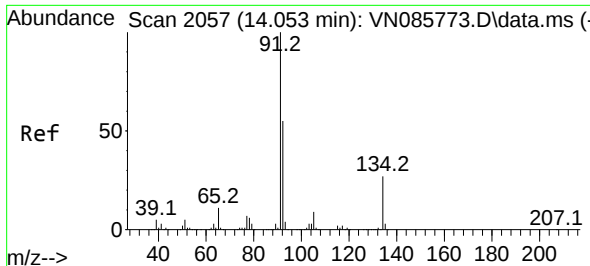


#86  
p-Isopropyltoluene  
Concen: 0.763 ug/l  
RT: 13.723 min Scan# 2001  
Delta R.T. 0.000 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11



Tgt Ion: 119 Resp: 936  
Ion Ratio Lower Upper  
119 100  
134 0.0 13.0 39.0#  
91 23.0 11.7 35.1

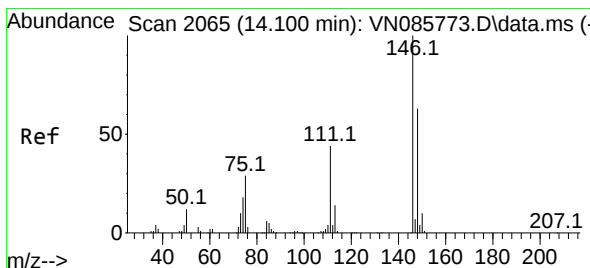
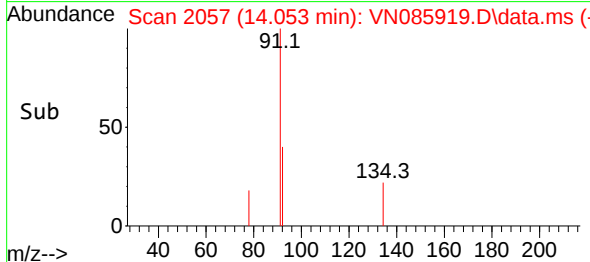
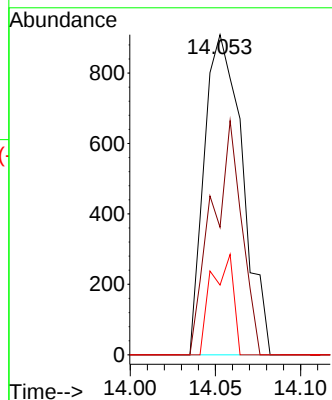
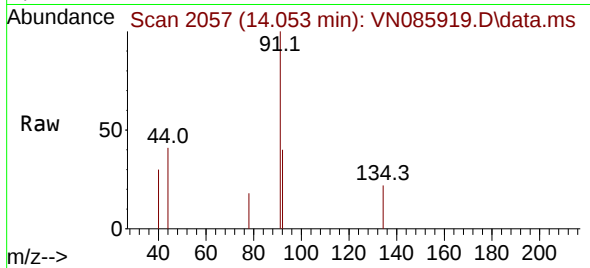




#89  
n-Butylbenzene  
Concen: 0.251 ug/l  
RT: 14.053 min Scan# 2057  
Delta R.T. -0.000 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

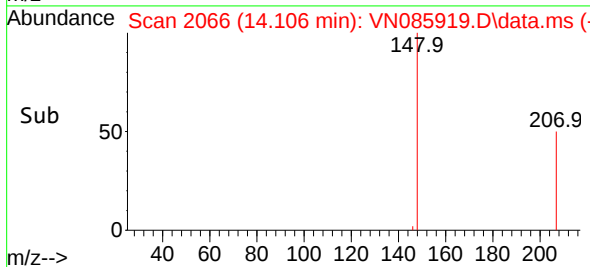
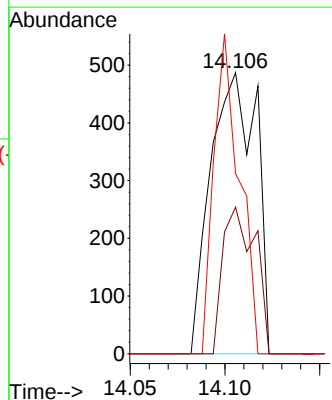
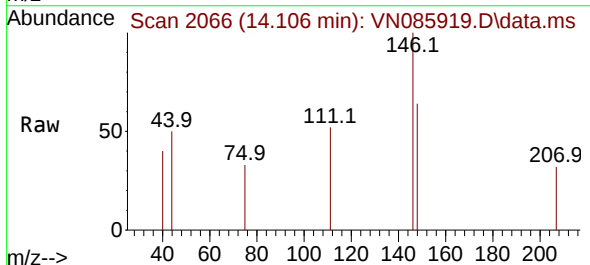
Instrument :  
MSVOA\_N  
ClientSampleId :

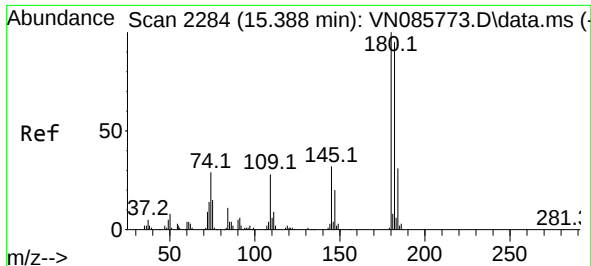
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 91 | Resp: | 1416      |
| Ion Ratio   | Lower | Upper     |
| 91          | 100   |           |
| 92          | 57.0  | 27.1 81.3 |
| 134         | 18.0  | 12.7 38.1 |



#91  
1,2-Dichlorobenzene  
Concen: 0.204 ug/l  
RT: 14.106 min Scan# 2066  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

|              |       |           |
|--------------|-------|-----------|
| Tgt Ion: 146 | Resp: | 813       |
| Ion Ratio    | Lower | Upper     |
| 146          | 100   |           |
| 111          | 37.1  | 21.4 64.3 |
| 148          | 63.8  | 32.0 96.2 |

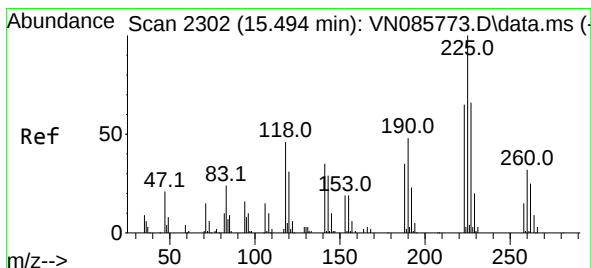
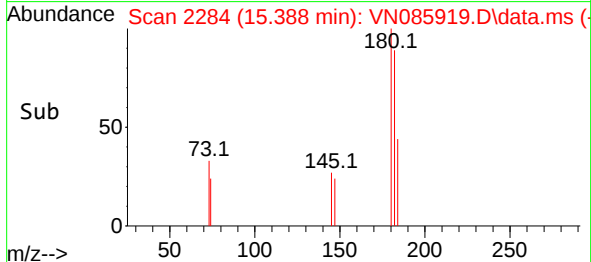
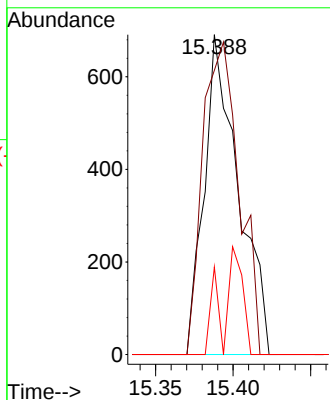
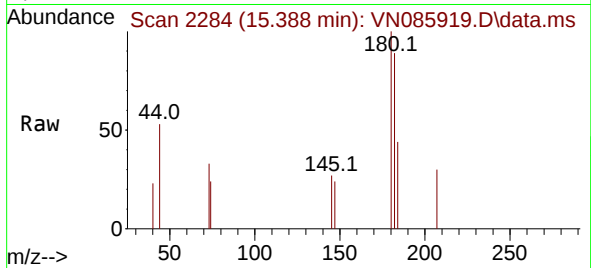




#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.555 ug/l  
 RT: 15.388 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: VN085919.D  
 Acq: 10 Mar 2025 17:11

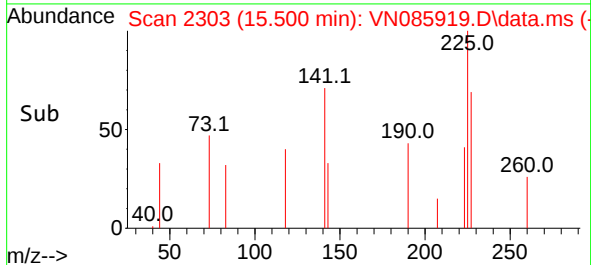
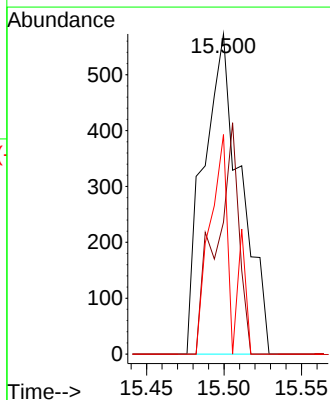
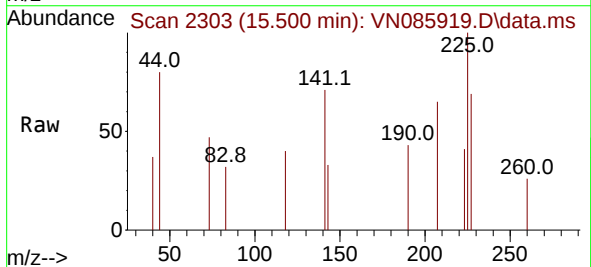
Instrument :  
 MSVOA\_N  
 ClientSampleId :

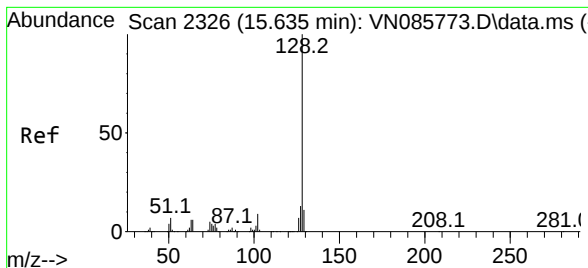
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 180   | Resp: | 1057  |
| Ion Ratio | Lower | Upper |       |
| 180       | 100   |       |       |
| 182       | 104.4 | 47.3  | 141.9 |
| 145       | 19.9  | 16.2  | 48.5  |



#94  
 Hexachlorobutadiene  
 Concen: 0.825 ug/l  
 RT: 15.500 min Scan# 2303  
 Delta R.T. 0.006 min  
 Lab File: VN085919.D  
 Acq: 10 Mar 2025 17:11

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 225   | Resp: | 954  |
| Ion Ratio | Lower | Upper |      |
| 225       | 100   |       |      |
| 223       | 43.9  | 31.9  | 95.5 |
| 227       | 40.0  | 32.2  | 96.6 |

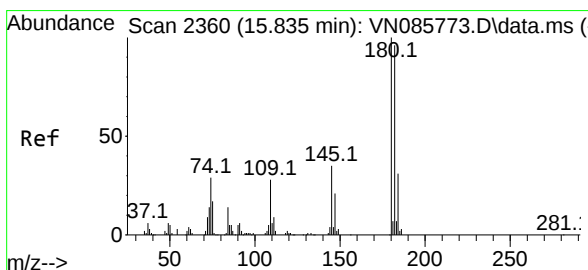
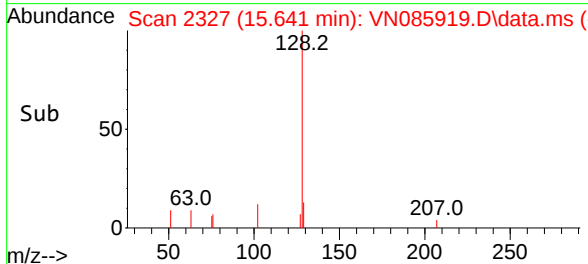
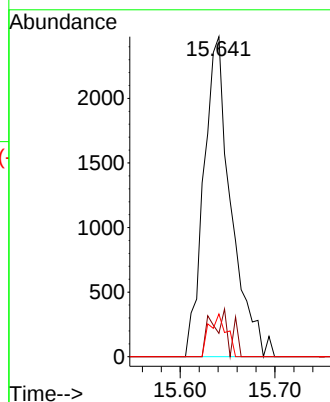
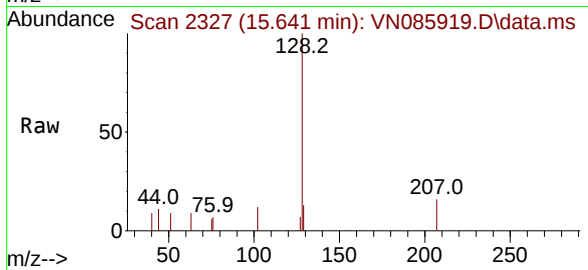




#95  
Naphthalene  
Concen: 0.947 ug/l  
RT: 15.641 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Instrument :  
MSVOA\_N  
ClientSampleId :

Tgt Ion:128 Resp: 4950  
Ion Ratio Lower Upper  
128 100  
127 5.3 10.2 15.2#  
129 8.5 8.7 13.1#



#96  
1,2,3-Trichlorobenzene  
Concen: 0.666 ug/l  
RT: 15.841 min Scan# 2361  
Delta R.T. 0.006 min  
Lab File: VN085919.D  
Acq: 10 Mar 2025 17:11

Tgt Ion:180 Resp: 1272  
Ion Ratio Lower Upper  
180 100  
182 105.7 47.3 141.8  
145 23.0 16.9 50.6

