

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN082525\  
 Data File : VN087660.D  
 Acq On : 25 Aug 2025 16:04  
 Operator : JC\MD  
 Sample : PB169356TB  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 15 Sample Multiplier: 1

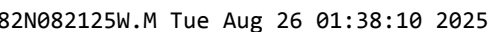
Instrument :  
 MSVOA\_N  
 ClientSampleId :

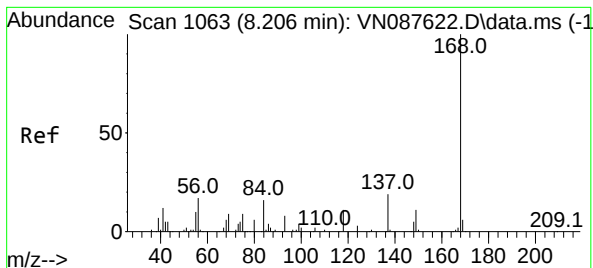
Quant Time: Aug 26 01:37:58 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082125W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 22 02:55:42 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|------------|----------|
| -----                         |        |       |          |          |            |          |
| Internal Standards            |        |       |          |          |            |          |
| 1) Pentafluorobenzene         | 8.212  | 168   | 173884   | 50.000   | ug/l       | 0.00     |
| 34) 1,4-Difluorobenzene       | 9.082  | 114   | 404163   | 50.000   | ug/l       | 0.00     |
| 63) Chlorobenzene-d5          | 11.847 | 117   | 391591   | 50.000   | ug/l       | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.770 | 152   | 182807   | 50.000   | ug/l       | 0.00     |
| System Monitoring Compounds   |        |       |          |          |            |          |
| 33) 1,2-Dichloroethane-d4     | 8.565  | 65    | 186693   | 52.402   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 74 - 125 | Recovery | = 104.800% |          |
| 35) Dibromofluoromethane      | 8.153  | 113   | 138980   | 47.628   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 75 - 124 | Recovery | = 95.260%  |          |
| 50) Toluene-d8                | 10.547 | 98    | 530181   | 48.544   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 86 - 113 | Recovery | = 97.080%  |          |
| 62) 4-Bromofluorobenzene      | 12.829 | 95    | 194578   | 50.096   | ug/l       | 0.00     |
| Spiked Amount                 | 50.000 | Range | 77 - 121 | Recovery | = 100.200% |          |
| Target Compounds              |        |       |          |          |            |          |
|                               |        |       |          |          | Qvalue     |          |
| 11) Tert butyl alcohol        | 5.500  | 59    | 709      | 1.146    | ug/l #     | 71       |
| 13) Acrolein                  | 4.189  | 56    | 162      | 0.213    | ug/l #     | 40       |
| 16) Acetone                   | 4.424  | 43    | 71107    | 36.664   | ug/l       | 100      |
| 18) Methyl Acetate            | 5.024  | 43    | 38324    | 9.438    | ug/l       | 99       |
| 20) Methylene Chloride        | 5.271  | 84    | 28293    | 9.070    | ug/l       | 96       |
| 25) 2-Butanone                | 7.471  | 43    | 13586    | 5.325    | ug/l       | 96       |
| 29) Tetrahydrofuran           | 7.835  | 42    | 1725     | 1.051    | ug/l #     | 60       |
| 31) Cyclohexane               | 8.200  | 56    | 5673     | 1.266    | ug/l #     | 15       |
| 36) 1,1-Dichloropropene       | 8.212  | 75    | 17492    | 3.907    | ug/l #     | 54       |
| 37) Ethyl Acetate             | 7.547  | 43    | 26018    | 4.253    | ug/l       | 96       |
| 38) Carbon Tetrachloride      | 8.212  | 117   | 21312    | 4.822    | ug/l #     | 17       |
| 43) Isopropyl Acetate         | 8.677  | 43    | 18595    | 1.947    | ug/l #     | 93       |
| 45) 1,2-Dichloropropane       | 9.729  | 63    | 1875     | 0.518    | ug/l #     | 43       |
| 48) Methyl methacrylate       | 9.724  | 41    | 153507   | 33.981   | ug/l #     | 48       |
| 49) 1,4-Dioxane               | 9.712  | 88    | 83       | 1.418    | ug/l #     | 1        |
| 51) 4-Methyl-2-Pentanone      | 10.424 | 43    | 7129     | 1.237    | ug/l #     | 81       |
| 54) cis-1,3-Dichloropropene   | 10.341 | 75    | 75898    | 13.379   | ug/l #     | 64       |
| 57) 1,3-Dichloropropane       | 11.182 | 76    | 5264     | 0.903    | ug/l #     | 44       |
| 59) 2-Hexanone                | 11.182 | 43    | 93135    | 25.574   | ug/l #     | 49       |
| 76) 1,2,3-Trichloropropane    | 12.829 | 75    | 109764   | 25.604   | ug/l #     | 1        |
| 81) trans-1,4-Dichloro-2-b... | 12.829 | 75    | 109764   | 67.785   | ug/l #     | 1        |
| 95) Naphthalene               | 15.611 | 128   | 4532     | 0.327    | ug/l #     | 84       |
| -----                         |        |       |          |          |            |          |

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

Quant Time: Aug 26 01:37:58 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082125W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 22 02:55:42 2025  
Response via : Initial Calibration

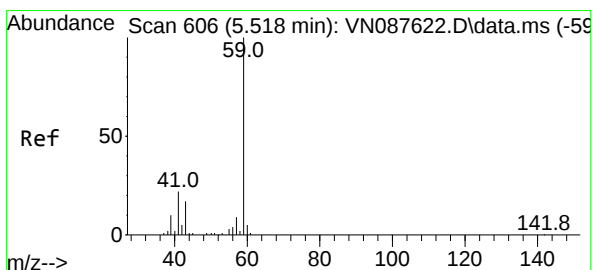
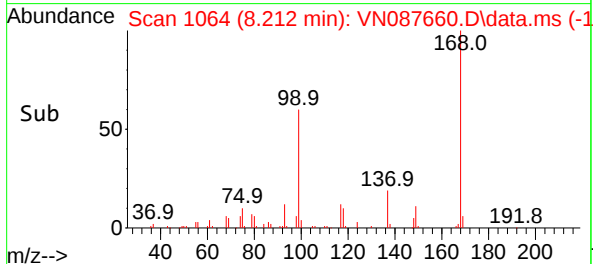
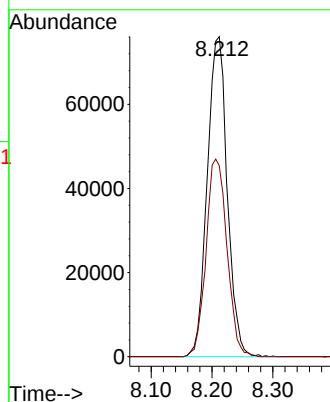
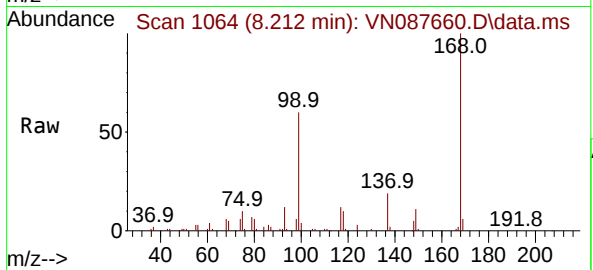




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.212 min Scan# 1064  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

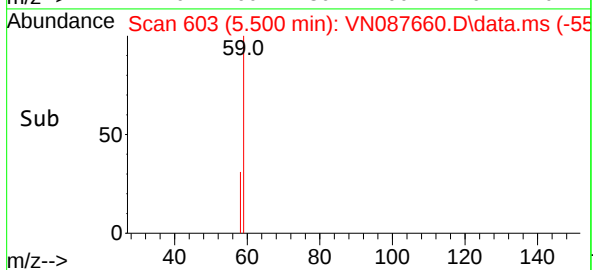
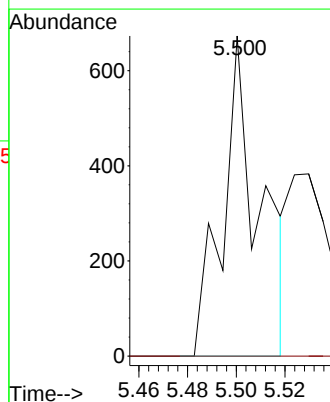
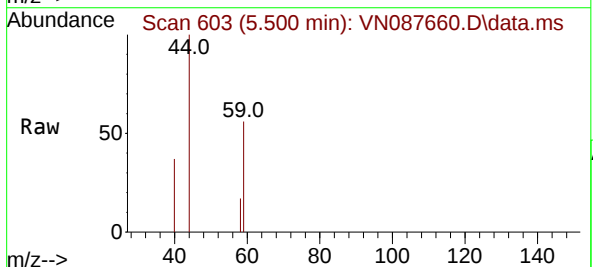
Instrument :  
MSVOA\_N  
ClientSampleId :

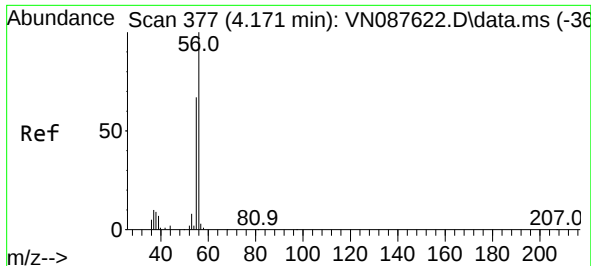
Tgt Ion:168 Resp: 173884  
Ion Ratio Lower Upper  
168 100  
99 59.7 57.2 85.8



#11  
Tert butyl alcohol  
Concen: 1.146 ug/l  
RT: 5.500 min Scan# 603  
Delta R.T. -0.018 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Tgt Ion: 59 Resp: 709  
Ion Ratio Lower Upper  
59 100  
57 0.0 9.0 13.4#

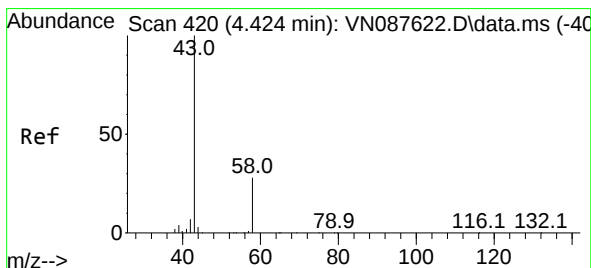
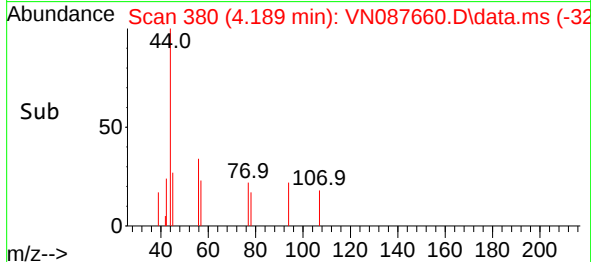
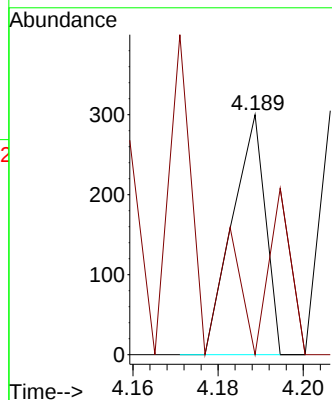
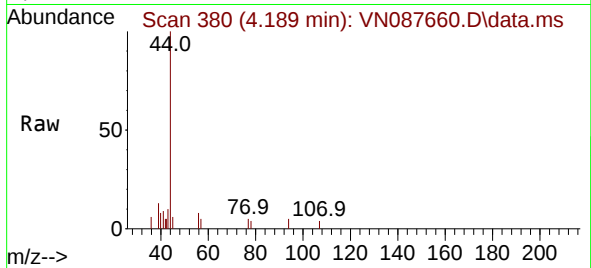




#13  
Acrolein  
Concen: 0.213 ug/l  
RT: 4.189 min Scan# 377  
Delta R.T. 0.018 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

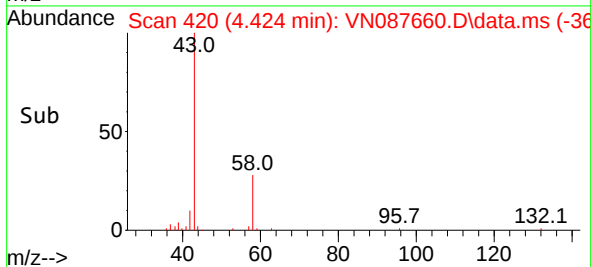
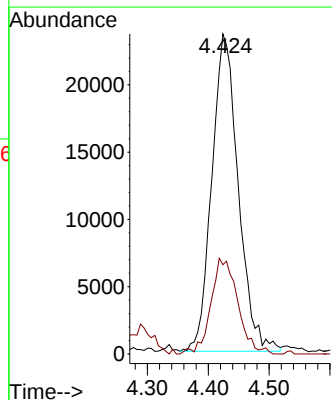
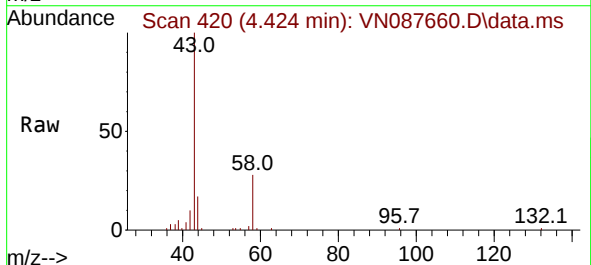
Instrument :  
MSVOA\_N  
ClientSampleId :

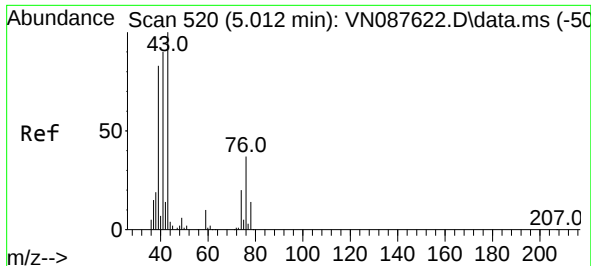
Tgt Ion: 56 Resp: 162  
Ion Ratio Lower Upper  
56 100  
55 121.6 57.3 85.9#



#16  
Acetone  
Concen: 36.664 ug/l  
RT: 4.424 min Scan# 420  
Delta R.T. -0.000 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

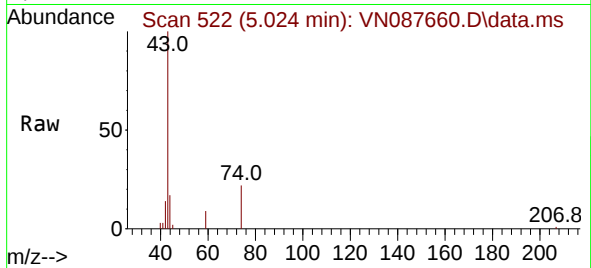
Tgt Ion: 43 Resp: 71107  
Ion Ratio Lower Upper  
43 100  
58 28.1 22.6 33.8



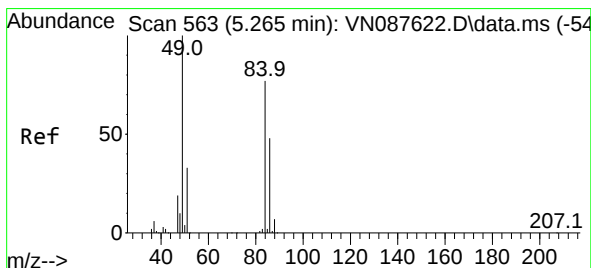
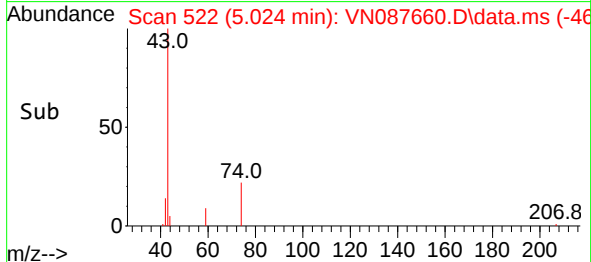
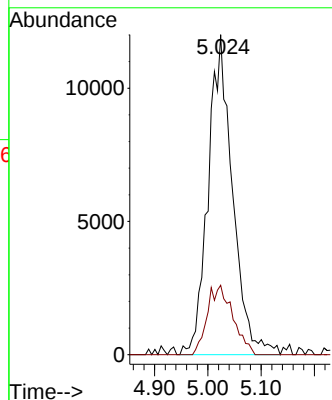


#18  
Methyl Acetate  
Concen: 9.438 ug/l  
RT: 5.024 min Scan# 51  
Delta R.T. 0.012 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Instrument :  
MSVOA\_N  
ClientSampleId :

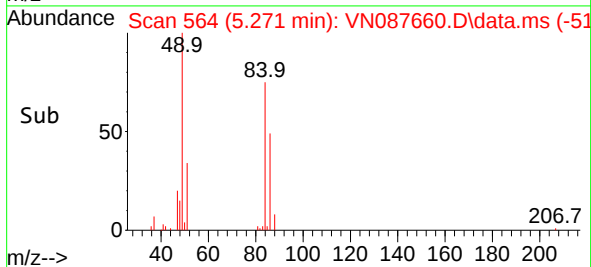
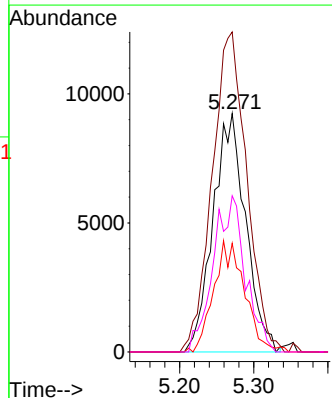
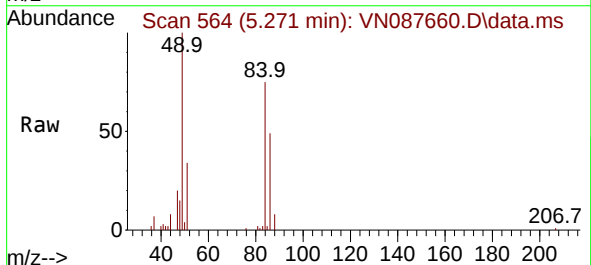


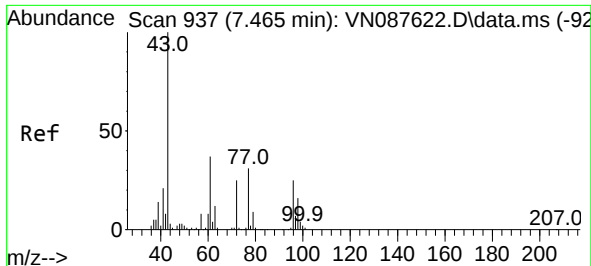
Tgt Ion: 43 Resp: 38324  
Ion Ratio Lower Upper  
43 100  
74 22.6 17.6 26.4



#20  
Methylene Chloride  
Concen: 9.070 ug/l  
RT: 5.271 min Scan# 564  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

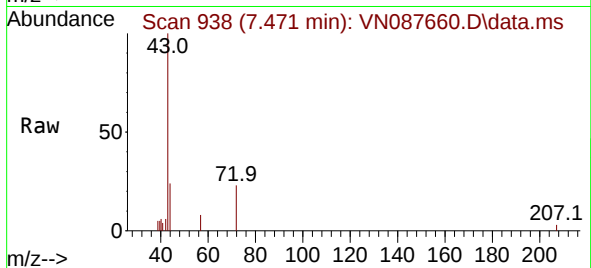
Tgt Ion: 84 Resp: 28293  
Ion Ratio Lower Upper  
84 100  
49 134.2 103.4 155.2  
51 45.6 33.8 50.8  
86 65.5 49.6 74.4



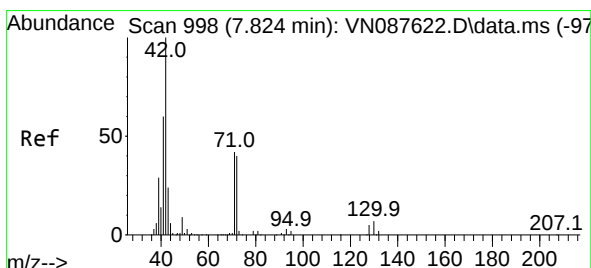
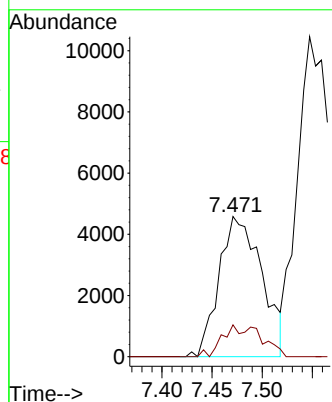
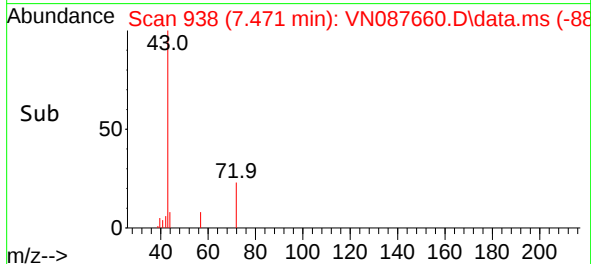


#25  
2-Butanone  
Concen: 5.325 ug/l  
RT: 7.471 min Scan# 91  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

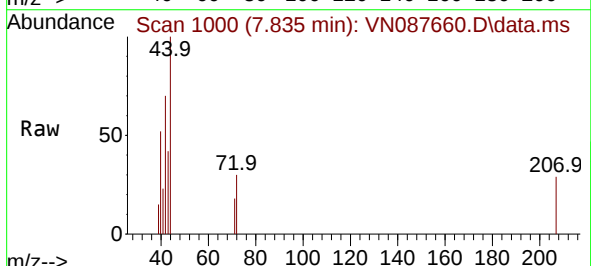
Instrument :  
MSVOA\_N  
ClientSampleId :



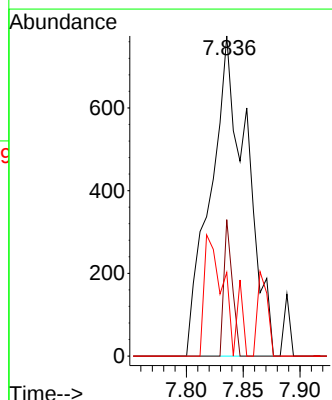
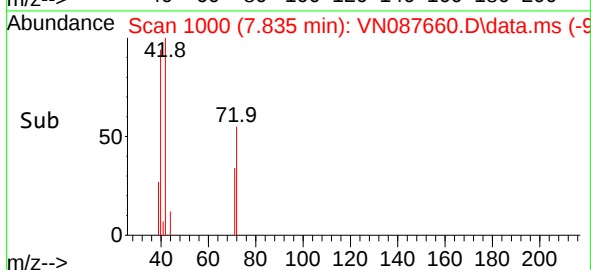
Tgt Ion: 43 Resp: 13586  
Ion Ratio Lower Upper  
43 100  
72 22.7 19.9 29.9

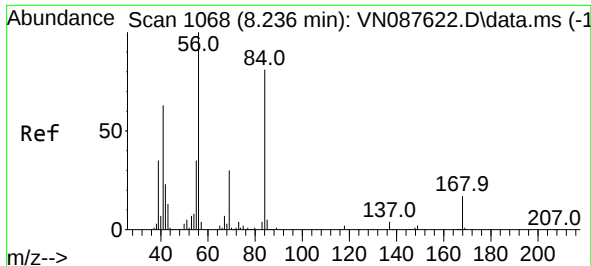


#29  
Tetrahydrofuran  
Concen: 1.051 ug/l  
RT: 7.835 min Scan# 1000  
Delta R.T. 0.012 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04



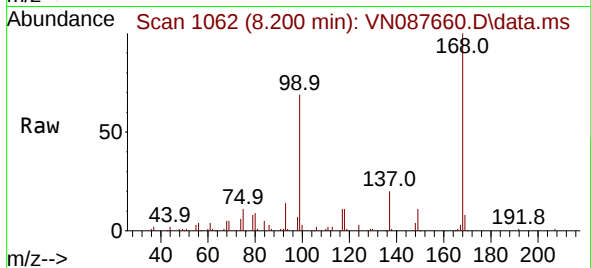
Tgt Ion: 42 Resp: 1725  
Ion Ratio Lower Upper  
42 100  
72 9.9 33.7 50.5#  
71 22.3 31.9 47.9#



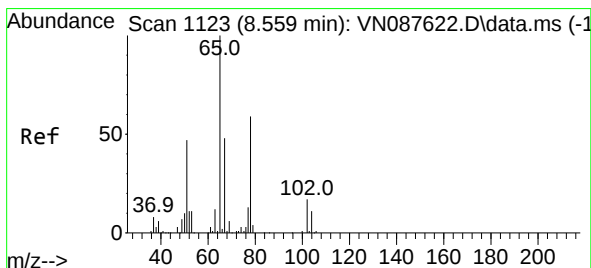
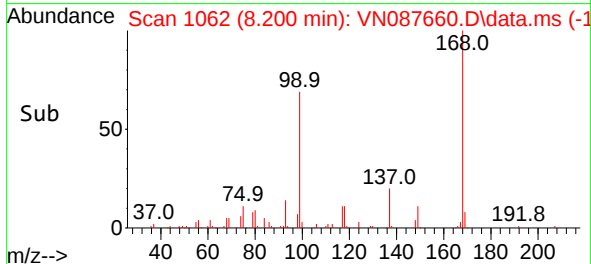
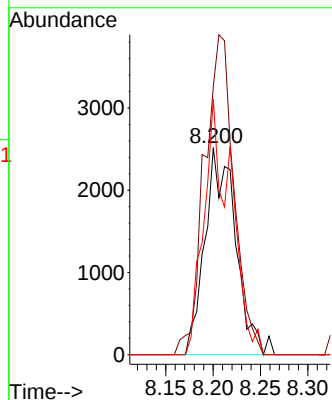


#31  
Cyclohexane  
Concen: 1.266 ug/l  
RT: 8.200 min Scan# 1068  
Delta R.T. -0.035 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Instrument :  
MSVOA\_N  
ClientSampleId :

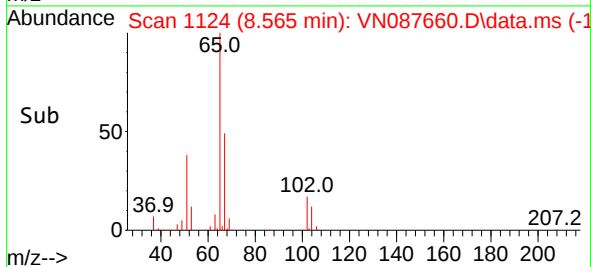
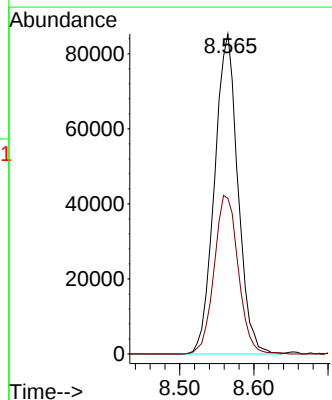
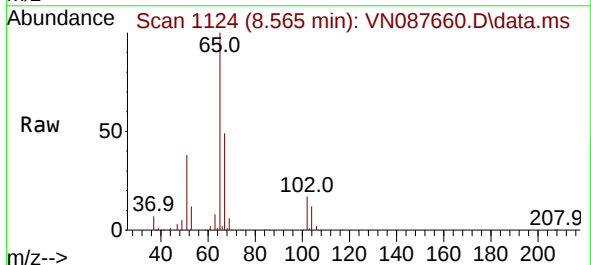


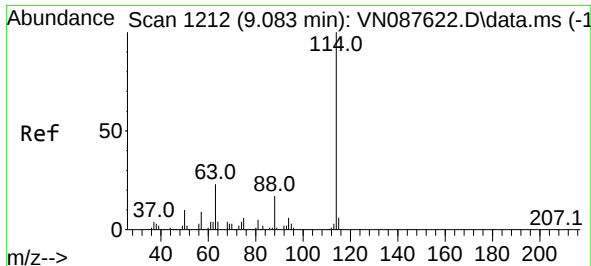
Tgt Ion: 56 Resp: 5673  
Ion Ratio Lower Upper  
56 100  
69 129.5 23.7 35.5#  
84 123.4 64.7 97.1#



#33  
1,2-Dichloroethane-d4  
Concen: 52.402 ug/l  
RT: 8.565 min Scan# 1124  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

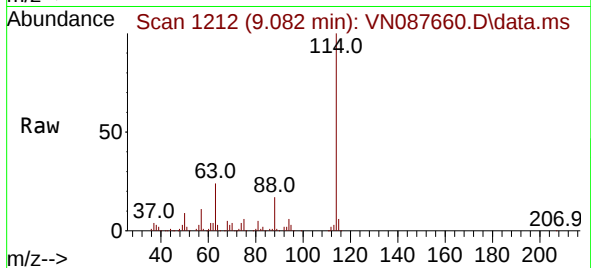
Tgt Ion: 65 Resp: 186693  
Ion Ratio Lower Upper  
65 100  
67 51.2 0.0 100.0



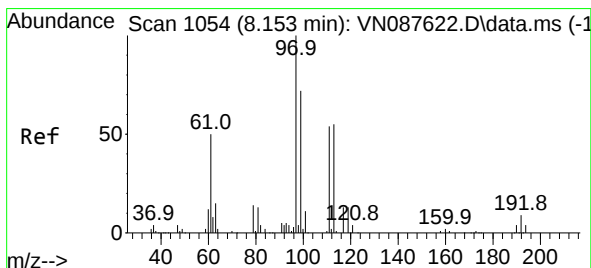
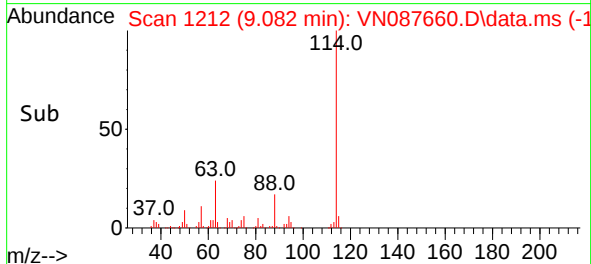
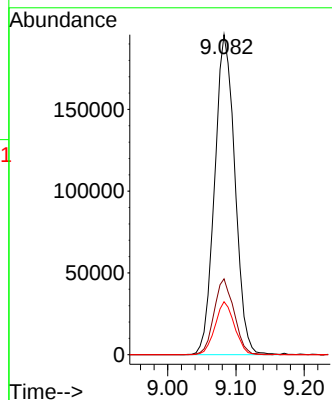


#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.082 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Instrument :  
MSVOA\_N  
ClientSampleId :

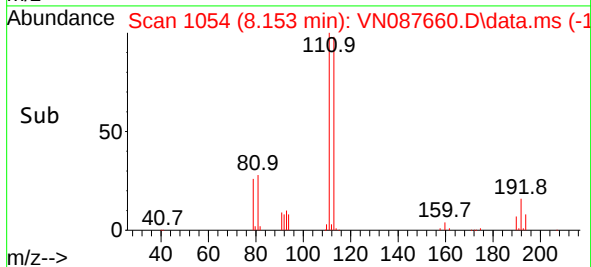
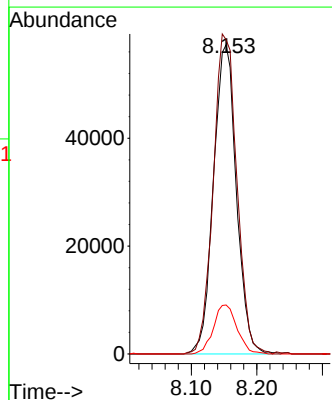
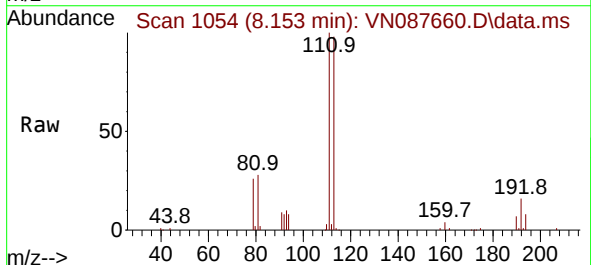


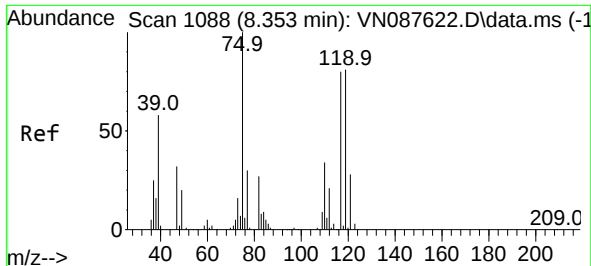
Tgt Ion:114 Resp: 404163  
Ion Ratio Lower Upper  
114 100  
63 23.7 0.0 45.2  
88 16.6 0.0 33.4



#35  
Dibromofluoromethane  
Concen: 47.628 ug/l  
RT: 8.153 min Scan# 1054  
Delta R.T. -0.000 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Tgt Ion:113 Resp: 138980  
Ion Ratio Lower Upper  
113 100  
111 106.4 82.8 124.2  
192 16.3 12.8 19.2





#36

1,1-Dichloropropene

Concen: 3.907 ug/l

RT: 8.212 min Scan# 1

Delta R.T. -0.141 min

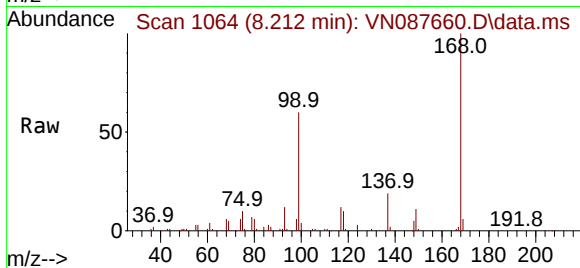
Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

Instrument :

MSVOA\_N

ClientSampleId :



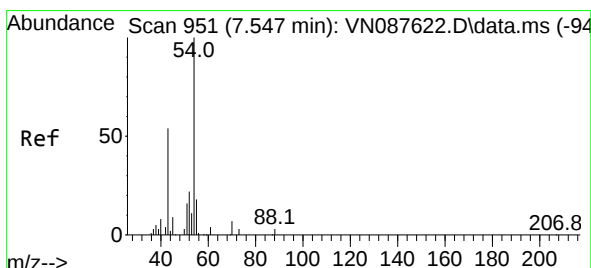
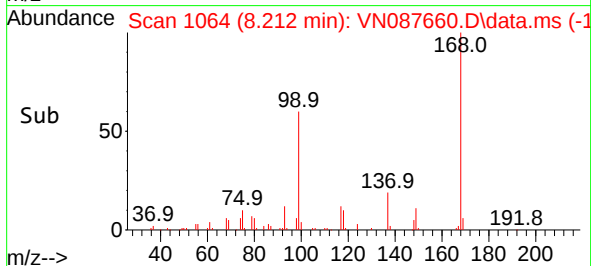
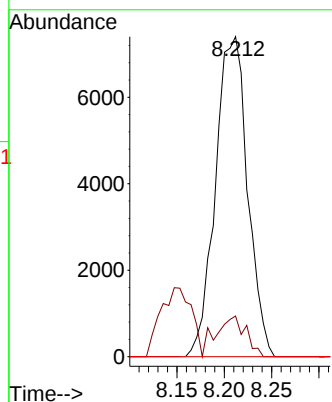
Tgt Ion: 75 Resp: 17492

Ion Ratio Lower Upper

75 100

110 11.7 15.9 47.6#

77 0.0 24.4 36.6#



#37

Ethyl Acetate

Concen: 4.253 ug/l

RT: 7.547 min Scan# 951

Delta R.T. -0.000 min

Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

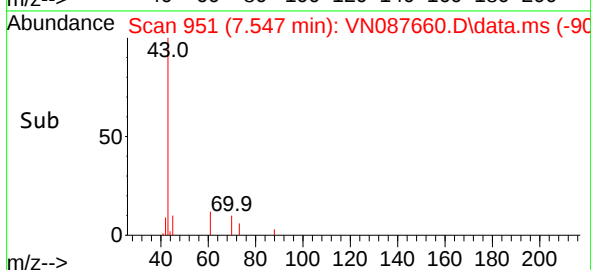
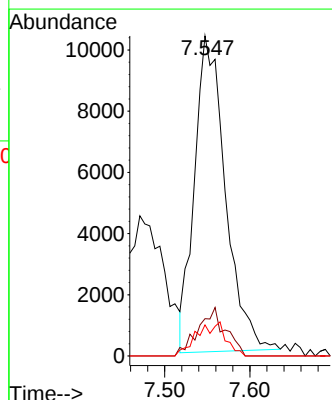
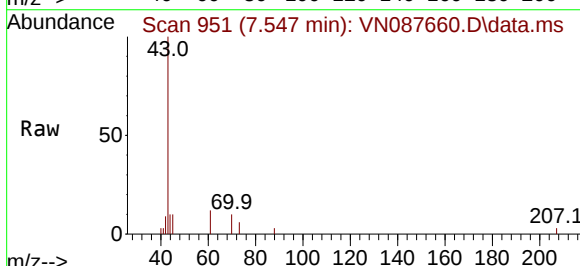
Tgt Ion: 43 Resp: 26018

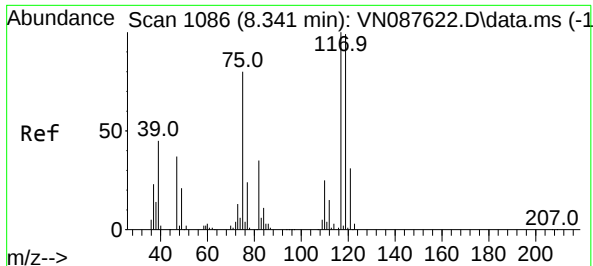
Ion Ratio Lower Upper

43 100

61 13.5 9.3 13.9

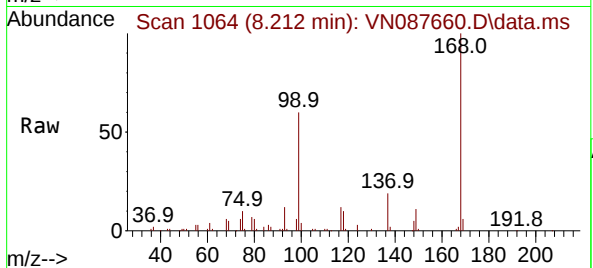
70 10.0 7.0 10.6



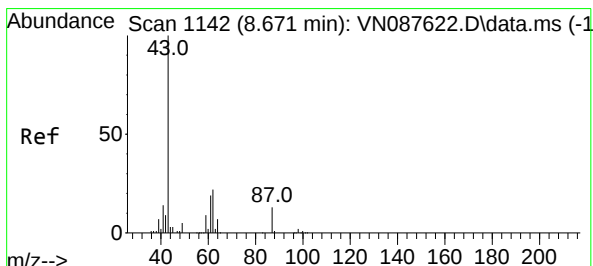
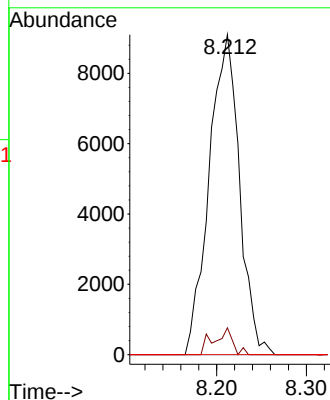
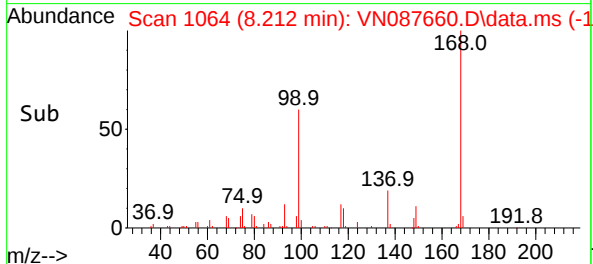


#38  
Carbon Tetrachloride  
Concen: 4.822 ug/l  
RT: 8.212 min Scan# 1064  
Delta R.T. -0.129 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Instrument :  
MSVOA\_N  
ClientSampleId :

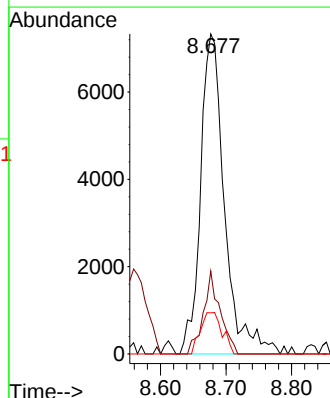
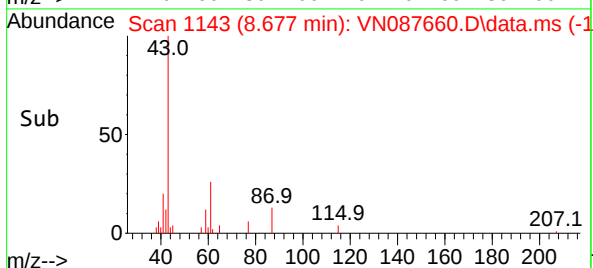
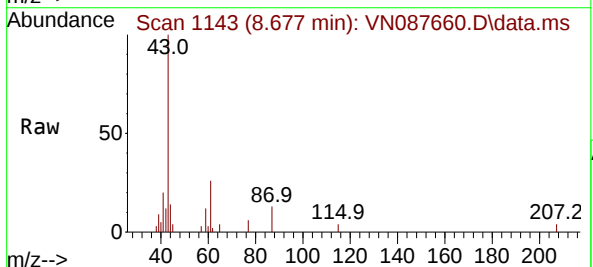


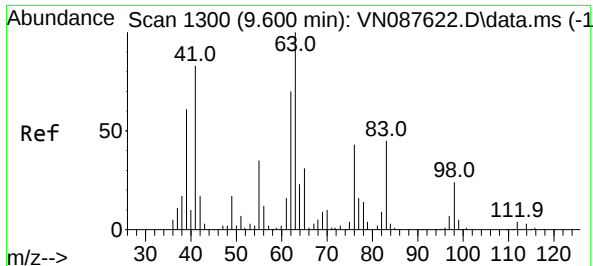
Tgt Ion:117 Resp: 21312  
Ion Ratio Lower Upper  
117 100  
119 8.4 79.0 118.6#  
121 0.0 25.0 37.6#



#43  
Isopropyl Acetate  
Concen: 1.947 ug/l  
RT: 8.677 min Scan# 1143  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Tgt Ion: 43 Resp: 18595  
Ion Ratio Lower Upper  
43 100  
61 18.2 18.8 28.2#  
87 11.7 9.6 14.4





#45

1,2-Dichloropropane

Concen: 0.518 ug/l

RT: 9.729 min Scan# 1322

Delta R.T. 0.129 min

Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

Instrument :

MSVOA\_N

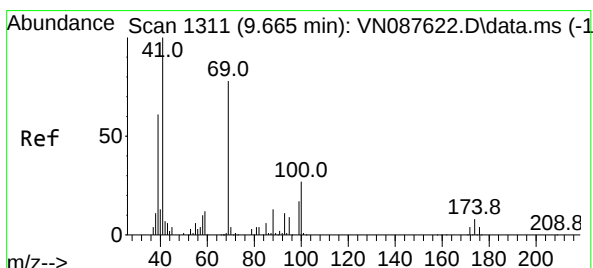
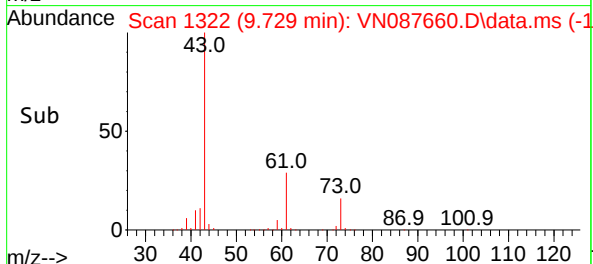
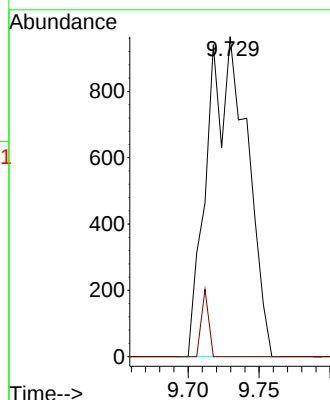
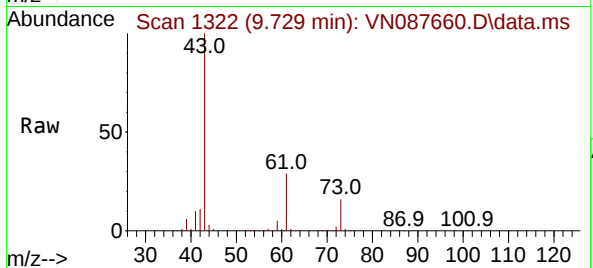
ClientSampleId :

Tgt Ion: 63 Resp: 1875

Ion Ratio Lower Upper

63 100

65 0.0 25.0 37.4#



#48

Methyl methacrylate

Concen: 33.981 ug/l

RT: 9.724 min Scan# 1321

Delta R.T. 0.059 min

Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

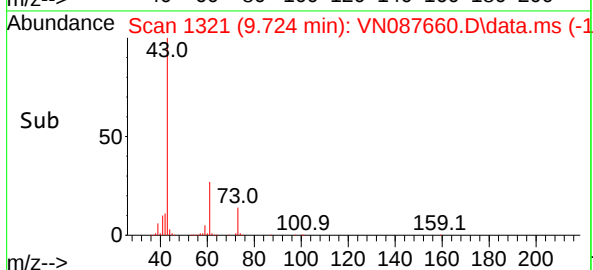
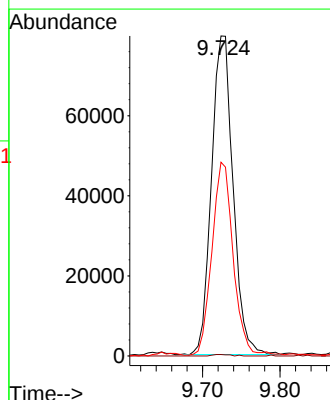
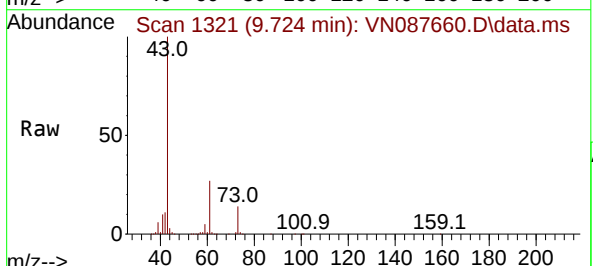
Tgt Ion: 41 Resp: 153507

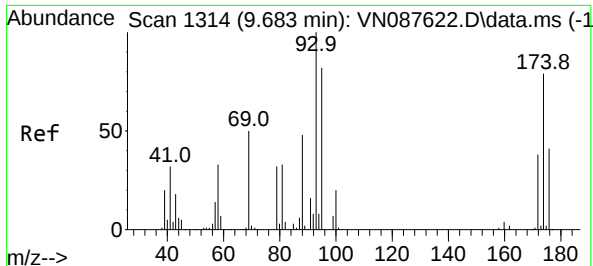
Ion Ratio Lower Upper

41 100

69 0.4 62.7 94.1#

39 59.8 52.9 79.3





#49

1,4-Dioxane

Concen: 1.418 ug/l

RT: 9.712 min Scan# 1

Delta R.T. 0.029 min

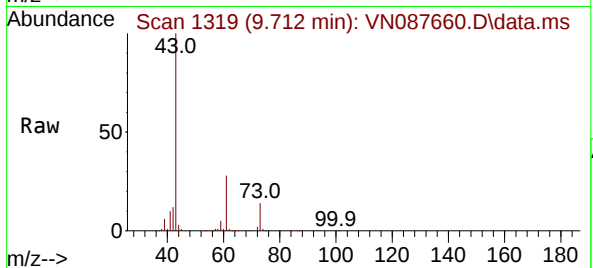
Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

Instrument :

MSVOA\_N

ClientSampleId :



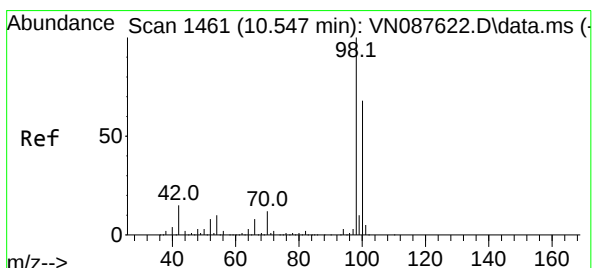
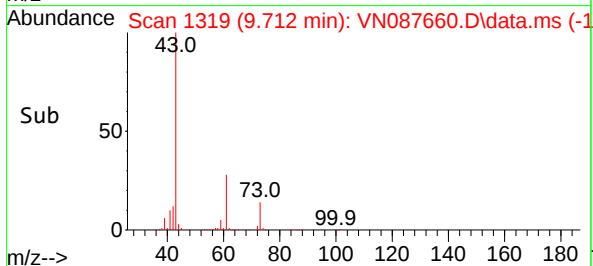
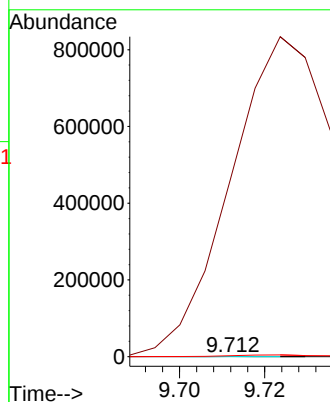
Tgt Ion: 88 Resp: 83

Ion Ratio Lower Upper

88 100

43 1874218.1 0.0 0.0#

58 9048.2 57.9 86.9#



#50

Toluene-d8

Concen: 48.544 ug/l

RT: 10.547 min Scan# 1461

Delta R.T. -0.000 min

Lab File: VN087660.D

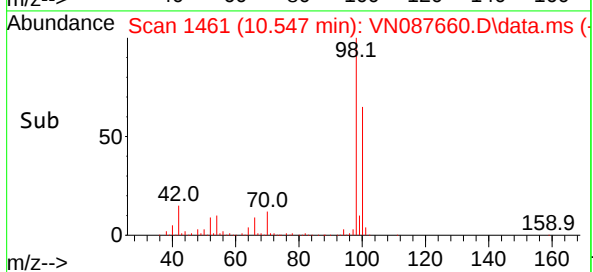
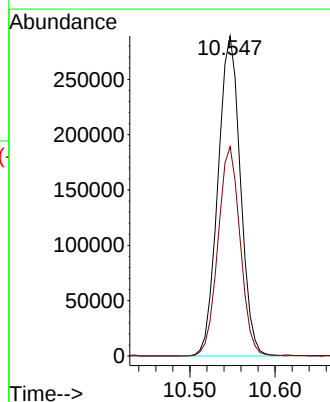
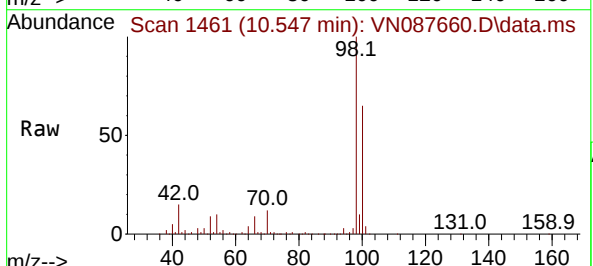
Acq: 25 Aug 2025 16:04

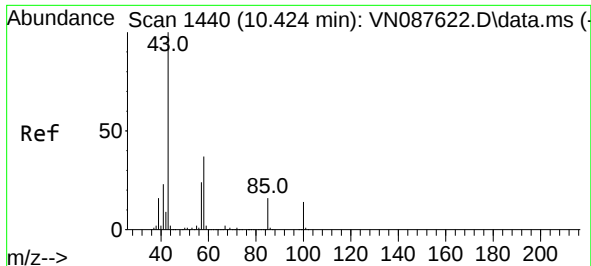
Tgt Ion: 98 Resp: 530181

Ion Ratio Lower Upper

98 100

100 64.4 52.8 79.2

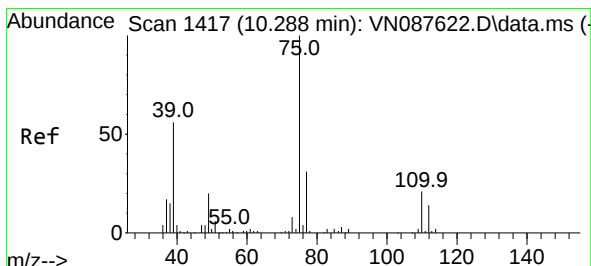
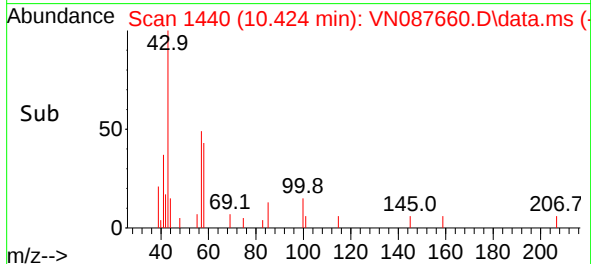
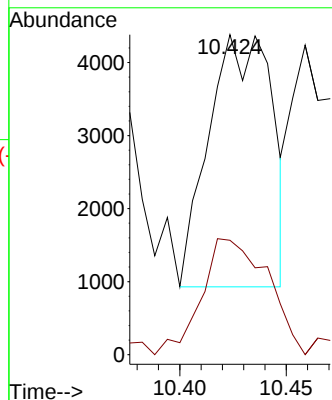
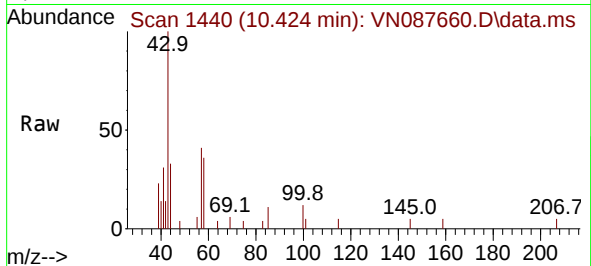




#51  
4-Methyl-2-Pentanone  
Concen: 1.237 ug/l  
RT: 10.424 min Scan# 1440  
Delta R.T. -0.000 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

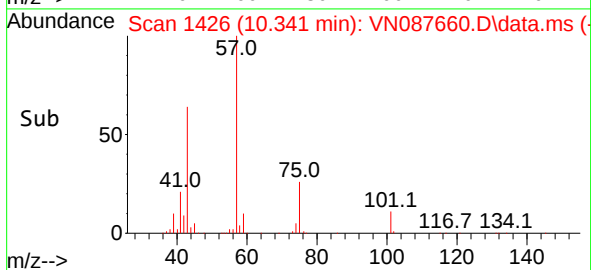
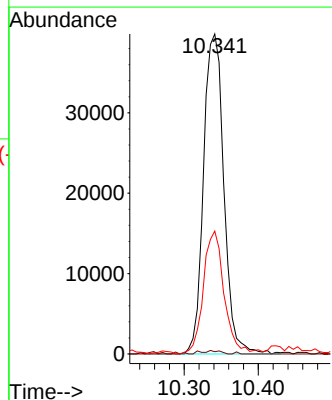
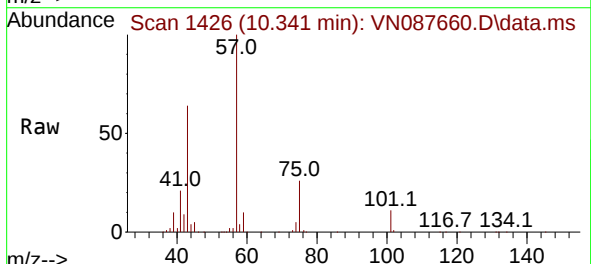
Instrument :  
MSVOA\_N  
ClientSampleId :

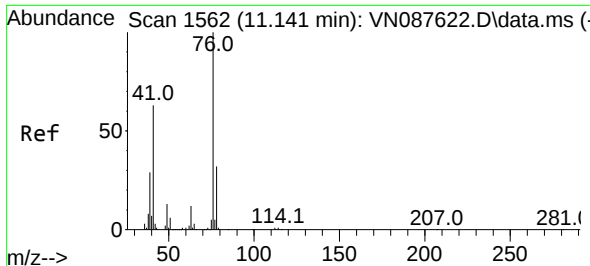
Tgt Ion: 43 Resp: 7129  
Ion Ratio Lower Upper  
43 100  
58 48.1 29.6 44.4#



#54  
cis-1,3-Dichloropropene  
Concen: 13.379 ug/l  
RT: 10.341 min Scan# 1426  
Delta R.T. 0.053 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Tgt Ion: 75 Resp: 75898  
Ion Ratio Lower Upper  
75 100  
77 0.7 24.6 37.0#  
39 37.7 45.2 67.8#





#57

1,3-Dichloropropane

Concen: 0.903 ug/l

RT: 11.182 min Scan# 1569

Delta R.T. 0.041 min

Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

Instrument :

MSVOA\_N

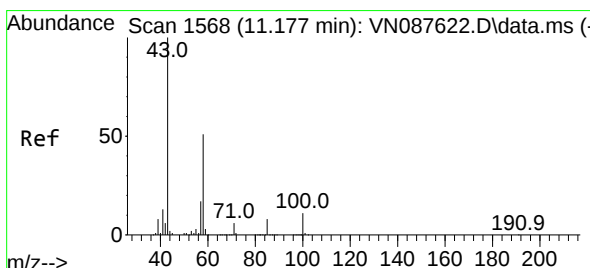
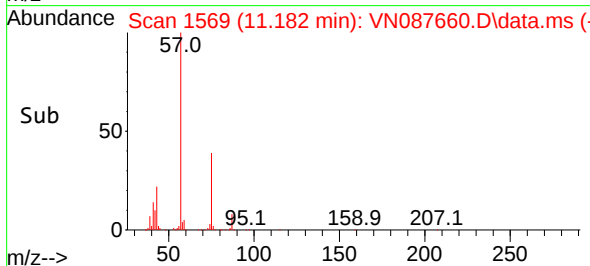
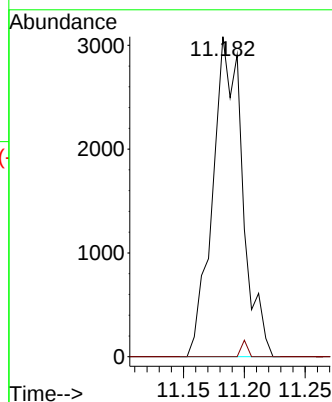
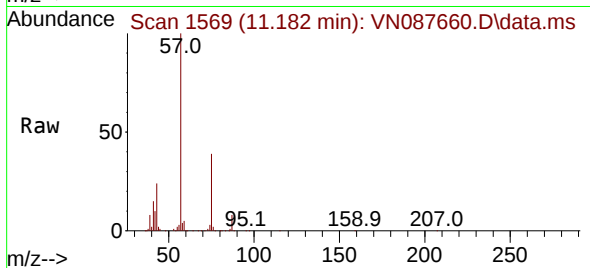
ClientSampleId :

Tgt Ion: 76 Resp: 5264

Ion Ratio Lower Upper

76 100

78 1.1 26.2 39.4#



#59

2-Hexanone

Concen: 25.574 ug/l

RT: 11.182 min Scan# 1569

Delta R.T. 0.006 min

Lab File: VN087660.D

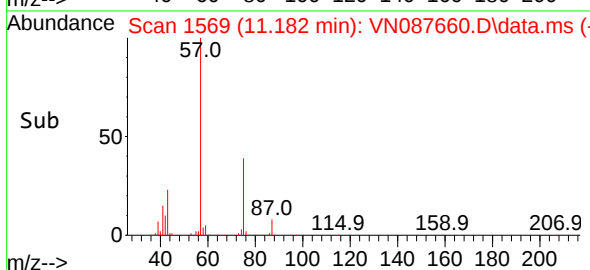
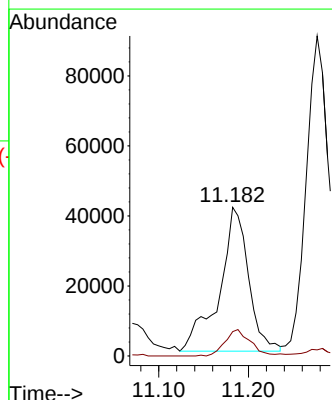
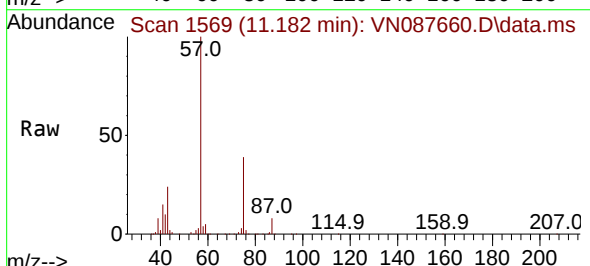
Acq: 25 Aug 2025 16:04

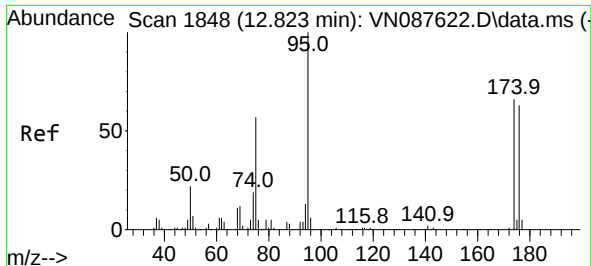
Tgt Ion: 43 Resp: 93135

Ion Ratio Lower Upper

43 100

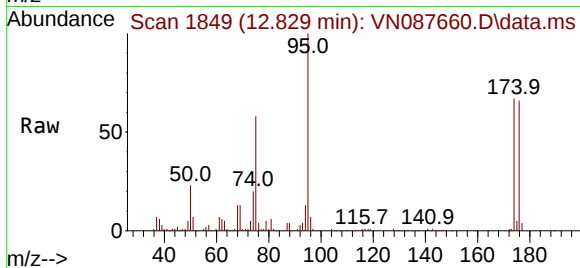
58 15.8 25.9 77.8#



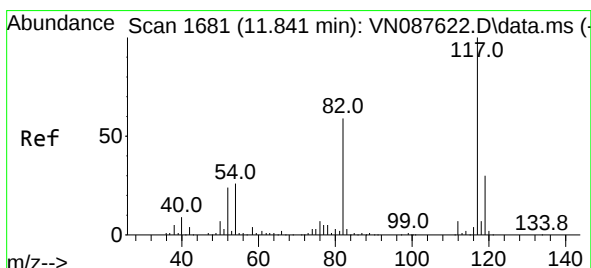
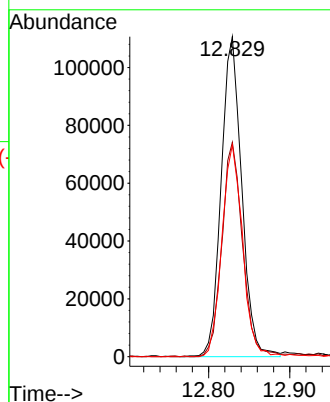
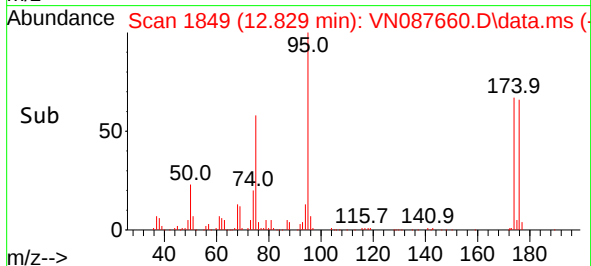


#62  
4-Bromofluorobenzene  
Concen: 50.096 ug/l  
RT: 12.829 min Scan# 1849  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Instrument :  
MSVOA\_N  
ClientSampleId :

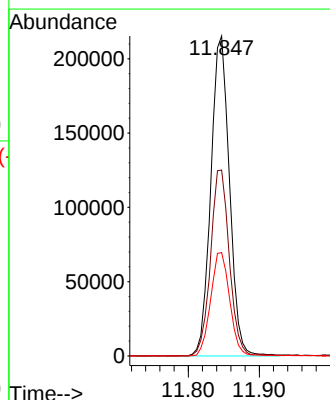
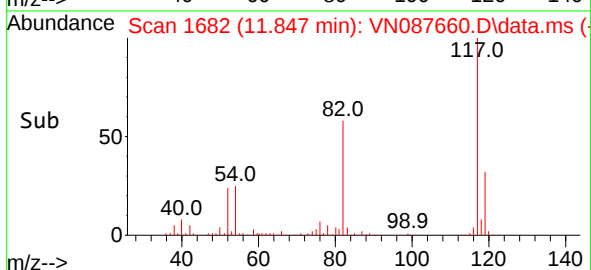
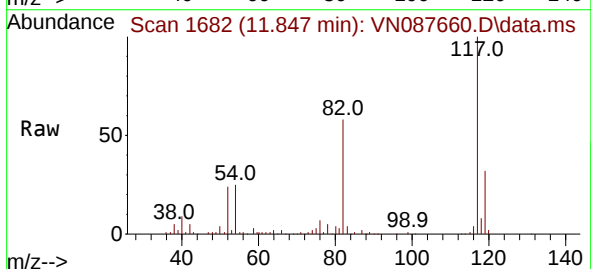


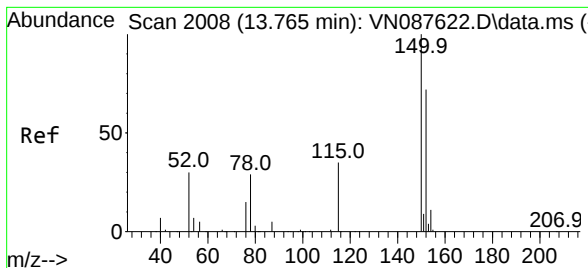
Tgt Ion: 95 Resp: 194578  
Ion Ratio Lower Upper  
95 100  
174 67.7 0.0 138.4  
176 66.5 0.0 132.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.847 min Scan# 1682  
Delta R.T. 0.006 min  
Lab File: VN087660.D  
Acq: 25 Aug 2025 16:04

Tgt Ion: 117 Resp: 391591  
Ion Ratio Lower Upper  
117 100  
82 58.0 47.4 71.2  
119 32.3 24.3 36.5





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.770 min Scan# 20

Delta R.T. 0.006 min

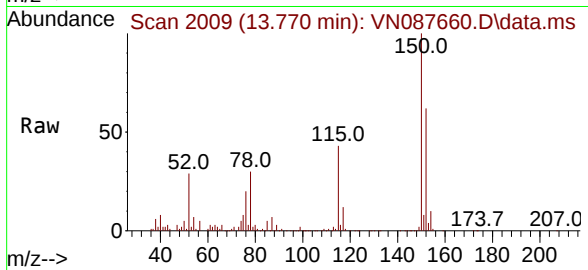
Lab File: VN087660.D

Acq: 25 Aug 2025 16:04

Instrument :

MSVOA\_N

ClientSampleId :



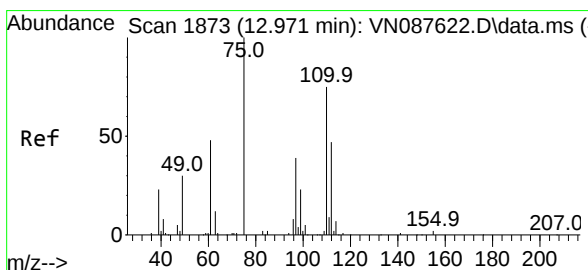
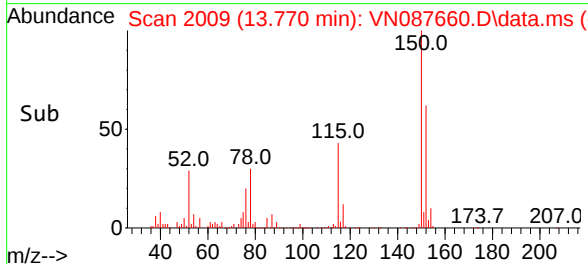
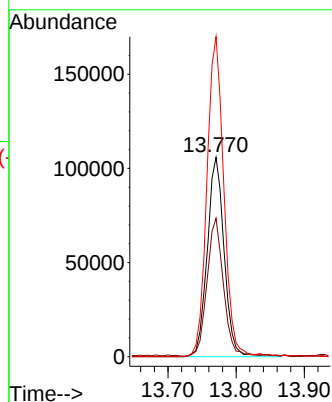
Tgt Ion:152 Resp: 182807

Ion Ratio Lower Upper

152 100

115 66.8 32.3 96.8

150 159.3 0.0 351.0



#76

1,2,3-Trichloropropane

Concen: 25.604 ug/l

RT: 12.829 min Scan# 1849

Delta R.T. -0.141 min

Lab File: VN087660.D

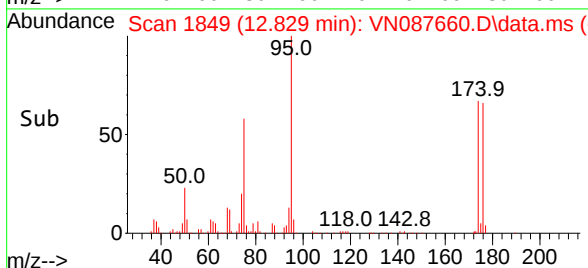
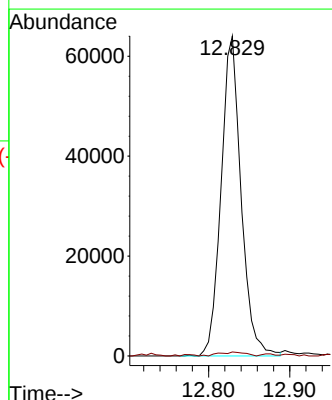
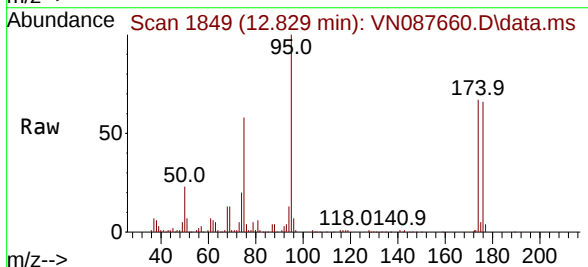
Acq: 25 Aug 2025 16:04

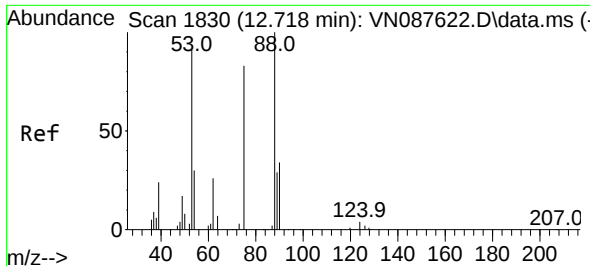
Tgt Ion: 75 Resp: 109764

Ion Ratio Lower Upper

75 100

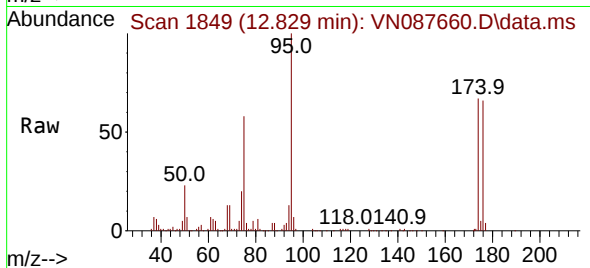
77 1.6 89.1 267.4#



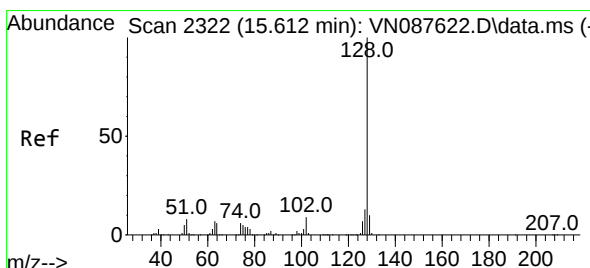
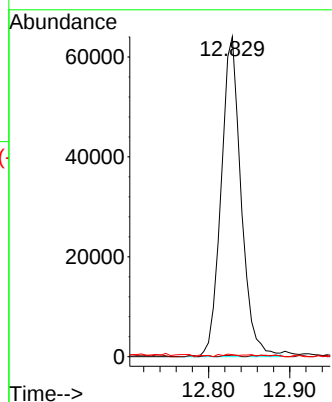
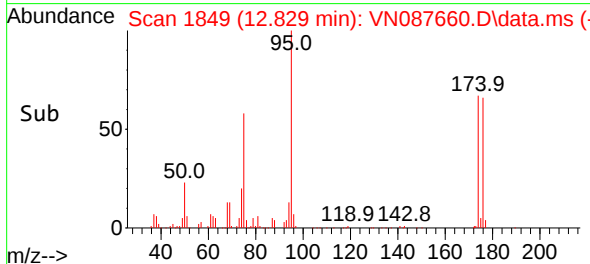


#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 67.785 ug/l  
 RT: 12.829 min Scan# 1849  
 Delta R.T. 0.112 min  
 Lab File: VN087660.D  
 Acq: 25 Aug 2025 16:04

Instrument :  
 MSVOA\_N  
 ClientSampleId :



Tgt Ion: 75 Resp: 109764  
 Ion Ratio Lower Upper  
 75 100  
 53 0.3 101.8 152.6#  
 89 0.6 35.6 53.4#



#95  
 Naphthalene  
 Concen: 0.327 ug/l  
 RT: 15.611 min Scan# 2322  
 Delta R.T. -0.000 min  
 Lab File: VN087660.D  
 Acq: 25 Aug 2025 16:04

Tgt Ion:128 Resp: 4532  
 Ion Ratio Lower Upper  
 128 100  
 127 3.2 10.6 15.8#  
 129 8.9 8.6 12.8

