

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112025\  
 Data File : VN088321.D  
 Acq On : 20 Nov 2025 11:21  
 Operator : JC\MD  
 Sample : Q3689-02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 21 02:57:40 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N111325W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Nov 14 00:49:21 2025  
 Response via : Initial Calibration

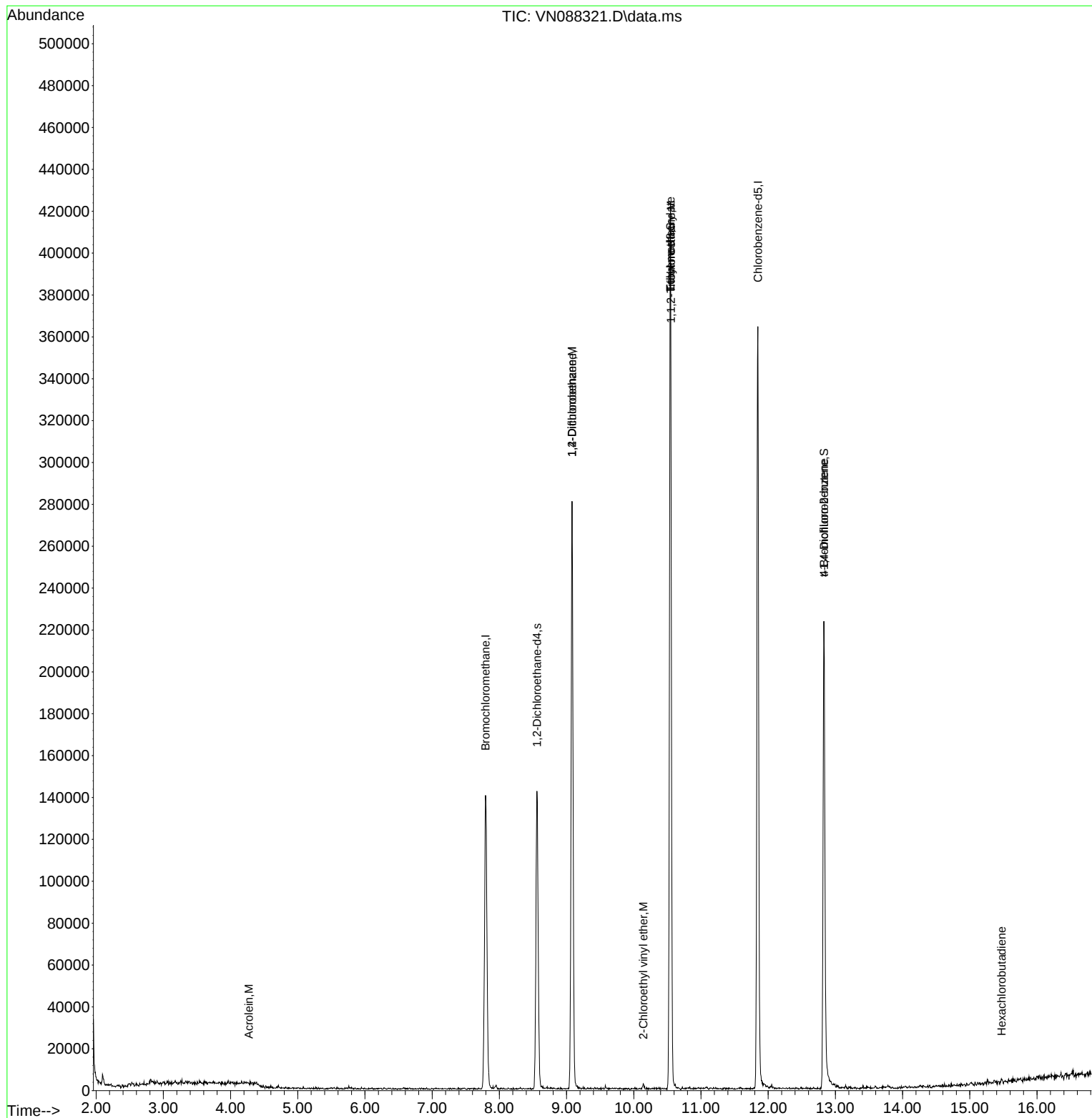
| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 7.794  | 128   | 46552    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene       | 9.082  | 114   | 224837   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5          | 11.847 | 117   | 205540   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4     | 8.559  | 65    | 119192   | 28.030   | ug/l   | 0.00     |
| Spiked Amount                 | 30.000 | Range | 91 - 110 | Recovery | =      | 93.433%  |
| 60) 4-Bromofluorobenzene      | 12.829 | 95    | 81986    | 23.596   | ug/l   | 0.00     |
| Spiked Amount                 | 30.000 | Range | 63 - 112 | Recovery | =      | 78.667%  |
| 63) Toluene-d8                | 10.547 | 98    | 284640   | 29.251   | ug/l   | 0.00     |
| Spiked Amount                 | 30.000 | Range | 91 - 112 | Recovery | =      | 97.500%  |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 13) Acrolein                  | 4.271  | 56    | 176      | 0.290    | ug/l   | 83       |
| 36) 1,2-Dichloroethane        | 9.082  | 62    | 9471     | 2.170    | ug/l # | 76       |
| 50) 1,1,2-Trichloroethane     | 10.553 | 97    | 11305    | 4.398    | ug/l # | 1        |
| 51) Ethyl methacrylate        | 10.547 | 69    | 1167     | 0.276    | ug/l   | 73       |
| 55) 2-Chloroethyl vinyl ether | 10.141 | 63    | 912      | 0.374    | ug/l # | 81       |
| 77) t-1,4-Dichloro-2-butene   | 12.829 | 75    | 48448    | 36.990   | ug/l # | 10       |
| 90) Hexachlorobutadiene       | 15.476 | 225   | 348      | 0.317    | ug/l # | 27       |
| -----                         |        |       |          |          |        |          |

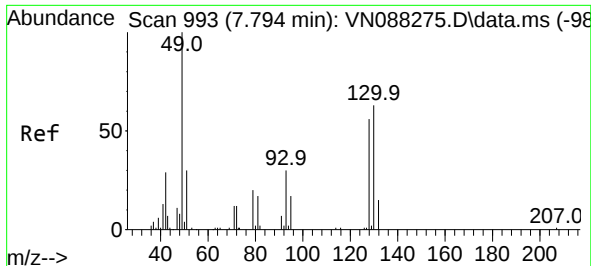
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Fri Nov 14 00:49:21 2025  
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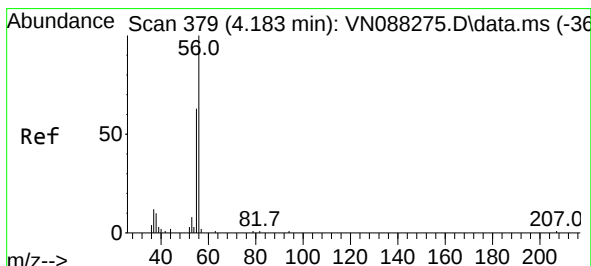
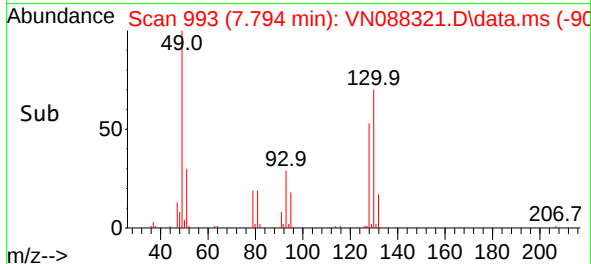
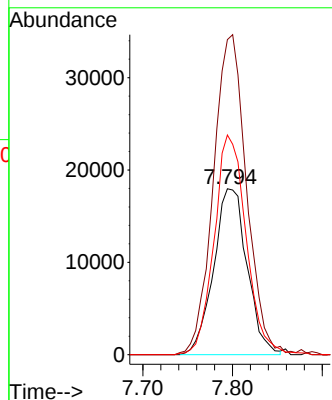
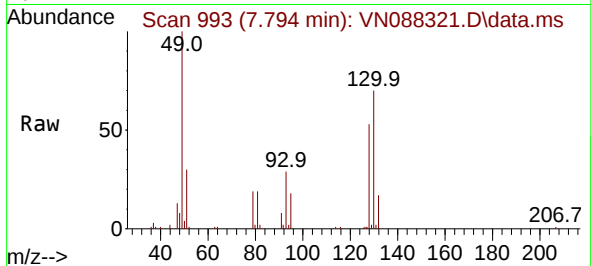




#1  
Bromochloromethane  
Concen: 30.000 ug/l  
RT: 7.794 min Scan# 993  
Delta R.T. 0.000 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21

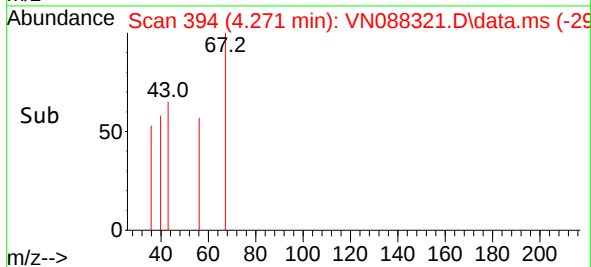
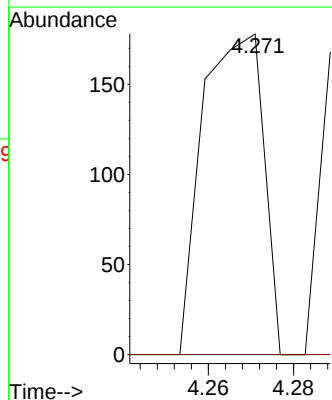
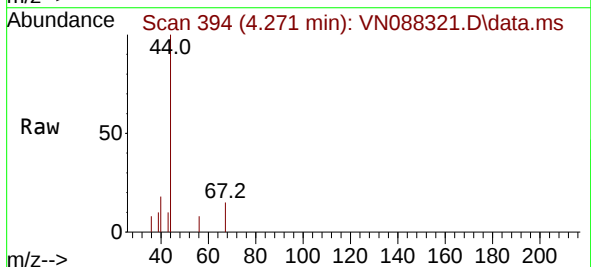
Instrument :  
MSVOA\_N  
ClientSampleId :

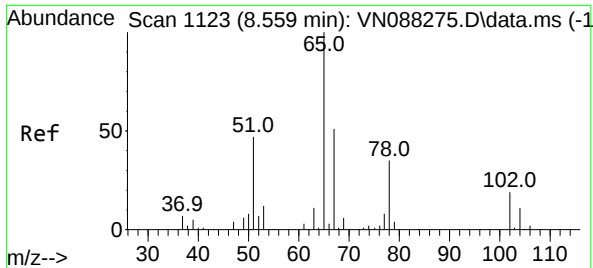
Tgt Ion:128 Resp: 46552  
Ion Ratio Lower Upper  
128 100  
49 190.8 0.0 501.2  
130 127.1 0.0 320.2



#13  
Acrolein  
Concen: 0.290 ug/l  
RT: 4.271 min Scan# 394  
Delta R.T. 0.088 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21

Tgt Ion: 56 Resp: 176  
Ion Ratio Lower Upper  
56 100  
55 86.4 57.9 86.9

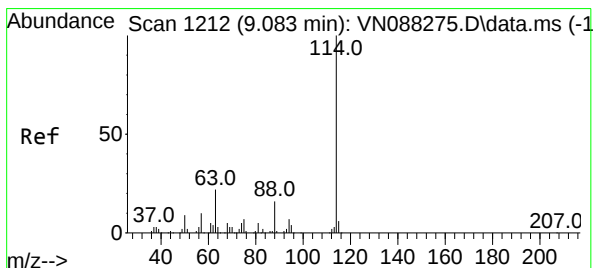
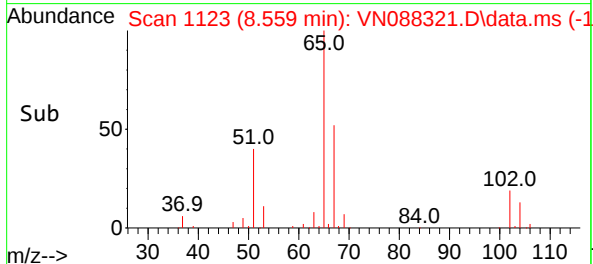
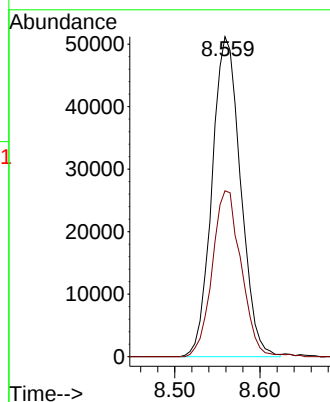
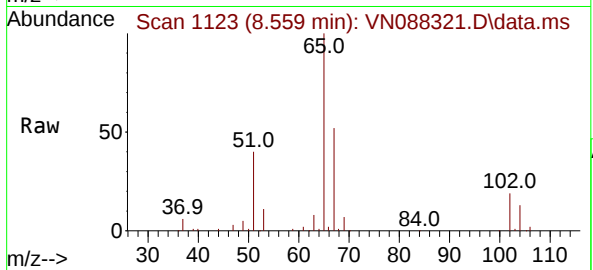




#27  
 1,2-Dichloroethane-d4  
 Concen: 28.030 ug/l  
 RT: 8.559 min Scan# 1123  
 Delta R.T. -0.000 min  
 Lab File: VN088321.D  
 Acq: 20 Nov 2025 11:21

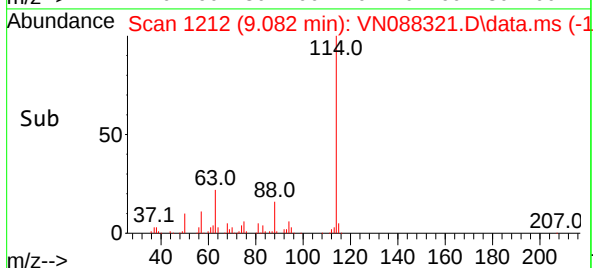
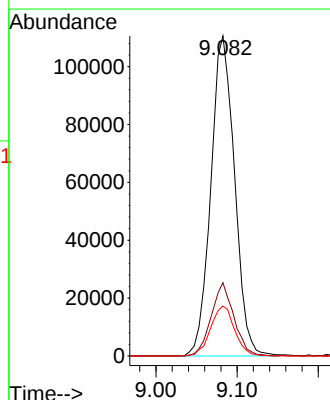
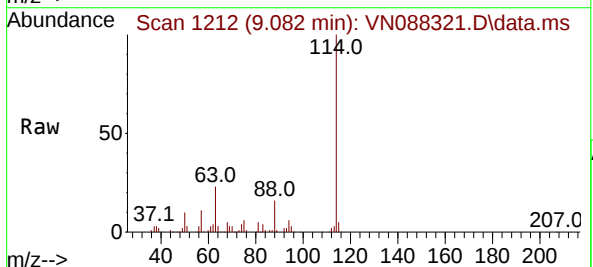
Instrument :  
 MSVOA\_N  
 ClientSampleId :

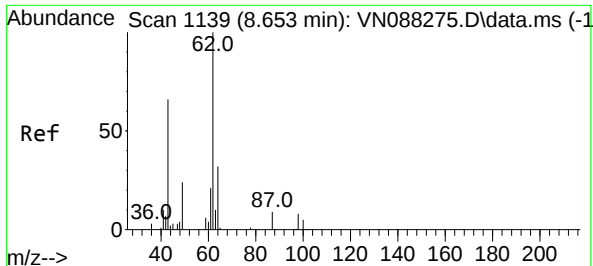
Tgt Ion: 65 Resp: 119192  
 Ion Ratio Lower Upper  
 65 100  
 67 52.3 40.2 60.2



#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 9.082 min Scan# 1212  
 Delta R.T. -0.000 min  
 Lab File: VN088321.D  
 Acq: 20 Nov 2025 11:21

Tgt Ion: 114 Resp: 224837  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 18.9 28.3  
 88 15.8 12.8 19.2





#36

1,2-Dichloroethane

Concen: 2.170 ug/l

RT: 9.082 min Scan# 11

Delta R.T. 0.429 min

Lab File: VN088321.D

Acq: 20 Nov 2025 11:21

Instrument :

MSVOA\_N

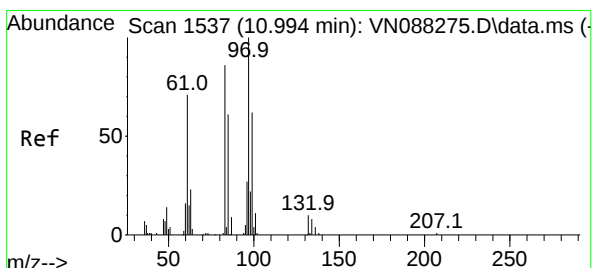
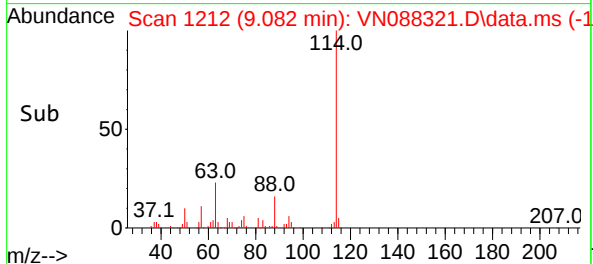
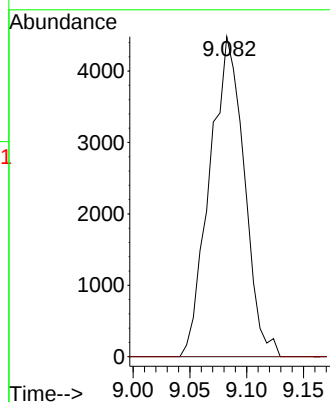
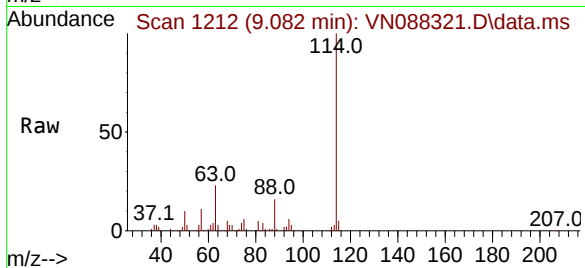
ClientSampleId :

Tgt Ion: 62 Resp: 9471

Ion Ratio Lower Upper

62 100

98 0.0 6.8 10.2#



#50

1,1,2-Trichloroethane

Concen: 4.398 ug/l

RT: 10.553 min Scan# 1462

Delta R.T. -0.441 min

Lab File: VN088321.D

Acq: 20 Nov 2025 11:21

Tgt Ion: 97 Resp: 11305

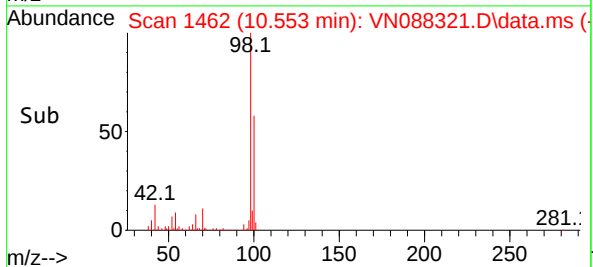
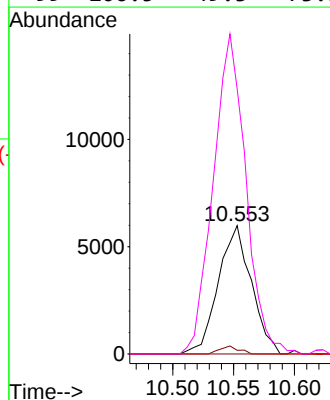
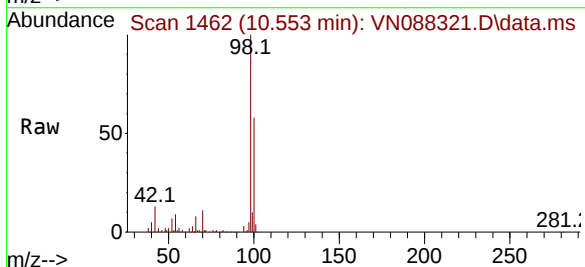
Ion Ratio Lower Upper

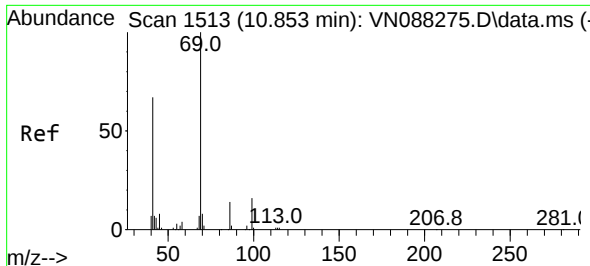
97 100

83 2.9 68.6 102.8#

85 0.0 49.0 73.6#

99 206.5 49.3 73.9#

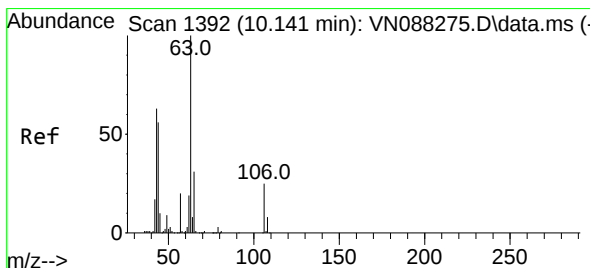
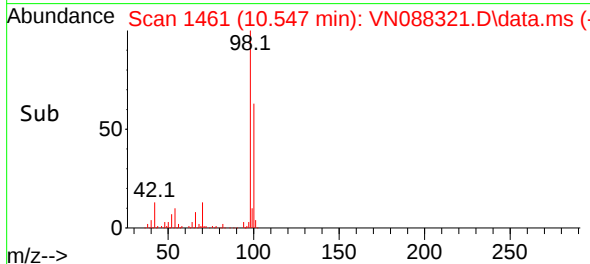
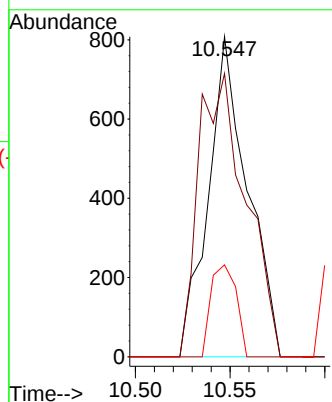
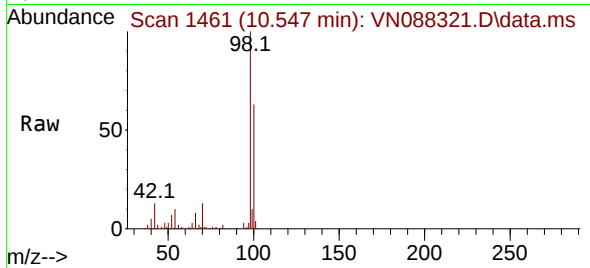




#51  
Ethyl methacrylate  
Concen: 0.276 ug/l  
RT: 10.547 min Scan# 1461  
Delta R.T. -0.306 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21

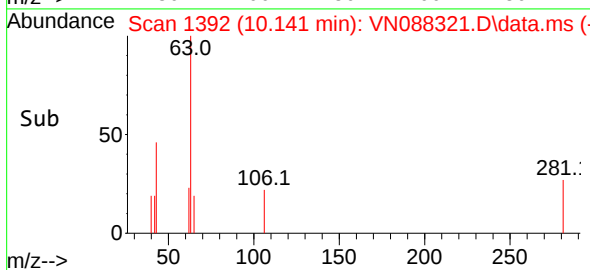
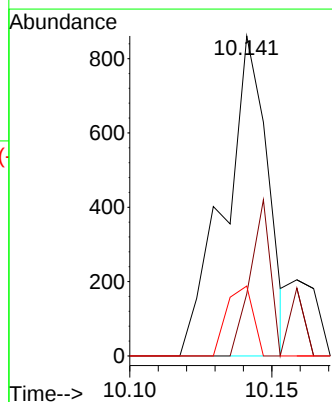
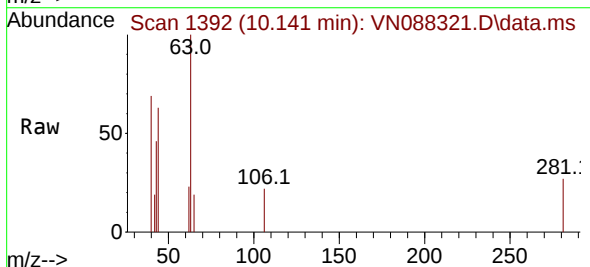
Instrument :  
MSVOA\_N  
ClientSampleId :

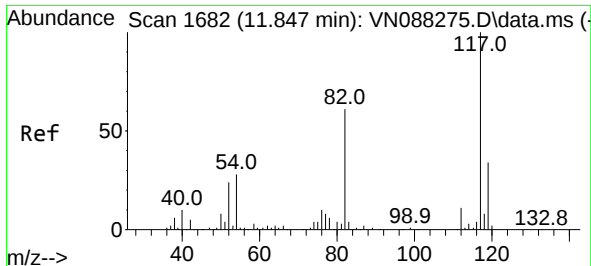
Tgt Ion: 69 Resp: 1167  
Ion Ratio Lower Upper  
69 100  
41 88.5 33.6 100.8  
39 28.7 23.4 70.2



#55  
2-Chloroethyl vinyl ether  
Concen: 0.374 ug/l  
RT: 10.141 min Scan# 1392  
Delta R.T. -0.000 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21

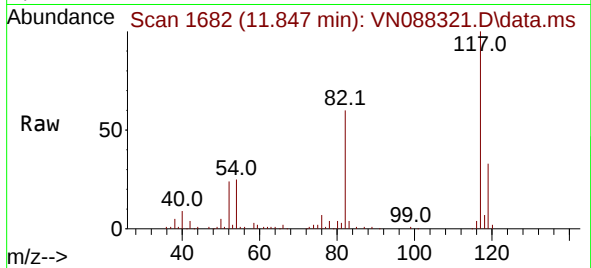
Tgt Ion: 63 Resp: 912  
Ion Ratio Lower Upper  
63 100  
65 22.7 24.9 37.3#  
106 13.4 20.3 30.5#



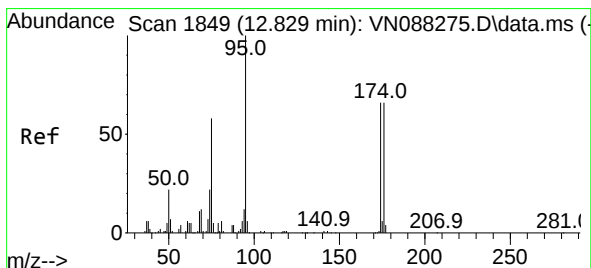
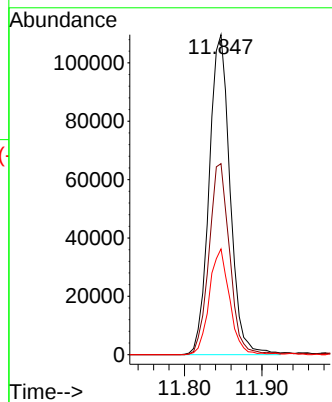
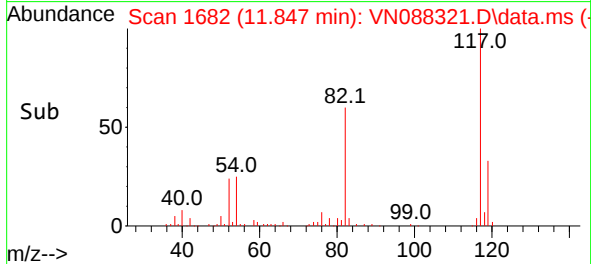


#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 11.847 min Scan# 117  
Delta R.T. -0.000 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21

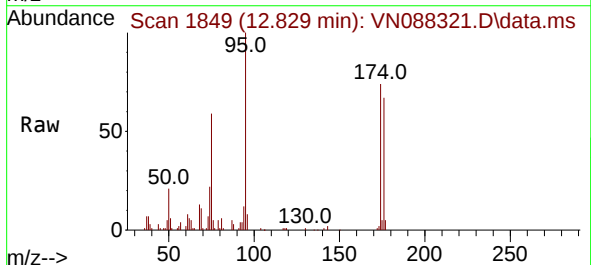
Instrument :  
MSVOA\_N  
ClientSampleId :



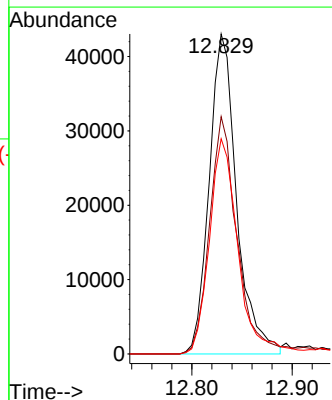
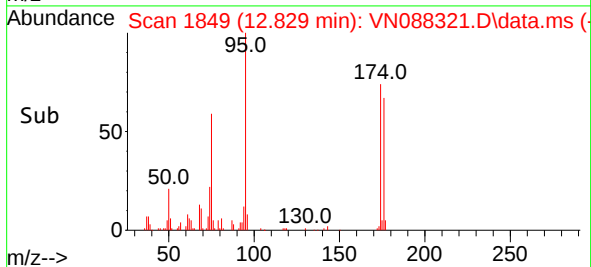
Tgt Ion:117 Resp: 205540  
Ion Ratio Lower Upper  
117 100  
82 59.0 49.3 73.9  
119 32.1 26.4 39.6

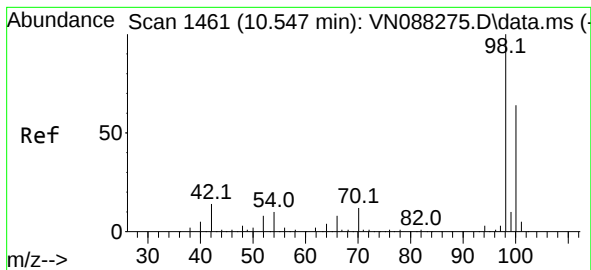


#60  
4-Bromofluorobenzene  
Concen: 23.596 ug/l  
RT: 12.829 min Scan# 1849  
Delta R.T. -0.000 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21



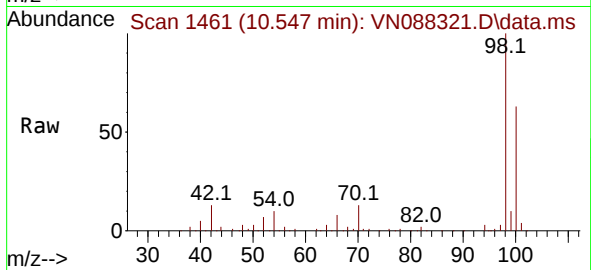
Tgt Ion: 95 Resp: 81986  
Ion Ratio Lower Upper  
95 100  
174 74.9 54.5 81.7  
176 70.1 53.8 80.6



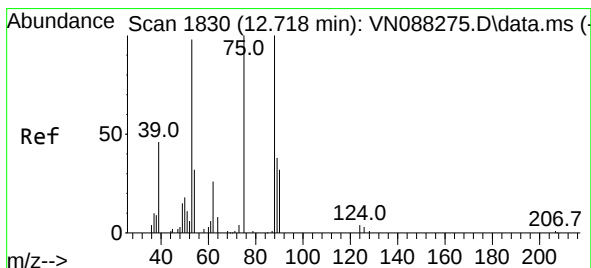
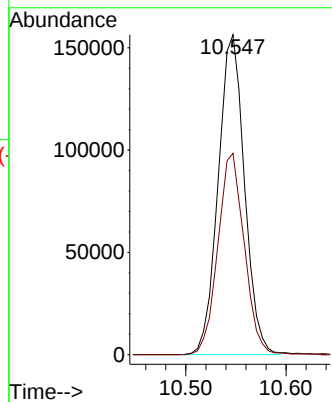
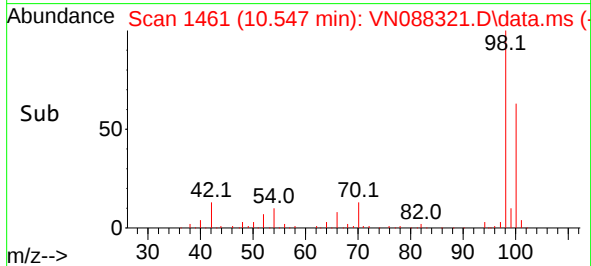


#63  
Toluene-d8  
Concen: 29.251 ug/l  
RT: 10.547 min Scan# 1461  
Delta R.T. -0.000 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21

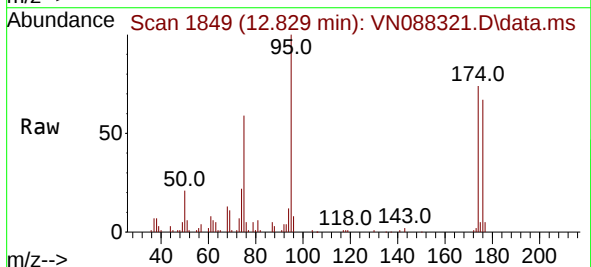
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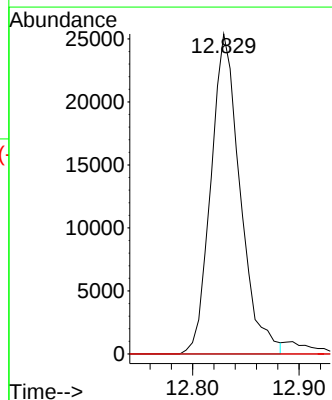
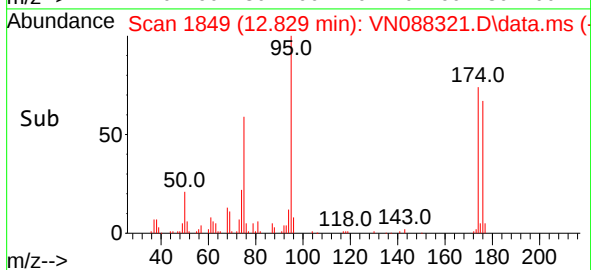
Tgt Ion: 98 Resp: 284640  
Ion Ratio Lower Upper  
98 100  
100 63.2 51.6 77.4

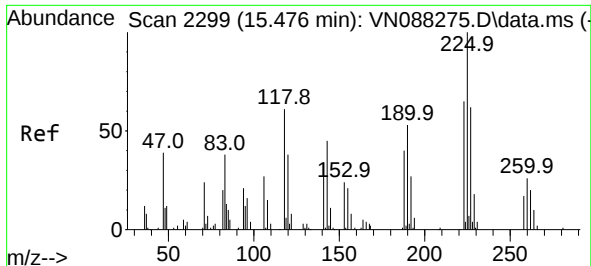


#77  
t-1,4-Dichloro-2-butene  
Concen: 36.990 ug/l  
RT: 12.829 min Scan# 1849  
Delta R.T. 0.112 min  
Lab File: VN088321.D  
Acq: 20 Nov 2025 11:21



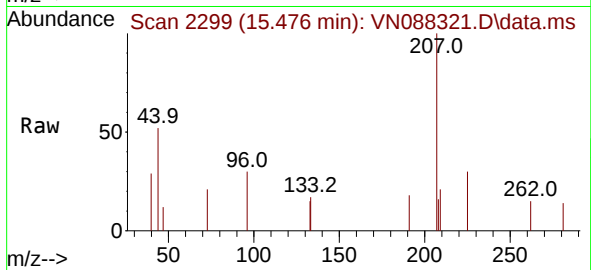
Tgt Ion: 75 Resp: 48448  
Ion Ratio Lower Upper  
75 100  
53 0.0 50.0 150.0#  
89 0.0 22.3 66.9#





#90  
 Hexachlorobutadiene  
 Concen: 0.317 ug/l  
 RT: 15.476 min Scan# 21  
 Delta R.T. -0.000 min  
 Lab File: VN088321.D  
 Acq: 20 Nov 2025 11:21

Instrument :  
 MSVOA\_N  
 ClientSampleId :



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 225   | Resp: | 348   |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 0.0   | 0.0   | 132.0 |
| 227      | 16.1  | 0.0   | 132.6 |

