

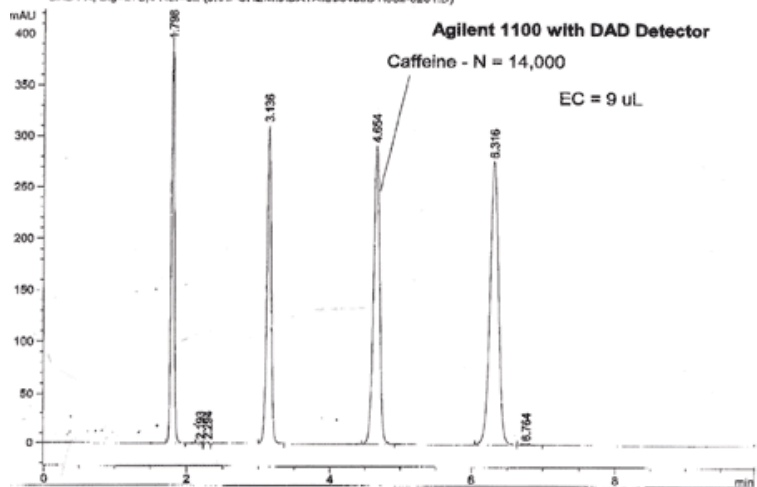
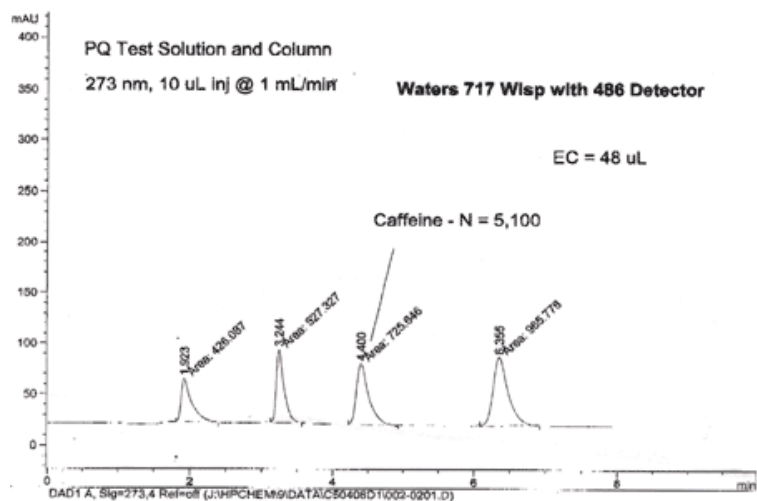


## What is the effect of extra column volume for different HPLC instruments on the same method – FAQ

**The difference can be very significant.**

Extra Column Volume (ECV) that is “hidden” in your HPLC system, the fittings, the tubing and the flow cell can greatly impact the efficiency of your method. Extra Column Dispersion (ECD) will result and the smaller the particle, the more impact will be observed.

Below are two chromatograms using the exact same certified, HPLC Column, with the exact same NIST traceable standards on the exact same day. The older HPLC instrument and the newer instrument may be plumbed differently. This is only one example of how two different instruments can produce very different results with these conditions.





*Recommendation: Make sure all fittings are new, secure and all tubing is well cut and is as short as possible. Not all HPLC instruments offer optimal extra volume. Check with your instrument manufacturer on how to optimize your system.*

*You can measure your extra column volume with the MicroSolv [HSQ Kit for HPLC Self Compliance](#). Easy to use and low cost.*

