## 3. Results and Discussions

## **3.1 Method Development**

At the beginning, we tried many methods to develop a method for the two drugs with different mobile phase composition, buffer, pH, column, absorbance and flow rate.

All methods had been applied showing asymmetrical peaks, overlapping, and unusual chromatograms for the drugs separately and in mixture in solution.

The method (60:40) acetonitrile:buffer, 50 mM KH2PO4 with pH 6.0 was the best one for this group of drugs regarding symmetry of peaks, resolution, and their retention time, when they are analyzed by HPLC system. Solvent identification chromatogram is shown in figure (5).

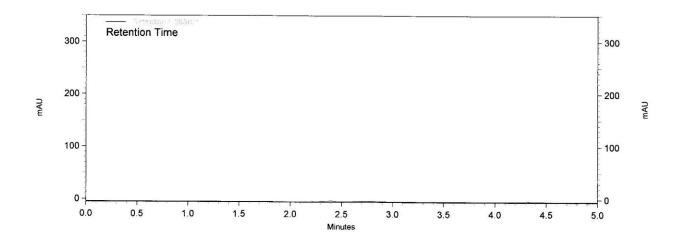


Figure 5 : Solvent (mobile phase) chromatogram