## (5) Baseline Noise in Gradient Elution

In gradient analysis, incomplete mixing of mobile phases or impurities in water can cause baseline noise. In the former case, it can be improved by using a proper mixer before the injector (baseline  $1\rightarrow 2$ ). In the latter case, it can be improved by using a pre-column. Impurities in water are adsorbed to the pre-column (baseline  $2\rightarrow 3$ ). COSMOSIL 5C<sub>18</sub>-AR-II is effective as a pre-column (4.6 mm I.D. x 10 mm, or 10 mm I.D. x 20 mm).

