

## **HPLC Chromatography Packing as a Tool to Evaluate Mechanisms of Formation Damage by Fines Migration**

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### **ABSTRACT**

The aim of this paper is to show that a system of steel packed columns of known blends of minerals (with controlled ratios and size distributions) coupled to an equipment of high performance liquid chromatography (HPLC) allows us to emulate fines migration phenomena in rock porous media.

Time / pressure measurements were taken in two different ways:

- Fixed rate of injection with decreasing salinity to fresh water.
- Fixed salinity with variable rate of injection.

The results obtained by this non conventional dynamic method are similar to those in the case of displacement test in core plugs. Moreover, time of analysis is shorter and the technique is more simple.