

Resedimented Mudrocks From Around the World (Version 1)

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ABSTRACT

Our current database on resedimented mudrocks from around the world includes Boston Blue Clay (BBC), Kaolinite, Nankai Mud, Resedimented Gulf of Mexico Clay (RGMC), and Gulf of Mexico Clay from Eugene Island. Even though compressibility among those mudrocks is similar, variations in grain size distribution and composition lead to a difference in permeability of one order of magnitude at a given stress. We describe each mudrock by grain size distribution, plasticity, and mineral composition. We then perform constant-rate of strain consolidation tests on the resedimented mudrocks to measure compressibility and permeability. A preliminary comparison of our U.T. GeoFluids mudrocks is presented here. We are continuously working on our database and will present an updated version next year.

**CLICK ON IMAGE FOR
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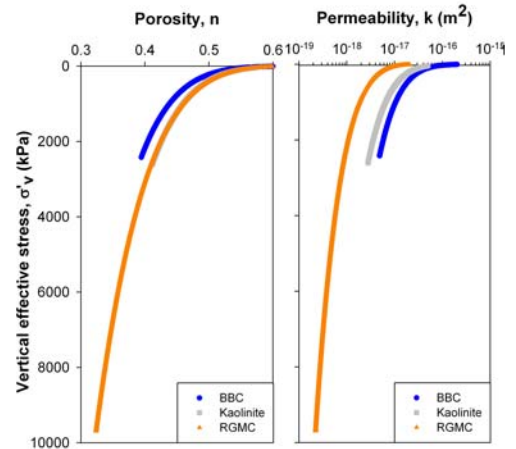


Fig. 1: Compaction trend and decrease in vertical effective permeability during burial of three resedimented GeoFluids mudrocks: (1) Boston Blue Clay (blue), (2) Kaolinite (gray), and (3) Resedimented Gulf of Mexico Clay (orange).

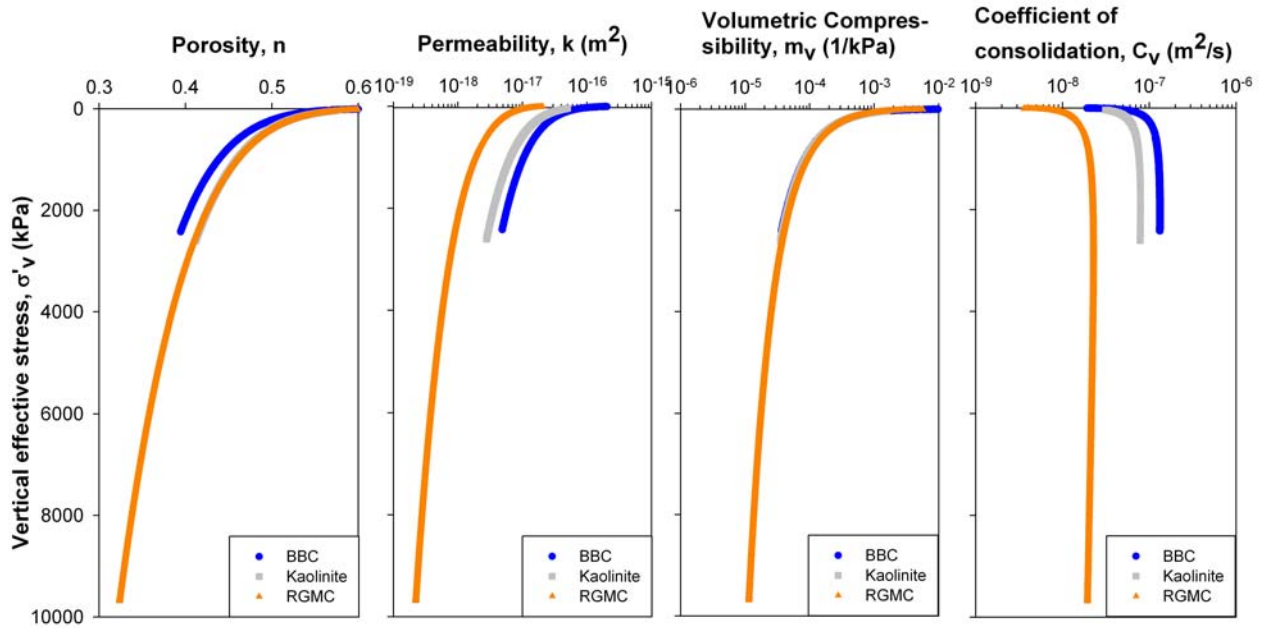


Fig. 1: Compaction trend and evolution of vertical effective permeability, volumetric compressibility, and coefficient of consolidation (hydraulic diffusivity) during burial of three resedimented GeoFluids mudrocks: (1) Boston Blue Clay (blue), (2) Kaolinite (gray), and (3) Resedimented Gulf of Mexico Clay (orange).

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