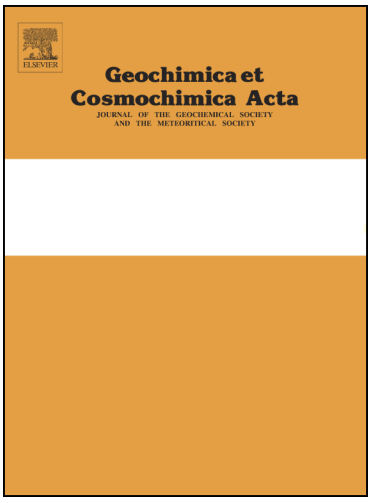

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Thermochemical Sulphate Reduction Can Improve Carbonate Petroleum Reservoir Quality

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Abstract

Interest in the creation of secondary pore space in petroleum reservoirs has increased because of a need to understand deeper and more complex reservoirs. The creation of new secondary porosity that enhances overall reservoir quality in deeply buried carbonate reservoirs is controversial and some recent studies have concluded it is not an important phenomenon. Here we present petrography, geochemistry, fluid inclusion data, and fluid-rock interaction reaction modeling results from Triassic Feixianguan Formation, Sichuan Basin, China, core samples and explore the relative importance of secondary porosity due to thermochemical sulphate reduction (TSR)