

Sedimentary-diagenetic ore formation in the Jurassic system terrigenous deposits of the Tatarstan Republic

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Abstract

© 2020 IOP Publishing Ltd. All rights reserved. Authigenic ore mineralization of the Jurassic terrigenous complexes rocks, widespread in the Tatarstan, is considered. It has been established that the ore minerals associations' composition is determined by geochemical conditions of mineral formation environment. In rocks of oxide geochemical facies (sandstones, siltstones), iron, manganese and titanium oxides predominate. Pyrite framboids and copper-nickel intermetallide compounds predominate in rocks of neutral geochemical facies (green clays). The rocks of anoxic geochemical facies (black clay, oil shale) contain only pyrite framboids. The main factor determining the authigenic ore minerals associations composition is redox potential of environment.

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