

## Contact zone gypsum - Carbonate sediments by electron paramagnetic resonance

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### Abstract

© SGEM2014. All Rights Reserved. The purpose of this work is to study geochemical features in the contact zone of gypsum - carbonate deposits by the electron paramagnetic resonance (EPR) method on the example of the typical core samples Syukeevskogo field. Choosing the annealing temperature of 350, 600 and 950 °C is associated with decomposition of organic matter and carbonates. Five different kind contact zones of gypsum-carbonate strata Syukeevskogo field along the borehole were selected. Quantitative changes of the EPR parameters:  $Mn^{2+}$ ,  $Fe^{3+}$ ,  $Cr^{3+}$ ,  $\alpha$  and radicals caused by thermochemical effects on the rock and organic matter are presented in the diagram forms. Geochemical features installed in the contact zones such as a manganese increase in the newly formed calcite, a decrease  $\alpha$  in sample oil-saturated, a reason of calcium excess or magnesium deficiency at increase alpha are discussed.

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### Keywords

Calcite, Dolomite, EPR, Gypsum, Thermal annealing