

FLUID REGIME OF FORMATION OF VEINLET MINERALIZATION IN SEDIMENTARY LAYERS OF CARPATHIAN AND DNIPRO-DONETS'K OIL- AND GAS-BEARING PROVINCES OF UKRAINE

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The following peculiarities of the process are reconstructed after the data of fluid inclusions research in calcite from (mostly) calcite, calcite-bitumen and (occasionally) quartz-calcite veinlets: 1. Existence of two-phase (liquid-gas) equilibrium in fluid caused by its unstable state in weakened zones in cracks which: a) begin to appear at the stage of lithification of sediment, especially under the conditions of pressure gradients, and later on renew; b) are paragenetical with tectonic deformations. 2. High value of gas saturation of mineral-forming fluid and high weight concentration of saturated hydrocarbons (methane, ethane, propane and others) comparing with the background values. This was put into the basis of new technology Method of determining the perspectiveness of oil- and gas-bearing of local area. The reliability of this method increases along with the growth of value of proportion of hydrocarbon concentration in minerals of host rocks. 3. The temperatures of mineral formation which correspond to thermal changes within the interval 60-200°C by catagenesis. 4. Similarity of ways of migration of hydrocarbon-holding and metall-bearing fluids which appear mostly by zones of deep breaks in Earth crust. This allowed to obtain valuable data about parameters of migration of hydrocarbon-holding paleofluids, ways of their migration and results of interaction on the contact with host rocks.