

OIL AND GAS RESERVOIRS IN THE CRETACEOUS DEPOSITS IN AZERBAIJAN

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Oil - gas reservoirs in the Cretaceous deposits in Azerbaijan are composed of different genetic types of rocks. One can identify granular reservoirs, carbonaceous reservoirs (Campanian, Maastrichtian), effusive reservoirs (Coniacian-Maastrichtian) in the Central Kura depression and in the North-east of the Lesser Caucasus. One can distinguish: fracture-porous associated with greatly changed effusive formations; porous-fracture with structural genetic type of limestones; fracture-porous-cavernous with crystalline dolomites. It was determined that the changes are closely associated with the composition of rocks character and intensity of postsedimentation transformations. Reservoir properties of the effusive rocks are determined by processes of the weathering of the initial, effusive mass. Formation of big pores is often associated with the destruction of phenocrysts of plagioclases resulting in the formation of micro-fractures: their value varies from 0.02-0.004% and permeability of pores varies from 0.00015-0.0063 md; average specific density of fractures is 0.28 cm/cm². Porosity of the effusive formations varies from 0.6 to 28% and is 13% on average. Unusual combination of high porosity and low permeability is owing to a complex and non-uniform structure of the porous space. Sandy-silty Cretaceous reservoirs contain clayey carbonaceous cement both of authigenous and allothigene genesis. The latter prevail in a weakly-changed sandy-silty rocks. They are located in the pore space disorderly. Starting from the stage of diagenesis in the pore space of the fragmental rocks there occurs a process of formation of the authigenous clayey minerals.