



Creating of the geological model of Pal-I gas field

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CREATION OF THE GEOLOGICAL MODEL OF Pal-I GAS FIELD M. Francuski , M. Beric Nis-naftagas, Development and Research , dj. ciric @ mail. nis-naftagas. co. yu Oil-gas field Pal-I is located within Pannonian basin, in the northern part of Backa. Geological structure, in domain of Pal-1 is contained of the following hronostratigraphic units: Paleosoic, Mesosoic (Triassic), Miocene (Sarmatian, Pannonian, Pontian), Pliocene (Paludine), Quaternary. The most important unit for Pal-I is Miocene, particularly Pontian sediments, presented by Lower and Upper Pontian. According to petrological investigation, Lower Pontian sediments are presented by marly limestones, marl, clayey marl, marly clay and fine-grain clayey sands. Upper Pontian sediments are presented by sandy clay and medium-grain clayey sands. Layers of clay and sand are changing each other. Within Upper Pontian sediments, nine gas fields have been discovered. Paliæ structure belongs to the system of morphological mounts of Northern Backa, particularly distinguished in W-NE direction from Subotica over Paliæ and Hajdukovo to Baèki Vinogradi, entering Hungary. In domain of Paliæ, tectonic deformations have not been defined. Paliæ structure is characterized by more intensive sinking of NE side, and in the western part, saddly depression. At Pal oil-gas field, ten gas fields are distinuished. From the viewpoint of calculated geological reserves, only two of them are economically interesting. Creating geological model of the gas field Pal-I, some indicators suggesting direction of the further exploration in outlining and defining position of the deposit in all directions are ocured. The gas field Pal-I is main carrier of gaseous hydrocarbons at the Pal oil-gas field. By the modern geological interpretation, gas field Pal-I was widened in western direction. Widening of the field was defined on the basis of detailed interpretation of seismic lines, as well as according to long-lasting monitoring and analysis of production results for the P-17 borehole. New geological model of the gas field Pal-I will contribute to provide the most efficient exploitation regime of the field.