

Oil-and-gas content's features of Guneshli field. Azerbaijan sector of the South Caspian

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Guneshli field is today's one of the largest producing oil and gas fields of the South Caspian Basin. It is located in 120km far from Baku, on the north-west of Absheron peninsula, between Neft Dashlari and Chirag fields.

Natural reservoirs and content of oil and gas deposits in them occurs almost in all horizons of the middle Pliocene aged Productive Series (PS). Complex geological structure of hydrocarbon's deposits are conditioned, first of all, by multiple tectonic faults and lithologic-collector nonuniformity of natural objects, and also very important is the source of detrital materials, which take part in sedimentary formation's creation.

In order with studying the filtration-capacitive property of rocks, the collector's distribution on the area in upper gas condensate and lower oil gas condensate horizons, the purposes of irregular oil-and-gas saturation of the field were considered.

The tectonic activity leaves traces on the field's construction in the period of structure formation on the earlier and following stages of middle Pliocene.

In the distribution of hydrocarbons reserves on area of the field the lithological factors also play quite active role, along with tectonic factor. Due to lithologic factors, the saturation of sandy objects nonuniformly spreaded on area, the level of trap's filling with hydrocarbons on area is not identical. Suite "Fasile" and X horizon of Balakhany suit are clearly being traced all over the structure, as distinct of the IX horizon which has lens like nature.

In spite of detailed study of the field, which in total were drilled 235 wells in, we are keeping on facing with nature's surprise. There are remarking very compound phase conditions of hydrocarbon mixture in some deposits of the field. For example, the presence of gas condensate deposit with water solved gas in Kala suit of PS. Quite extensive oil flap detected on gas saturated suits NKP and PK are on the north-west limb of the structure.

The generalized researches of Guneshli field prove the necessity of more detailed and system-defined approach in separation the exploitation objects, estimation of the collector and hydrocarbon potentials of the field, and also analysis of the development of oil-and gas field.