Stratigraphic Distribution of Oil and Gas Pools with Respect to the Dip of the Eastern Flank of the Karachukhur-Zykh Uplift Toward the Bina-Gousan Trough

S. T. Ovnatanov, G. P. Tamrazyan, A. I. Golovanova


There is a tendency for the oil and gas pools in the formations of the Productive Unit to occur in stratigraphically lower horizons from the Karachukhur-Zykh anticline through the west and central parts of the Gousan trough. See Table 1.

Within the Gousan area, oil and gas pools occur in all sub-formations of the Kalin formation (KaS). In the most subsided, Central Gousan sector, the pools occur largely in the lowest unit (KaS₃) and in part in the middle member (KaS₂). In the less subsided West Gousan sector the pools are largely in KaS₂ and in part in KaS₃. In neither of these Gousan areas have oil pools been found in the PK formation.

The Kalin formation is absent at the crest of the Karachukhur-Zykh uplift; however, it is present on the east flank where the main oil pool of this formation is in KaS₁. In the Zykh area almost all the oil reserves are in KaS₁.

The PK formation is host to oil pools on the Karachukhur-Zykh and Surakhany uplifts. The distribution of oil between the lower and upper PK formation is about the same in these areas; 33-37% of the reserves occur in PK₄ and 5 and 63-67% in PK₁ and 2. See Table 1. However, within the upper part of PK there is an increase in the oil content of the upper horizon (PK₁) in comparison with the lower (PK₂) up the regional dip: from 13-14% at Zykk and Karachukhur to 25% at Surakhany. There is thus a shift of the oil pools into higher horizons up the regional dip.