

PALEOGEOGRAPHY OF THE NORTHERN PART OF THE PRECASPIAN BASIN IN THE UPPER PALEOZOIC TIME

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The northern margin of the Precaspian basin was a part of the wide Sakmara land that existed in the eastern corner of the Russian Craton in the Early Paleozoic. By the Emsian time only two uplifts, the Pugachev and Salt - Ilezk domes, remained in this area. Between them came into existence a wide sea inlet in the Early Eifelian. On the eastern side of it evolved the great Karachaganak lagoon. In the Late Eifelian many reefal edifices originated in the northern part of the sea inlet. The input of terrigenous material increased sharply for the Givetian and Early Frasnian time and a wide river delta occupied the whole sea inlet. As a result, a thick succession of quartzose sandstones and siltstones accumulated there. In the Middle Frasnian the strong tectonic activation happened in this region. Some of blocks started to rise, and deposits that were formed earlier were partially removed. The new marine transgression expanded from the East and shallowsea water flooded the whole area soon. However, the tops of Pugachev and Salt - Ilezk domes rose above sea level. Between them several large lagoons developed in the Middle Frasnian. The gypsum and anhydrite accumulated there for the Middle - Upper Frasnian and Famennian time. During the Carboniferous and Early Permian a wide carbonate platform formed in the region with the greatest Karachaganak reefal massif at the south-eastern edge of it. The many oil and gas fields detected in most of Sedimentary complexes in this area.