

## **Paleogeographic conditions during the accumulation of Lower Pliocene deposits in the Caspian mega-basin**

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The Low Pliocene history and paleogeography of the Caspian depression represents the big interest first accumulation of huge thicknesses molasse stratum is characterized by a regional oil and gas accumulation in extensive region of its distribution.

The basic precondition for finding-out of conditions of sedimentation of molasse deposits in basin of Productive century is concurrence of their accumulation with active orogenic phases of Alpine folding, caused a variety of conditions formation of molasse.

The Pont Sea by the end of Upper Miocene starts to recede quickly; there is a strong downturn of a level of its water and basis of erosion. The beginning of formation of deposits of century of Productive Thickness for same time in the replaced Pont Sea basin, which already had the closed and rather limited outlines, is dated. Fast development of the South Caspian depression from the end of Pontian strengthened inflow of water to a reservoir, which was gradually, desalinated also it somewhat promoted extinction Pontian organisms. The analysis of the previous geological centuries of development of the Black Sea - Caspian Sea basin shows, that down to Pontiac these basins, being connected, have formed together with other parts Miocene and Low Miocene basins the extended depression of latitudinal orientation. Since a century of Productive Thickness the formed two independent basins - Black Sea and Caspian Sea developed already as the isolated depressions having the characteristic features. Since a century of Productive Thickness because of large lowering the Caspian mega basin gradually turned to the huge bath extended in meridian direction and this form of basin was kept in all the next geological centuries, changing only in sizes.

In the beginning Low Pliocene the Caspian mega basin has considerably decreased up to contours modern South Caspian depression where accumulation molasse deposits proceeded. Specific feature of basin of a century of Productive Thickness (Low Pliocene) during all period of its existence was the environment its Alpine folded mountain ridges continuously delivering in its various parts clastic materials.

With amplified to the beginning Low Pliocene in a southern part of the Caspian mega depression tectonic processes with prevalence of ascending movements and warming of a climate universal thawing glaciers and snow covers at tops and slopes of highlands surrounding basin begins. There comes intensive erosion in the field of washout. Powerful river arteries transfer continuously to basin of sedimentation in huge quantity terrigenous material. The basin was gradually overflowed with fresh

waters and its coastal line extended, that is gradual transgression was marked at the general tendency of immersing of a bottom of this basin sedimentation.

As a result the basin of century Productive Thickness (low Pliocene) during all its geological history differed by complexity of outlines of coast along which gulfs, peninsulas, shallows, sandbanks, etc. were formed, and also is characterized by a wide shelf zone.