SEISMO-STRATIGRAPHIC ANALYSIS OF THE CASPIAN CENOZOIC SEDIMENTS

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Seismic time field has several distinguished seismic formation complexes covering Cenozoic sediments of the Middle and North Caspian.

One strata presumably comparable with the Maikopian is the most interesting one and known as an oil and gas bearing both on the western Caspian Sea coast and South Caspian Basin.

The strata is restrained by the unconformity surfaces, i.e., it unconformably overlaps the more ancient Paleogenic and Cretaceous formations and is unconformably overlapped by the Akchagyl sediments.

Wedge-shaped bodies are widely developed to the south of the Mangyshlak Sill. Development of these bodies is associated with the sedimentation conditions, like in the North Caucuses. Perhaps, by the beginning of the Oligocene, the Middle Caspian had a relatively shallow non-compensated basin filled with the sediments washed down from the Mangyshlak-Bozashi High. Wedge-shaped sand bodies formed on the slopes of the Paleogenic highs along the shoreline. The wedge-shaped strata framework model creates favorable conditions for prospecting the non-anticlinal oil and gas traps.

Given the regional oil and gas bearing of the Maikopian sediments in the South and Middle Caspian, their study in the Kazakh Caspian Sea Sector may become one of the most prospective areas of the oil and gas pool prospecting.

The overlying Neogene and Quaternary sediments often display the erosional entrenchments at various stratigraphic levels which, probably, correspond to the ancient river paleo-beds position, possibly Paleo-Volga and Paleo-Ural.