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Maikop Formation's Role in Forming Hydrocarbon Fluids of the Eastern Black Sea Depression

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According to data of the comparative-geological method, Maicop Oligocene-Lower Miocene deposits of the Black Sea- the Caspian Sea region are considered ancient homologs of Black Sea Holocene sediments which are enriched with organic matter in conditions of hydrogen sulphide contamination.
Unoxide sedimentary basins are geochemical systems which efficiently "catch" organic matter and various chemical elements. During favourable tectonic situation and progressive lithogenesis sedimentary-rock basin turns into elision system and becomes the source of complex gas fluids. As it is known, the thickness of sedimentary cover of the central part of the eastern depression of the Black Sea reaches 15km, and the cover itself is disposed directly on basalt layer. According to the model of oil-gas formation, in this zone Cretaceous, Paleocene and partially Eocene sediments already realized their potential of oil formation due to catagenic processes. Thick (3-5km) Oligocene sediments (PK3-MK3) are in main phase of oil formation, Lower Miocene sediments are initial stage of oil formation, and Pliocene and Quaternary sediments are at diagenesis stage.
In the sea water area, parallel to the eastern depression, Guria deflection (distinguished in the shelf and on the continental slope) is the zone of comparatively lower potential of oil-gas formation.
In this region the thickness of sedimentary cover reaches 11-12 km. The foundation of sedimentary cover of southern part if eastern depression of the Black Sea, adjacent continental slope and the shelf is characterized by comparatively high temperatures. The temperature reaches 2500C on sea prolongation of Achara-Trialeti zone. In this region high temperatures are also received for Conrad (4500C-7500C) and the Moho (up to 16000C) discontinuities.
On the whole, geological model of formation of hydrocarbon deposits in elision basin of eastern Black Sea depression is explained by arrival of fluids of diagenetic and katagenetic processes mainly from Oligocene-Lower Miocene deposits.