

OIL AND GAS PROSPECTS OF PRICASPIAN DEPRESSION POST-SALT SEDIMENTS

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Potential resources of the Pricaspian postsalt Basin have been estimated in late 70s. In compliance with the information available at that time, total resources of postsalt deposits have been estimated as much as 0.6 billion tons. The above assessment was based on criteria developed on out-of-date opinions on structure of postsalt deposits, and also on system of oil and gas accumulations distribution in them. Information that has been got last years absolutely alters these opinions. This data includes the following:

- Discovery in the postsalt deposits of a number of major fields: Kenbay, Karatyube, Zaburunye, Martyshy, Zhanatalap, Kamyshitovy and others. This allows increasing values of reserve density, which are applied in assessment of hydrocarbons potential resources;

- Last years Permian-Triassic deposits complex, that hasn't actually been explored earlier, becomes a source of considerable rise of Hydrocarbons potential;

- Nowadays, concepts on hydrocarbon sources in postsalt series have essentially changed. They are related to own resources of postsalt series as well as to probable hydrocarbon flows from presalt deposits. If earlier vertical migration was presumed to exist solely by depth faults system, then nowadays flows are understood to be moving other ways also. In many interdome zones, where there are no salt section deposits, there are no impassible obstacles for hydrocarbons free migration up by subsurface. Moreover, in some zones (in buried Lower Permian system of canyons cutting presalt deposits of basin flange zones) lower parts of postsalt subsurface of up to 1,000m thickness, are likely to immediately contact by lateral with producing horizons of presalt series. And, finally, according to estimates of some researchers, weight of salt section series in the dome crests along the Basin flanges within the zone limits up to 200 km appear to be lower than abnormal pressures in presalt series. This creates favorable conditions for regional discharge of presalt hydraulic system in this zone;

- New types of traps, that are formed in the course of complicated evolution of galokinetic processes at the slope of salt structures, and that haven't been taken into consideration earlier, have been discovered. Presently, a great number of traps, sealed by steep slope of salt, stratigraphically related to pinch out of formations, replacement, etc., have been discovered in the Precaspian Basin besides traditional types of traps related to salt domes crests (anticline and sealed by tectonic faults). All that is a basis for a statement, that potential resources of postsalt of the Precaspian Basin are several times higher than the existing estimates.

However, you can hardly anticipate successful exploration without appropriate research of accumulated geological geophysical data, study of general uniformity of oil and gas accumulations distribution in postsalt deposits.

Thus, it is high time now, to settle the following matters:

- Re-estimation of potential resources of Upper-Permian -Triassic, Jurassic-Cretaceous and Pliocene deposits;
- Identification of the Precaspian Basin areas for density of reserves as a whole, and independently by complexes;

- Development of new exploration concepts.

The paper will give the opportunity to solve the mentioned above problems.