



DESCRIPTION OF OIL AND GAS FIELDS

Za'ripbaev Tursinbay Sarsenbay uli

2nd year student of Faculty of Geography and Natural Resources of Karakalpak State University

Abstract: *In this article, we will talk about oil and gas fields, their structure and service. Oil fields are piles of oil located in a certain tectonic structure in the Earth's crust, and its extraction is considered profitable from an economic point of view. Oil fields are located in anticlinal folds and tectonically disconnected monostructural natural traps. The main parameters describing oil fields: the geological structure of the field, the location of the local structure in relation to the main structures, the presence of different structural layers, the productive horizons, the type of accumulations, the phase composition of hydrocarbons, reserves, their density across the field, and other Oil fields combine several structural layers. possible Depending on the type of piles, deposits are single-layered or multi-layered. Depending on the amount of oil in the field, it is divided into oil, oil-gas, gas-oil, gas-condensate-oil fields. Several large oil and gas fields located close to each other form basins.*

Key words: *gas, oil, mines, structure, importance in the development of the state, task, general concept.*

Introduction

Oil fields are composed of one or more productive layers as they are formed mainly from sedimentary rocks. Oil field reserves are divided into general (geological) and recoverable (industrial) reserves. According to the structure of oil and gas piles, they are divided into layered dome piles (in porous rocks), unlayered dome piles (in porous or fractured rocks) and stratigraphically limited groups. Oil fields are found on all continents of the Earth, on the continental shelf. In particular, it is present in the rocks at the bottom of the oil and gas basin of the Gulf of Mexico, the North Sea, the Caspian, Kora and Mediterranean seas and other water bodies. Oil and gas deposits are located between layers from the Proterozoic to the Quaternary era. It was found abroad in the 19th century on the Apsheron Peninsula, near the city of Grozny, Krasnodar Territory, Cheliken Peninsula and other places. Later, oil fields were opened in Turkmenistan, Kazakhstan, Ukraine, the USA, Nigeria, and the countries of the Middle East. In the territory of the Republic of Uzbekistan, 5 regions where oil and gas have been discovered (Bukhara-Khiva, Ustyurt, Surkhan-Darya, Hisar south-west and Fergana) are conducting regional work on oil and gas exploration. As a result, more than 450 liquid and gaseous hydrocarbon accumulations were identified, which are embodied in 155 deposits.

Materials and discussion

Production of oil from the fields according to the amount of hydrocarbon reserves in the fields known so far. small (74.3%), second (14.4%), medium (14.4%), third (10%) and fourth (1.3%) unique mines. 66% of hydrocarbon deposits are located in Bukhara-Khiva, 17.5% in Fergana, 7% in Surkhandarya, 5.7% in South-West Hisar and 3.2% in Ustyurt regions. The stratigraphic range of productivity covers the Paleozoic (Ustyurt region) to



Neogene (Fargona region) deposits. Search operations were carried out intensively in the Fergana region. The first mine (Chi-myeon) was opened in 1900. Until the beginning of the 1980s, the Fergana region was in the leading position in Uzbekistan in the rate of oil production and increase of reserves. Among the scientists from Uzbekistan, O.M. Akramkhozhayev, P. K. Azimov, O. S. Vyalov, M. S. Saydaliyeva, A. H. Haji-matov and others made important contributions. Since 1985, the Bukhara-Khiva region has overtaken the Fargona region in terms of extraction of liquid hydrocarbons and has taken the leading place in Uzbekistan. N. Kh. Alimuhamedov, T. L. Bo-bojonov, A. V. Vakhrbov, A. G. Ibrokhimov on increasing oil, gas and condensate reserves in this region. [2.56]

V. A. Kulagin and several other scientists and production specialists have contributed. 86 industrially important oil fields have been opened in Uzbekistan, of which 36 are oil fields, 24 are oil-gas and gas-oil fields, and 26 are oil-gas condensate fields, and currently oil is being extracted from 63 fields. At the current rate of oil production, the explored oil reserves will provide the republic's needs for more than 30 years. 14 oil fields are being explored and their total reserves are 185 mln. [1.67]

Predicted oil resources are unevenly distributed across the regions of Uzbekistan, most of them are concentrated in Fargona (74.8%) and Surkhondarya (10.5%) regions. Predicted oil resources in the Fergana region are estimated mainly in Paleogene and Neogene deposits. Predicted oil resources in the Bukhara-Khiva region are associated with carbonate deposits of the Upper Jurassic and terrigenous deposits of the Lower Cretaceous. The discovery of medium and relatively large oil fields is expected in the subsalt deposits of the Surkhondarya megasyncline. Comparing the Ustyurt region with the pre-Caspian syneclyse, the similarities in the geological structure were identified, which made it possible to estimate the oiliness of the Paleozoic deposits in this region. Despite the fact that oil production in Uzbekistan is a long-term, annual industry, 6.0 mln. t oil was brought from abroad. During the years of independence, the rate of oil production in Uzbekistan is growing dynamically (8.2 million tons in 1999) and the need for liquid fuel is fully covered. Gas fields are deposits of natural gas located in a specific tectonic structure in a certain part of the Earth's crust. Natural gas is found as a separate gas field or together with oil (oil and gas fields). It is divided into multi-layered and single-layered deposits. [3.89]

Multi-caste ones in the cross-section, there will be a number of gas piles located on top of each other at different depths in one area. G. k. different gas piles are found at different distances of the cross-section. G. k. grouped in spatially generalized gas gathering zones and divided into gas or gas-oil platform (domed dome, platform internal sediments, etc.), geosynclinal (intermountain valleys, middle massifs), transition (foot depressions) types. Multi-layered G. k. gas is extracted from separate wells or from one well that crosses the entire formation. G. k. gas The composition and some properties of gas condensates of Uzbek gas reservoirs contain, in addition to hydrocarbons, carbon dioxide (SO₂), nitrogen (N), hydrogen sulfide (H₂S), rare gases helium, argon. G. k. pure (or dry gas) and oily G. k. divided by Pure. Its gases consist of methane (94-99%) and a small amount of ethane. In addition to methane and ethane, a certain amount of propane (S₃N₈), butane, isobutane (S₄N₁₀) and pentane (S₅N₁₂) can be found in oily gas.



Conclusion

By the end of the 20th century, about 16,000 oil and gas fields were discovered in more than a hundred countries. About 400 of them are under water. They are located near the ocean coast in deposits at a depth of several hundred meters to 3.5 km. In the Caspian Sea, on the coasts of California and Alaska, in the gulfs of Persia and Mexico (in the Gulf-Costa region), gas and oil deposits are located in porous and fractured rocks of the Paleozoic, Mesozoic and Cenozoic eras. Urengoi, Zapolyarnoye, Gazli, and Medvezhye mines are the largest mines. Part of the gas produced in Uzbekistan is exported to neighboring countries. In Uzbekistan, more than 100 oil and gas fields were discovered from rocks of the Mesozoic and Cenozoic eras.

REFERENCES:

1. Akramov, B., Khayitov, O., Davlatboev, J., Umirzokov, A., & Usmonov, K. (2021). Modern methods of enhanced oil recovery, Collection scientific practice SCIENTIA.
2. Akhmedov, H. R., Panzhiev, H. A., & Eshmurodov, A. P. (2021). The structure of the Jurassic-Cretaceous deposits of the central part of the Bukhara-Khiva oil and gas pool.
3. Khalismatov I.Kh., Akhmedov Kh.R., Babalov J.Q. Oil and gas resources and calculation of reserves, textbook, against, "INTELLECT" publishing house 2021.