ISSN 2181-3187

THE MAIN TECHNOLOGIES USED IN THE USE OF OIL AND GAS FIELDS.

Abdunazarov Sardor Choriqul ugli
Jurayev Eldor Isroilovich
(Karshi engineering-economics institute)

Annatation

Quantitative or qualitative assessment of the effectiveness of the operational system and geological-technical measures implemented in the field is carried out after it has been used for a certain period of time and after obtaining data that allows studying the process of oil extraction, because the oil-saturated layer is located at a great depth and there is no possibility to directly observe the processes taking place in it. is expressed.

Basic words

Geological event, technical event, integral description, oil reserve, water-oil factor, current oil extraction, differential method, impure oil water content

We can think about the processes taking place in the layer through the responses that are returned to our influence on it. However, the scientific research carried out in the field of oil and oil-gas field operation shows that it is possible to solve many important tasks as a result of processing and analyzing the data obtained during the field operation. Including, it allows to evaluate the efficiency of the introduced work system and the carried out geological-technical measures The effectiveness of the operational system implemented in oil and oil-gas fields and the geological-technical activities carried out is determined by the difference between the actual and the basic version of oil production. Methods of calculating technological indicators in the basic version are divided into two main groups:

- The first group includes descriptions of oil displacement with water and simulation models obtained from multifactorial analysis;

• The second group includes mathematical models that shed light on the physical essence of the process of oil extraction from different layers. These models are used to a limited extent due to their complexity and inability to fully cover the process of oil fields in practice. Descriptions of oil displacement with water used in practice can be divided into two types - integral and differential. Integral oil-water displacement descriptions are generally less sensitive to random short-term changes in field performance, changing their shape only when there are significant changes in the bulk of the formation being used for oil production. For this reason, integral descriptions of oil displacement with water are widely used in the evaluation of the effectiveness of methods of influencing the formation. Current oil recovery, the amount of oil contained

ISSN 2181-3187

in the product, and the differential description of the displacement of oil by water, represented by the water-oil factor, are relatively unstable and require careful processing of data and the exclusion of random indicators. For this reason, it is recommended to use differential methods of oil displacement with water during the initial operation of deposits, that is, in cases where it is not possible to use integral methods.

A reliable quantitative assessment of the efficiency of the working system and the methods of influencing the layer introduced in the field through the descriptions of oil and water displacement in many ways improves the completeness of our perception of the geological structure of the formation or its studied part, the size of the oil reserves, the degree of their extraction and their characteristics, the stability of the working system, the field and It depends on the order and pace of putting its parts into operation, the size of previously conducted geological and technical activities. The combination of these factors in different ways can have a significant impact on the characteristics of oil displacement during oil production. The main indication that the description of oil displacement with water can be applied is that the object in question has a straight line at the end until the method of exposure to the formation is applied. For this reason, many descriptions of oil-water displacement have been proposed by various researchers, and only some of them can be used in certain geological conditions and specific characteristics of oil production. The main disadvantage of these methods is that they do not allow to evaluate their effectiveness separately when several exposure methods are used in the field, and they do not take into account the interaction of wells.

In practice, from a theoretical point of view, the effect of capillary suction in impure oil-aqueous formations is that under certain conditions in impure formations, capillary forces squeeze out oil in low-permeability formations, balance the water front, and capture water trapped in the formation.

Thus, from the many works summarized in this way, according to the form of different description and research conditions, according to the experimental data on the influence of water flooding rate on the oil permeability of the layers, it is possible to confirm such a conclusion that water flooding and oil permeability do not depend on the production rate and utilization index in the uncontaminated layers.

It is required to apply accelerated water suppression systems to zones with low hydraulic conductivity values. From the above facts, it can be concluded that increasing the buffer pressure at a high level of watering wells complicates the conditions of well fountaining. In terms of permeability, wells are complicated by the large non-integrity of the wells.

ISSN 2181-3187

Used literature

1. Ирматов Э.К., Агзамов А.Х. Опыт и проблемы совершенствования разработки нефтяных и нефтегазовых месторождений Средний Азии и методы повешения их нефтеотдачи. - Тошкент : ФАН, 1991.
2. Ирматов Э.К., Агзамов А.Х., Ибрагимов М.Х. Нефтеотдача месторождений межгорных впадин Средний Азии с осложненными геолого-физическими условиями и пути ее увеличения. - Ташкент: АН РУз, НПО Кибернетика, 1992.
3. .Bekjonov, R., & Norchayev, A. (2022). Shock wave velocity in two-phase pressure flow. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1036, No. 1, p. 023129). IOP Publishing.