International Journal of Scientific Trends- (IJST)
ISSN: 2980-4299
Volume 3, Issue 6, June - 2024
Website: https://scientifictrends.org/index.php/ijst
Open Access, Peer Reviewed, Scientific Journal

Determination of the Boundary Well Consolidation Limit for the Final Operation of the Reservoir

Bobomurodov Utkir Ziyadullaevich
Karshinsky Institute of Engineering and Economics 180100,
Republic of Uzbekistan, Kashkadarya region,
Karshi, ave. Mustaqillik, 225.
E-mail: qmii@qmii.uz, kiei _info@edu.uz

Abstract
The imperial concernings used to identify the net law are as follows. The results of drilling well drilling were evaluated at different periods of operation of the Shurtepa deposit. It was determined that the wells were to be tightened and that each well would be reduced to the specific oil reserves.

Keywords: Mining, alignment, well, traction, netting, compression, removable backup, coverage, dynamics, evaluation, effectiveness.

Introduction

To quantify the efficiency of compaction of the density of a well pattern in accordance with the recommendations of the methodological guide for determining the technological efficiency of hydrodynamic methods for enhancing oil recovery, a characteristic of oil displacement by water (WW) was constructed, which is an empirical relationship between Ql Qn and Ql (where Ql and Qn are the accumulated production of liquid and oil in reservoir conditions) The main feature that determines the possibility of using chemical waste for this purpose is the linear nature of this relationship in the final section. As can be seen from Fig. 4. In the CV there are several straight sections.

The only factor explaining the difference between these two straight sections is that during the period characteristic of each of them, the density of the well pattern was compacted.

As is known, one of the main parameters that allows us to evaluate the effectiveness of hydrodynamic methods is the amount of recoverable reserves and the final oil recovery factor. To determine these parameters, all straight sections of the displacement characteristic were processed by the least squares method and the dependences of Ql·Ql on Ql with sufficient correlation coefficients were obtained Based on the results of calculations of recoverable oil reserves, which is numerically equal to the coefficient “c”, the dependence of the specific recoverable oil reserves

per one production well on the total number of oil production wells was constructed (Fig. 5). It shows that the drilling of infill wells in the period 1984-1990. led to an increase in specific reserves, and the subsequent compaction of the grid in 1992-2000. and 2005-2017 to its reduction. Based on the results obtained, the following conclusions can be drawn:

- drilling new wells in areas not covered by the drainage process of the original grid leads to an increase in specific recoverable oil reserves and oil recovery factor;
- drilling new wells in areas covered by the drainage process of previously drilled wells leads to a decrease in specific recoverable reserves and a relatively smaller increase in oil recovery factor;
- the efficiency of drilling infill wells largely depends on the reasonable identification of zones not involved in the drainage process by the existing stock of wells. The disposal of associated oil gases is the main problem of all oil companies. Currently, there are several methods of economical use of associated petroleum gases.

1. Satellite petroleum gas can be used as a fuel directly in gas piston generators or in gas turbine units, after partial cleaning and drying in units of gas preparation and separation devices. In gas piston generators or gas turbines, full power cannot be achieved when satellite petroleum gas is used, and the presence of heavy hydrocarbons and sulfur causes equipment to wear out quickly.
2. On the basis of chemical technology, fuel constituents are separated using chemical reagents. Taking into account the high cost of such chemical reagents and the fact that they are imported, the cost of using them in practice increases.
3. Associated petroleum gases are passed through special blocks and fuel components are separated. It uses membrane technology and molecular mesh, but the sorbents quickly saturate and the films become full and have to be replaced quickly. 4. It is possible to apply low-temperature separation technology based on the propane cycle. When this technology is used in hot climates, performance decreases and operating costs are high.
5. Associated petroleum gases are transported to gas processing plants and processed. Expensive pipelines are expensive to lay and the coverage period is long.
6. With the help of coolers, all components of satellite gas are separated into fuel components based on combustion.

The use of heavy fractions of hydrocarbons (and higher) satellite petroleum gas as a fuel for gas power generators presents certain problems and is an expensive raw material in the petrochemical industry. Oil is the main direction of finding a solution to the problem.

Comprehensive measures are taken to collect associated oil from oil fields for gas processing, it is transported to gas processing plants and processed to obtain dry degassed gas (QBG-dry degassed gas), broad fraction light hydrocarbons (KFEU) and stable gas gasoline (BGB) is obtained. In addition to the broad fraction of light gas (S_4 and above), the gas is collected in a fractionation unit to separate liquefied petroleum gases.

References

1. Ziyadullayevich, B. U., & Normuradovich, S. N. (2023). EVALUATION OF THE POSSIBILITIES OF INCREASING OIL YIELD IN HIGH-VISCOSITY OIL FIELDS USING THERMAL METHODS. American Journal of Technology and Applied Sciences, 19, 69-71.

2. Ziyodullayevich, B. U. (2023). THE RESULTS OF THE FORECAST OF THE MAIN TECHNOLOGICAL INDICATORS OF THE DEVELOPMENT OF THE OIL AND GAS CONDENSATE FIELD EASTREN ISPANLI. American Journal of Research in Humanities and Social Sciences, 13, 102-104.
3. Soatmurodovich, B. R., Gayratovna, A. D., & Ziyodullayevich, B. U. (2023). Special Methods of Using Oil Fields with High Viscosity. The Peerian Journal, 18, 1-4.
4. Kibriyo, B. O. T. Z. M., & Aktam o'g, O. I. S. (2023). STUDY OF SECONDARY METHODS OF OIL PRODUCTION IN THE LAST PERIOD OF OPERATION. Innovations in Technology and Science Education, 2(8), 397-400.
5. Бобомуродов, У., & Бекжонов, Р. (2022). ПОКАЗАТЕЛИ РАЗРАБОТКИ НЕФТЕГАЗОКОНДЕНСАТНОГО МЕСТОРОЖДЕНИЯ.