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International scientific-online conference



EVALUATION OF THE TECHNOLOGICAL AND ECONOMIC EFFECTIVENESS OF IMPACTING OIL AND GAS WELLS

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Abstract: In this article, we describe the assessment of the technological and economic efficiency of impacting the bottom of oil and gas wells. Today, technology is developing at a very fast pace, and at the same time, the oil and gas industry is also developing at a high speed.

Key Words: gas wells, oil wells, economic effectiveness, evaluation, determination.

INTRODUCTION

Choosing a well construction is the most important thing in building a well is one of the main stages and it is a well ensures high-quality construction. Wells in the process of drilling to the depth of the project to avoid troubles and accidents, to dig a well consumption of time and material and technical items reduction - to the correct choice of well construction depends. Can fully meet the specified requirements, the number of protective ridges to be lowered - it is selected based on the conditions of certain intervals of the well or other technical-technological conditions. Selection of the well structure, which will be drilled from the field and drilled in the nearest neighboring fields geological indicators obtained from wells and collected based on material analysis. Determination of the number of protective ridges to be lowered into the well pressure distribution (change) along the well section for a graph of pressure change is made after studying its character. This graph shows formation pressure and rock fracturing pressure change in the rectangular coordinate system is brought (depth-pressure gradient equivalent).

MATERIALS AND DISCUSSION

The pressure equivalent gradient is at the bottom of the well overpressure of fluid density, formation pressure or formation of formation pressure equal to hydraulic fracturing pressure understood. For example, in the construction of oil and gas wells in the Fan field Let's consider an example of choosing a well structure: Field of science, Kashkadarya, Republic of Uzbekistan located in the Mirishkor district of the region. Neighbors such as Oroqboy, Ayzovat, Eshonquduq, and Yangariq industrial-geophysics in exploratory wells dug in fields layer pressure was fully studied using the method. It is known from this their gradient is from 1.0 to 1.10 kgs/cm/m. up to will change. (in Paleogene and Cretaceous deposits). Pressure change as can be seen from the graph, drilling in the well section, there are three levels of difficulty and defend each of them, it is required to close with a ridge. That's why the well the construction consists of protective ridges of three types and sizes and they are at depths of 520, 3070 and 3500



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meters should be lowered. In addition, Oroqboy, Ayzovat, Wells dug in Yangariq and Eshonquduq example, it can be seen that the Quaterny, they are washed away due to the lack of rock strength. This 50 meters from these rocks to prevent washouts should be closed with protective ridges lowered into the depth. "Construction of wells in oil, gas and gas condensate fields uniform technical rules of work in the process" to basically, of the cement mixture behind each protective ridge the rise height is projected up to the top of the well.

Extended guide with a diameter of 426 mm the upper part of Quaternary and Neogene deposits, and the top of the well is lowered to protect it from washouts. The conductor ridge with a diameter of 299 mm is Neogene, it has the crushing of the Paleogene and Senon deposits covering weak rocks and absorption zones is lowered for the purpose. There is a technical protection ridge with a diameter of 219 mm and cover of Upper Jurassic deposits, necessary geological-geophysical is downloaded for the purpose of obtaining information. A technical ridge is a breakthrough in opening a productive horizon also as a ridge for installing anti-device (preventor) is used. It has a working ridge with a diameter of 140 mm separating the conductive layers in the deposits from each other, quality testing of well productivity and oil and gas accumulation is lowered in order to determine the sizes. Projecting use the inner diameter of the ridge to test the quality of the well must provide vision. The outer diameter of the designed protective ridges (426, 299, 219 and 140 mm) of oil and gas exploration expeditions obtained by digging exploration wells are selected based on experience. Drilling works for the planned protective ridges diameter 490; 393.7; 269.9; 190.5 mm drill bits is done using with drills of this size after drilling, lowering protective ridges into the well and strengthening works were carried out without any problems is increased. Delivering the well to the depth of the project without interruption; Opening a productive horizon in optimal ways; The layer is real in opening up a productive horizon must maintain permeability; Effective operation of the well during mine operation provide. Creating a project for drilling exploratory wells often the geological conditions are unknown or insufficient will not be correct. That's why the well to fulfill the first requirement in choosing a construction. A reserve interval is left in the well barrel, which is difficult to lower the reserve protective tube at birth. The purpose of drilling is geological conditions, drilling technique and technology, issues of environmental protection and economy. What is the technique and technology of well drilling? If it is high, if there are good geological conditions, it is the front of the ridge. The distance from the ridge is large and the gap is large size will be small. Environment for environment protection, with cement solution filling intervals, tamponade materials and cementation, it is necessary to choose the right technology. A variety of gas and oil properties, gas and gas condensate indicates the specific basicity of wells. The pressure of a gas well above the well is at the bottom of the well is close to the pressure and differs little from the formation pressure. For example, the depth was 4000 meters, and the



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layer pressure was 40 MPa in a gas well, the pressure above the well is around 30 MPa. Gas wells are prone to explosions and gas the movement is large, the risk of gas formation is also high. The probability of a gas explosion is greater than that of protective pipes meets high requirements for hermeticity and strength requires a choice. Which is protection anti-explosion equipment is installed in the pipelines. Grooved fasteners for strengthening gas wells from protective pipes with high hermeticity must be used. Special for separating layers in gas wells separating device - pipe-type (zakolonnie) packers is used. This section covers researching past and present oil and gas companies, resources for starting a company in the oil and gas industries, and references to top companies. Energy companies, nationally owned and privately owned, are some of the biggest companies that have every existed in the world. Many of them are well known, Exxon (U.S.), Chevron (U.S.), Saudi Aramco (Saudi Arabia), Gazprom (Russia), China National Petroleum Corporation (China), Equinor (formerly Statoil of Norway), TOTAL (France), and ENI (Italy). Additionally, companies that use oil and natural gas, like autos, electric providers, and airlines are also among the most well-known and largest companies. The oil and gas industry is frequently divided into three segments: upstream, midstream and downstream. While each of these areas has a number of independent companies, major companies in oil and gas are often considered integrated, meaning their businesses consist of a mix of upstream, midstream and downstream activities. Companies can be private, public, or state-owned, which impacts the amount of information available.

CONCLUSION

As the world became more dependent on oil, oil prices became a matter of political and global economic importance. Major oil companies set crude oil prices, until control shifted in the 1960s to oil exporting countries. Price forecasting became important in the early 1960s after a series of oil price hikes turned into oil crises. In 1983, crude oil futures joined the New York Mercantile Exchange (NYMEX) and was traded like other commodities. I Natural gas futures became available on NYMEX in 1990.2 NYMEX is currently owned and operated by the Chicago Mercantile Exchange (CME). For the first time in oil price history, in April 2020 the price of oil dropped below zero to -\$37 per barrel. At that time, demand for oil dropped due to the coronavirus pandemic, and supply increased due to the inability of countries such as Saudi Arabia, Russia, and OPEC countries to agree on oil production reduction, which drove up demand for oil storage.

REFERENCES:

- 1. Sh.K. Gimatudinov et al. "Development and operation oil, gas and gas condensate fields", Moscow. Nedra, 1989.
- 2. A.I. Sherkovsky "Development and operation gas and gas condensate fields", Moscow. Nedra, 1987.
 - 3. www.nefte.ru