

SUMMARIES

Dubiel S.: How to Select Methods of Interpreting Curves of Water Table Growth in Deep Wells, Accounting for Development Technology • Drilling Oil and Gas 2006 • Volume 23/2

The ways of interpreting curves of water table growth based on the Horner method are presented in the paper. Theoretical bases of the method are given. Ways of interpreting the results and determining the coefficient of hydraulic transmissibility of water-bearing strata, accounting for the development technology, are discussed in the paper. Recommendations and numerical examples are given as well.

Jewulski J.: The Specificity of Heavy Oil Production from „Lubaczów” Reservoir • Drilling Oil and Gas 2006 • Volume 23/2

The proposal of choice of the heavy oil production method from „Lubaczów” reservoir is presented in article. This selection was made with regards of oil physicochemical properties and their change with temperature and geological properties of reservoir. Author proposes to heavy oil production the use of rod modified pumps or screw pumps.

Kaliski M., Staško D., Trzaskuś-Żak B.: Legal and Organisation Regulations of Third Part Access in the Gas Sector Based on Polish and British Gas Market • Drilling Oil and Gas 2006 • Volume 23/2

This paper presents the legal and organization analysis of TPA (Third Part Access) in the gas distributing business in the Polish market. There is described the situation of introduction of TPA in the Polish gas market and there is also included an analysis of British gas market. In the article there is a description of changes demanded from European Union to be put in action in the Polish gas sector, especially included the transfer and distribution. There is included the regulations of creating gas tariffs in liberated gas market. The paper also shows the possibilities of apostasy of TPA regulated by gas directive. There is presented practical site of introduction of TPA in the Polish gas market taking into consideration investments in process of eliminating barriers.

This article also presents experiences of function of liberated British gas market. This market can be an example of possible changes, which can also happen in Polish gas sector in introduction of TPA. The changes can affect:

- clients behaviour,
 - offer of gas companies,
 - level of prices,
 - structure of market players,
 - PGNiG's politics.
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Kopey B., Kopey V., Bednarz S., Savula S.: Finite-element Analysis of the Tubing Thread • Drilling Oil and Gas 2006 • Volume 23/2

Cycles of underground gas storage filling and unfilling imply axial loading and internal pressure to tubing thread with dynamic loading in the dangerous planes. The stress – deformation state of coupling with three levels of axial elongation resulted of screwing and external tension loading is presented. The amplitude – frequency descriptions of coupling and tubing screwed together are reached by the harmonic analysis of contact pressure vibrations. The action of vibrations can result in big reduction of contact stresses in tubing coupling thread connection. The computer finite-element axisymmetrical model of the tubing couplings has been developed. The first proper charge frequency is the most dangerous from point of view fatigue destruction of coupling in the critical plane of coupling (the first working pitch thread of pin and the last working pitch thread of box). The most dangerous frequencies of such coupling are the first and third proper charge frequency. Screwing together coupling results in smoothing amplitudes of contact pressure on the working sides of threads.

Twardowski K., Drożdżak R., Glazor A.: Comparative Analysis of Indirect Evaluation Methods of Ground Filtration • Drilling Oil and Gas 2006 • Volume 23/2

Practical applicability of empirical formulae for predicting coefficients of ground filtration has been assessed in the paper. The analysis was made for three various groups of formulae, accounting for:

- 1) exclusively granulometric data,
- 2) granulometric data and ground porosity,
- 3) granulometric data, ground porosity and physical properties of the filtrating water.

The quality of predictions was based on measuring data for three typical real grounds representing coarse sands, medium sands and clayey sands. As a result of the analysis, the empirical formulae enabling reliable predicting of the filtration coefficient for various types of ground, were determined.

Twardowski K., Traple J.: Remarks on Doubtful Results of Measurements • Drilling Oil and Gas 2006 • Volume 23/2

The most frequent controversial issues related to tackling the so-called doubtful results of measurements are discussed in the paper. The lack of clarity of the results can be most often attributed to:

- coarse errors (mistakes) in the case of repeatable results,
- statistical non-homogeneity of series in the case of measurements of various elements of the analyzed population.

Tests used for detecting single results of measurements burdened with coarse errors and for verifying a set of results in measurement series (statistical tests) are presented in the paper.

Rychlicki S., Siemek J.: Natural Gas in the World, Europe and Poland. Reserves, Trade and Diversification • Drilling Oil and Gas 2006 • Volume 23/2

In the paper are presented the actual situation in natural gas trade and gas reserves. Also are shown the prognosis in gas industry in different world's regions. Else it the authors indicate the direction of gas supply diversification to Poland. The utilization of natural gas and coal in the electric power station is also presented.

Wiśniowski R., Stryczek S.: The Present State and Development of Drilling Technology • Drilling Oil and Gas 2006 • Volume 23/2

The classification criteria of wells, where drilling technology and engineering activity is used, are presented in the paper. The newest technical solutions are surveyed in view of drilling rigs, design of drill bits, drilling fluids and casing. Some new drilling technologies enabling drilling with concurrent casing, drilling with reaming, and vertical wells designing, are presented further in the paper.