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Rationale for supplementary exploration of a deep horizon in the Russian Far East

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Abstract. A giant oil and gas field A is located on the shelf of the Sea of Okhotsk. The vertical productivity of several layers that are under development has been proven. The deepest well A-1 at the field penetrated only a part of the Okobykay formation of the Lower Miocene, which is a thick regional seal for hydrocarbon (HC) reservoirs of Dagi horizon in a number of other fields in the region. The oil and gas potential of Dagi formation has been confirmed both onshore and offshore in the Sea of Okhotsk. The prospects of Dagi formation (N1dg) of the considered field A have been estimated by several authors over the years, but the opinions on this issue differ, including due to the influence of gas from the overlying reservoirs on the quality of seismic signals related to the target Dagi interval. The article describes a complex of available geological and geophysical information, which made it possible to find a set of arguments in favor of the Dagi prospecting target. It is recommended for additional exploration by drilling.

Key words: *Dagi formation, regression, delta progradation, graben, katagenesis, net-reservoir formation, amplitude anomaly*

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EDN GXCQDM

УДК 552.541

Genetic void types and analysis of reservoir potential of carbonate rocks of Timan-Pechora province

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Abstract. The main biocenoses of carbonate oil and gas complexes in the Timan-Pechora province are described. Genetic types of void space in carbonate rocks are defined. To assess their reservoir potential, a sedimentation classification is proposed.

Key words: *limestone, biocoenosis, types of void space, sedimentation classification*

For citation: K.Yu. Olenova, E.T. Kazimirov, R.R. Nuriahmetov Geneticheskie tipy pustotnogo prostranstva I analiz kollectorskogo potenciala karbonatnyh porod Timano-Pechorskoi provincii [Genetic void types and analysis of reservoir potential of carbonate rocks of Timan-Pechora province]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 15-31. DOI https://doi.org/10.25689/NP.2025.4.15-31. EDN GXCQDM (in Russian)

DOI: https://doi.org/10.25689/NP.2025.4.32-65

EDN IAGBEV

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Relationship of the Jurassic terrigenous formation in the northwestern part of the Chardzhou stage with the pre-Jurassic rock complex (Republic of Uzbekistan)

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Abstract. Identification of oil and gas traps in the Lower-Middle Jurassic terrigenous formation deposits in the study area, both anticlinal and related to stratigraphic and lithological relationships of layers (non-anticlinal traps, clinoforms, etc.) is possible only on the basis of careful dissection and correlation of sections. The results of detailing the stratigraphic structure for restoring the sequence of geological events, on which all geological constructions are based, are presented. In determining the oil and gas potential of terrigenous formations, the issue of clarifying the relationship of these formations with the pre-Jurassic rock complex is very relevant as a basis for identifying promising objects for discovering oil and gas deposits. Clarification of the geological structure of Jurassic terrigenous formations, as well as determination of their relationships with the pre-Jurassic rock complex will improve the reliability of decoding geophysical work materials and link biostratigraphic benchmarks to reflecting seismic horizons and materials of geophysical well studies.

Key words: *stratigraphy, terrigenous formation, oil, gas, Jurassic, pre-Jurassic deposits, suite, horizon*

For citation: G.S. Abdullaev, R.T. Zakirov, G.B. Evseeva, L.R. Kudasheva Vzaimootnosheniye yurskoy terrigennoy formatsii v severo-zapadnoy chasti Chardzhouskoy stupeni s do-yurskim kompleksom porod (Respublika Uzbekistan) [Relationship of the Jurassic terrigenous formation in the northwestern part of the Chardzhou stage with the pre-Jurassic rock complex(Republic of Uzbekistan)]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 32-65. DOI https://doi.org/10.25689/NP.2025.4.32-65. EDN IAGBEV (in Russian)

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EDN IEOFYC

УДК 553.983

Structures, material composition and metal content of oil shales of the Paleogene deposits of the Lower Syrdarya Depression

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Abstract. The article discusses the features of the geological structure of oil shales in the Syr Darya Depression, provides an overview of oil shales in Kazakhstan, their distinctive features. It provides a stratigraphic position of oil shales in the Paleogene section and other types of minerals found in this area and their distinctive lithological and facies features both during the accumulation period in sedimentation basins and in modern conditions. The material composition and metal content of productive horizons are characterized, an assessment of the predicted resources and prospects for their use is given using the example of the Baikhozhinskoye oil shale deposit.

Key words: *Paleogene, oil shale, kerogen, rhenium, selenium, sediments, suite, horizon, site, deposit, reserves*

For citation: T.Kh. Shoimurotov, A.Z. Zhumagaziev, S.K. Kurbaniyazov, M.T. Khannanov Stroyeniya, veshchestvennyy sostav i metallonosnost' goryuchikh slantsev paleogenovykh otlozheniy Nizhnesyrdar'inskogo svoda [Structures, material composition and metal content of oil shales of the Paleogene deposits of the Lower Syrdarya Depression]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 66-82. DOI https://doi.org/10.25689/NP.2025.4.66-82. EDN IEOFYC (in Russian)

DOI: https://doi.org/10.25689/NP.2025.4.83-100

EDN IETCKE

УДК 550.84(575.1)

Rationale for searching for natural hydrogen deposits within Uzbekistan

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Abstract. The change and development of technologies in industry usually depend on the broad structural stability of the raw material base, which is clearly manifested in the consumption of primary energy sources. The energy sector is the most capital-intensive industry and determines the dynamics of changes in the technological structure of the economy. Further accelerated development of modern energy and transport based on hydrocarbon raw materials leads humanity to a large- scale ecological and energy crisis. Developed countries are making efforts to find alternative, renewable, environmentally friendly energy sources. At present , significant scientific and scientific-practical work is being carried out to transfer the world energy, and, consequently, the economy, to a new energy source, that is, environmentally friendly and renewable solar and wind energy. At the same time, certain positive results have been achieved. In addition, the problem of transferring to an unusual and safe new energy source, «green energy» - hydrogen, has arisen. In this regard, fundamental scientific research is being carried out in the leading scientific centers of the world and certain effective results are being achieved. The use of hydrogen as a primary energy source leads to the creation of a fundamentally new hydrogen economy. This, in turn, will become a scientific and technical achievement comparable in socio-economic consequences with a positive impact on the development of the energy industry.

For the first time in the practice of the State Institution «Institute of Geology and Exploration of Oil and Gas Fields», promising geological conditions within Uzbekistan, where natural hydrogen deposits are most likely to be found, have been examined.

Key words: *hydrogen, energy, anomaly, gas, fluid, carbon, hydrocarbon, deposits, zone, deposits*

For citation: T.Kh. Shoimurotov, O.A. Karshiev, M.T. Khannanov, S.S. Yusupkhodjaev Obosnovaniye poiska zalezhey prirodnogo vodoroda v predelakh Uzbekistana [Rationale for searching for natural hydrogen deposits within Uzbekistan]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 83-100. DOI https://doi.org/10.25689/NP.2025.4.83-100. EDN IETCKE (in Russian)

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EDN JBCHVV

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Study of carbonate reservoirs of the Volga-Ural oil and gas basin central regions

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Abstract. This paper examines the key structural characteristics of carbonate reservoirs and the formation of organogenic structures genetically related to the marginal barrier-structural facies zone of uncompensated troughs of the Kama-Kinel system of the Volga-Ural oil and gas basin. Post-sedimentation processes, which significantly complicate the internal structure of carbonate rocks, contribute to both the improvement and deterioration of reservoir properties. The final spatial architecture of most organogenic traps is formed as a result of erosion processes, which influence the nature of oil saturation in the traps. A set of methods for identifying and studying carbonate reservoirs is considered.

Key words: *carbonate reservoir, organogenic structure, Kama-Kinel trough system, seismic exploration, natural reservoir, geological model, reefs, paleotectonic reconstructions, dolomitization, sulfation, incision*

For citation: R.G. Lukyanova, R.A. Mudarisova, S.E. Valeeva Izuchenie karbonatnyh rezervuarov central'nyh oblastej Volgo-Ural'skogo neftegazonosnogo basseina [Study of carbonate reservoirs of the Volga-Ural oil and gas ba-sin central regions]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 101-113. DOI https://doi.org/10.25689/NP.2025.4.101-113. EDN JBCHVV (in Russian)

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EDN JMMXTA

УДК 551.35

Key aspects of deltaic sediments evolution and structure to be considered during geological modeling

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Abstract. River deltas are one of the main sedimentation zones. They contain significant amounts of hydrocarbons. Sediments in deltas often form heterogeneous reservoirs with complex sediment geometries. This complicates both the definition of the conceptual structure of sediments and their development. The article focuses on two points: the type of delta determines the orientation of the distribution of reservoirs and the correlation of well sections, taking into account the features of the delta structure.

Key words: *general correlation, detailed correlation, accumulation cycle, geometry and orientation of bodies, core studies*

For citation: N.V. Yankova Klyuchevyye momenty razvitiya i stroyeniya del'tovykh otlozheniy dlya ucheta v geologicheskom modelirova-nii [Key aspects of deltaic sediments evolution and structure to be considered during geological modeling]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 114-121. DOI https://doi.org/10.25689/NP.2025.4.114-121. EDN JMMXTA (in Russian)

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EDN YMGGUQ

УДК 622.279.031+622.245

The effect of changes in the petrophysical properties of rocks on the effectiveness of geological exploration and well development

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Abstract. The paper is devoted to an urgent scientific and practical mission - to increase the efficiency of geological exploration and well development in conditions of anisotropic filtration and capacitance properties of reservoir rocks.

Numerous studies have established and long-term experience in the exploration and development of hydrocarbon deposits has confirmed that the filtration and capacity properties (FCP) of reservoir rocks vary both in terms of the thickness of the reservoir and the extent of the deposit. Moreover, while the patterns of FCP variation for terrigenous reservoirs have been studied in detail, the properties and parameters of carbonate reservoirs vary randomly and unpredictably from well to well, making it impossible to make reliable predictions.

The results of a study of the effect of depression on well productivity are presented. It is proved that it is necessary to take into account the petrophysical properties and parameters of low-permeability rocks in the bottom zone of the formation, gas and water saturation, the direction of filtration flows, changes in the stress state in the structure of the hydrocarbon deposit for effective geological exploration and well development.

Keywords: *development of hydrocarbon fields, increasing the efficiency of geological exploration, well development, well productivity, filtration and capacitance properties of reservoir rocks, bottom-hole formation zone, well flow rate*

For citation: E.V. Melnikova, V.I. Nifantov, V.M. Pischukhin Vliyaniye izmeneniya petrofizicheskikh svoystv gornykh porod na effektivnost' geologo-razvedochnykh rabot i osvoyeniya skvazhin [The effect of changes in the petrophysical properties of rocks on the effectiveness of geological exploration and well development]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 122-141. DOI https://doi.org/10.25689/NP.2025.4. 122-141. EDN YMGGUQ (in Russian)

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EDN XLKEOI

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Experience in Developing Carbonate Reservoirs in Eastern Siberia

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Abstract. The work reflects the experience of studying and developing carbonate deposits of the Osinsky, Yuryakhsky and Preobrazhensky horizons located within the Nepa arch and the Nepa-Botuoba anteclise. During the study, the actual data obtained from drilling exploration, prospecting and production wells, the results of core material studies, formation fluid and the interpretation of 3D seismic exploration materials were summarized. The article provides a brief overview of published works, based on the results of which an analysis of all accumulated available geological, industrial and laboratory information was performed, and a unified conceptual model of the geological structure of the layers of the Osinsky, Yuryakhsky and Preobrazhensky horizons and the conditions of their formation was constructed. The work proposes a methodological approach to selecting a strategy for developing carbonate formations in Eastern Siberia.

Key words: *field development, Eastern Siberia, Lena-Tunguska oil and gas province, Nepa-Botuoba anteclise, Nepa arch, Osinsky horizon, Yuryakhsky horizon, geological structure, fracturing, cavernosity, development systems, hydrodynamic model, salinization*

For citation: R.V. Malkosh, S.A. Leontyev Opyt razrabotki karbonatnykh kollektorov mestorozhdeniy Vostochnoy Sibiri [Experience in developing carbonate reservoirs in Eastern Siberia]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 142-161. DOI https://doi.org/10.25689/NP.2025.4.142-161. EDN XLKEOI (in Russian)

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EDN QZNCKO

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Features of the development of carbonate deposits of the Arlanskoye field with usage of horizontal wells in pressure maintenance system

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Abstract. Nowadays, the share of hard-to-recover hydrocarbon reserves, often found in complex carbonate reservoirs, is increasing. These formations are characterized by low permeability, high heterogeneity, and rock fragility. Implementing an effective reservoir pressure maintenance system is crucial for improving oil recovery from such fields.

This article analyzes the development system for the carbonate Kashira-Podolsk sediments of the Arlanskoe field, revealing the low efficiency of the existing selective reservoir pressure maintenance system using directional injection wells.

To enhance performance, a methodology was developed for selecting candidate injection wells for these carbonate sediments. The impact of these new injection wells on reserve recovery was also investigated and compared to the results achieved with directional wells.

Key words: *Arlanskoe oilfield, carbonate sediments, horizontal wells, reservoir pressure maintenance system, high injection pressures, auto-fracturing effect*

For citation: G.S. Erokhin A.A. Babkina, A.M. Vagizov, E.R. Nurlygayanova, S.R. Nurov, A.T. Gareev, T.P. Azarova, R.F. Yakupov, A.T. Khisamutdinov Osobennosti razrabotki kashiro-podolskikh otlozhenij Arlanskogo mestorozhdeniya s perevodom gorizontalnykh skvazhin pod zakachku [Features of the development of carbonate deposits of the Arlanskoye field with usage of horizontal wells in pressure maintenance system]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 162-183. DOI https://doi.org/10.25689/NP.2025.4.162-183. EDN QZNCKO (in Russian)

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EDN FELZKS

УДК 622.276.42

Using carbon dioxide for enhanced oil recovery: current trends in Russia and international practices

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Abstract. In the context of global energy transition and the necessity to compensate for declining conventional oil reserves, enhanced oil recovery methods utilizing carbon dioxide (CO_2-EOR) are gaining particular significance, as they combine economic and environmental benefits. The paper presents a comprehensive analysis of CO_2-EOR technology application, both in Russia and throughout the world, with a focus of identifying key barriers to adoption of this technology. It discusses various approaches to CO_2 utilization, including its injection in gaseous, liquid, and supercritical states, cyclic injection (or Huff & Puff), carbonated water flooding, and some hybrid techniques. Particular attention is paid to the physical and chemical mechanisms of CO_2 impact on the reservoir, specifically its ability to reduce oil viscosity, cause oil swelling, and prevent asphaltene precipitation. The supercritical state of CO_2 demonstrates particularly high efficiency in reservoirs containing heavy and high-viscosity oil. The analysis of domestic experience includes a review of pilot projects in a number of Russian fields, where the application of CO_2-EOR technology successfully revived idle wells and increased production from reservoirs containing hard-to-recover reserves. International case studies, such as projects in the Permian Basin and Weyburn-Midale, demonstrate high efficiency of integrating CO_2-EOR with CCUS technologies, providing both enhanced oil recovery and long-term carbon dioxide storage. The study revealed some key challenges of large-scale implementation of this technology in Russia: equipment corrosion, high project capital intensity, lack of CO_2 transportation infrastructure, and poor regulatory framework. The paper also discusses potential ways to overcome these barriers by adapting the international best practices, through pipeline network development, and government support. The study confirms that CO_2-EOR serves not only as an effective enhanced oil recovery technique but also as a crucial element of a decarbonization strategy in the oil and gas industry. Successful implementation of such projects can serve as a driver for a dual transformation: maintaining competitive advantage of the industry and fulfilling climate change commitments, which is particularly relevant in the context of current energy challenges.

Key words: *carbon dioxide, enhanced oil recovery, supercritical CO_2, carbonated water, oil recovery efficiency, CCUS*

For citation: N.R. Safarov, A.T. Zaripov Primeneniye uglekislogo gaza dlya povysheniya nefteotdachi plastov: sovremennyye tendentsii v Rossii i mirovoy opyt [Using carbon dioxide for enhanced oil recovery: current trends in Russia and international practices]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 184-201. DOI https://doi.org/10.25689/NP.2025.4.184-201. EDN FELZKS (in Russian)

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УДК 622.276.66

Prospects for the Application of Combined Guar-Borate Binary Thermochemical Compositions for Hydraulic Fracturing in Low-Temperature Formations

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Abstract. Hydraulic fracturing (HF) is a key method for developing hard-to-recover hydrocarbon reserves. Its effectiveness in low-temperature reservoirs is limited by the delayed and incomplete degradation of the polymer gel in hydroxypropylguar (HPG)-based fracturing fluids, leading to significant residual damage to fracture and near-wellbore zone conductivity.

This paper investigates an approach to modifying conventional guar-borate systems by introducing binary thermochemical reagents that provide controlled activation of an exothermic reaction directly under reservoir conditions. A key aspect is the induction of an in situ process that combines thermal decomposition of the polymer matrix, pressure generation, and a gas-drive effect, aimed at the complete degradation of the gel into a Newtonian fluid with a viscosity of ~1.1 mPa·s.

Laboratory studies confirmed that the developed composition maintains stable rheological properties during the injection stage (crosslinked gel viscosity >500 cP at 100 s^{-1}), while subsequent activation by an acid agent ensures a rapid temperature increase to 73–83 °C and complete gel degradation. It was established that using surfactants within the activator composition enables the generation of stable foam systems with a quality of up to 25, which facilitates the mechanical displacement of degradation products from the pore space.

It is shown that secondary, yet significant, effects of the technology include the cleanup of formation damage (clays, mud) and the creation of thermal conditions for the consolidation of resin-coated proppant (RCP). The results demonstrate the potential of using thermochemical compositions to address the fundamental problem of residual damage in low-temperature reservoirs caused by undegraded polymer residues.

Key words: *Guar-borate fluids, thermochemical compositions, thermochemical reaction, heat and pressure generation, rheology, gel degradation, proppant pack, formation damage (ASPO), fracture clean-up, formation clean-up, conductivity, resin-coated proppant (RCP) curing*

For citation: I.I. Mannanov, G.R. Ganieva, O.V. Anikin, A.R. Tazeev, I.F. Minhanov Perspektivy primeneniya kombinirovannykh guaro-boratnykh binarnykh termokhimicheskikh kompozitsiy dlya gidrorazryva plasta v «kholodnykh» plastakh [Prospects for the Application of Combined Guar-Borate Binary Thermochemical Compositions for Hydraulic Fracturing in Low-Temperature Formations]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 202-220. DOI https://doi.org/10.25689/NP.2025.4.202-220. EDN FBKQLP (in Russian)

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EDN EYXTCV

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Improving the efficiency of gas field development by redistributing well production using machine learning

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Abstract. The task of optimal control of gas field development, in particular the task of well rate regulation, is a relevant one. The article shows that rate regulation during the period of constant production affects the gas recovery factor (GRF). Machine learning was used to derive the relationship between the optimal target production rate and the known well parameters. To form a training dataset, "synthetic" hydrodynamic models of gas deposits were created, simulating 40 different development scenarios differing in the number and location of wells. For each development scenario, the best rate allocation options were obtained using optimization tools and included in the training dataset. The implemented model uses the Random Forest algorithm. In a test case, when allocating rates based on the ML model, the accumulated discounted incremental gas production amounted to 164 million m³ (+0.56% to GRF) compared to the reference distribution (optimizer), plus 255 million m³, which indicates the applicability of the tool as a fast (but less accurate) alternative to the optimizer. It is concluded that pre-trained ML models can be used within optimization algorithms to obtain a "first approximation" solution, which significantly speeds up the subsequent search for the optimum.

Key words: *Gas field development, production strategy, gas flow rate, optimization, machine learning, hydrodynamic modeling*

For citation: A.Yu. Yushkov, V.A. Ogai, R.N. Khakimov, N.D. Bulychev, Yu.G. Fedoreev Povysheniye effektivnosti razrabotki gazovykh mestorozhdeniy za schet pereraspredeleniya otborov mezhdu skvazhinami s ispol'zovaniyem mashinnogo obucheniya [Improving the efficiency of gas field development by redistributing well production using machine learning]. Neftyanaya Provintsiya, No. 4(44), 2025. pp. 221-234. DOI https://doi.org/10.25689/NP.2025.4.221-234. EDN EYXTCV (in Russian)

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EDN EQWNKO

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Biogases produced by in situ microbial activity show promise for enhanced oil recovery

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Abstract. The paper considers applicability of biogases as microbial enhanced oil recovery (MEOR) method. Particular attention is given to the potential of such technologies in poorly accessible areas where conventional energy sources are unavailable or inefficient. Mechanisms of biogas production are described, particularly under natural conditions and through anaerobic sludge digestion in anaerobic reactors. Examples of successful implementation of such technologies in various fields within and outside the Urals-Volga region are provided. Key factors affecting the efficiency of their operation are also discussed. Biogases, consisting predominantly of methane and carbon dioxide, have high potential for alteration of physical and chemical properties of highly viscous oil. Studies suggest that microbial processes taking place in oil reservoirs can facilitate reduction of oil viscosity and increase in oil mobility, which in turn improves hydrocarbons recovery efficiency. Integration of biogases into field development processes is expected to increase the efficiency of oil production and reduce the environmental impact. The paper also considers the advantages and limitations of this method, prospects for technology evolution and discusses the need for further research and developments aimed at optimization of biogas generation processes and improving its efficiency in enhanced oil recovery (EOR) applications.

Key words: *enhanced oil recovery methods, biogas, reservoir, highly viscous oil*

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A comprehensive approach to well interference modeling using physically-based graph neural networks

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Abstract. For effective development of oil fields, it is necessary to correctly account for the interaction between injection and production wells. The interference coefficient is a key parameter characterizing the degree of water injection impact on oil production. Traditional methods for its determination: analytical calculations, field studies, and hydrodynamic modeling - have a number of limitations: from simplified physical assumptions to high computational complexity. In this regard, the application of machine learning methods, particularly graph neural networks (GNN), opens up new opportunities for more accurate and rapid determination of well interference, taking into account the complex structure of the development system.

Key words*: interference coefficient, graph neural network, algorithms, streamlines, machine learning, hydrodynamic modeling*

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Predicting of gas wells watercut using a machine learning models (ML-models)

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Abstract. The article discusses the problem of prediction accuracy of gas well watercut, its relevance, and existing solutions. As an alternative prediction method, the authors suggest using machine learning tools (ML model). The training case is based on synthetic data obtained from the results of hydrodynamic modeling of the development of gas deposits of various configurations with low gas saturated thickness. 13 previously known geological and technological factors characterizing each well are accepted as input parameters of the ML model. The output (forecast) parameters of the model are: the year of the beginning of well watercut and the growth dynamics of the well water-gas ratio. The effectiveness of various machine learning algorithms is analyzed, and the implementation of the XGBoost algorithm is considered in more detail. Based on the results of testing the model on a control sample, a good accuracy of forecasting the time of the beginning of well flooding was obtained. It is concluded that ML models are capable of solving specific development management tasks, providing a quick forecast of selected target parameters.

Key words: *gas field development, gas well, hydrodynamic modelling, watercut prediction, machine learning, neural networks*

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Method for assessing the validity period of fluid models for multiphase flow metering

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Abstract. The fluid production metering at the well level in the license blocks of the Urengoy gas condensate field of ROSPAN INTERNATIONAL is ensured by multiphase flow meters (MPFM). In order to correctly assess the flow rates of phases under operating and standard conditions, during testing of each well, its individual fluid model, built based on the results of the study of linear fluid samples taken from the well, is loaded into the software of a multiphase flowmeter. The model must ensure the correct operation of a flow meter in a certain range of operating pressures and temperatures. With a significant change in P&T conditions, the composition of the extracted fluids, the model needs to be updated, since the fluid properties change significantly.

The paper describes the main stages of the development of a method for assessing the relevance of fluid models used in multiphase flowmetering.

The main results of the study:

- The quantitative characteristics of the influence of the physical and chemical properties of the phases and their complex effect on the flow rates measurement by MPFM have been determined.

- An algorithm has been developed for predicting changes in the properties of linear fluids depending on reservoir pressure to compare the current properties of gas and condensate with properties estimated in the current MPFM fluid model.

- An automated tool has been created to evaluate the applied MPFM fluid models.

The developed tool allows one to evaluate the current measurement error, make a conclusion on the relevance of the applied model and give a warning on the need to update it. The tool allows you to schedule the necessary model updates, avoiding research redundancy and optimizing production costs.

Key words: *fluid models, Fluids ID, multiphase flowmeter, gas condensate studies, PVT properties of reservoir fluids, fluid production metering*

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