

An Approach to Solving Some Inverse Problems for Parabolic Equations

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Abstract : Problems concerning the interpretation of the well testing results belong to the class of inverse problems of subsurface hydromechanics. The distinctive feature of such problems is that additional information is depending on the capabilities of oilfield experiments. Another factor that should not be overlooked is the existence of errors in the test data. To determine reservoir properties, some inverse problems for parabolic equations were investigated. An approach to solving the inverse problems based on the method of regularization is proposed.

Keywords : iterative approach, inverse problem, parabolic equation, reservoir properties

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