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DEVELOPMENT OF ALGORITHM AND PROGRAMS FOR TWO-DIMENSIONAL FILTERING PROBLEMS OF INCOMPRESSIBLE LIQUIDS

Dilmurod Tuhtanazarov*

*Senior Teacher,
Department of Modern ICT, International Islamic Academy of Uzbekistan,
Tashkent, UZBEKISTAN.
Email id: dtuxtanazarov@gmail.com

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ABSTRACT

The paper presents the task of controlling the filtration process of oil and gas fields. A computer model has been created for controlling filtration processes using mathematical models of the oil and gas field development process. With the help of the created model, the permeability, viscosity, porosity and production were selected to a minimum of the differences between the computational and actual pressures. Certain optimal parameters are used for control and forecasting in the development of oil and gas fields.

KEYWORDS: *Field, Control, Control Task, Oil, Gas, Model, Mathematical Model, Wells, Permeability, Filtration, Equations, Viscosity, Porosity, Reservoir.*

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