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ESTIMATING ACTIVE GAS IN UNDERGROUND GAS STORAGE SUBJECT TO ADSORPTIONAL PROPERTIES OF A RESERVOIR AND INTERFORMATIONAL CROSS FLOW CONDITIONS

Abstract

One of the important factors of effective functioning of underground gas storage (UGS) is regulation of amount of injected and extracted gas.

Certain estimation of capacity of pore space and also calculation of amount of active and buffer gas in connection with its effusion and adsorption allows to exclude contradictions in the process of seasonal gas supply industrial and consumer services systems.

In the paper a new method for estimating gas loss as a result of effusion and adsorption processes in formation systems is given applied and analytic solution methods of the stated problem are reduced.