

عنوان مقاله:

Development of Drilling Mud Solution for Drilling in Hard Rocks

محل انتشار:

ماهنامه بین المللی مهندسی، دوره 30، شماره 5 (سال: 1396)

تعداد صفحات اصل مقاله: 7

نویسندگان:

v Morenov - Saint-Petersburg Mining University, Electromechanical Department, Saint Petersburg, Russia

e Leusheva - Saint-Petersburg Mining University, Oil and Gas Department, Saint Petersburg, Russia

خلاصه مقاله:

Aim of the project is efficiency increase of hard rocks destruction at borehole bottom by developing drilling mud solution and evaluation of its influence on drilling process. The article presents the results of studies directed on studying of drilling mud composition (the choice of reagent concentrations, taking into account the filtration properties, structural and rheological parameters, study of the temperature effect influence on the quality of the solution). Experiments of metallic indenter penetration into the glass sample at various number of strikes in the water and surfactant solutions are presented in the article. Paper also offers investigation devoted to development of clayless mud solution with surfactant additions, which will allow increase of hard rocks destruction efficiency. Results of industrial test trials of developed mud solution are also represented, showing implementation of developed drilling .mud composition to increase productivity of drilling operations by maintaining high drilling speed and advance per bit

کلمات کلیدی:

,Drilling Mud,Hard Rocks,Microfractures,Rock Destruction,Surfactant

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/630408>

