

عنوان مقاله:

Investigating the effect of different salts on rheological properties of oil well cements

محل انتشار:

پنجمین کنفرانس ملی و اولین کنفرانس بین المللی صنعت سیمان و افق پیش رو (سال: 1398)

تعداد صفحات اصل مقاله: 5

نویسندگان:

M Shayan - BSc student, Department of Petroleum Engineering, Hakim Sabzevari University, Sabzevar, Iran

E Esmaeilnezhad - Assistant Professor, Department of Petroleum Engineering, Hakim Sabzevari University, Sabzevar, Iran

خلاصه مقاله:

Hydrocarbons production quantity, strongly affected by quality of cementing operation which can be considered as the one of the most important operations performed in the petroleum industry operations. Using sweet water as a dispersing agent is rarely in drilling operations for preparation mud drilling and cement slurries. Consequently, accurate understanding the effect of salts on the rheological properties of cement slurries which is a key factor to have a sufficient job, is crucial. So in this study the effect of monovalent and divalent salts on the rheological characteristics of two types of oil well cements slurries (class G cement and class G cement modified with a water repellent nano additive) was investigated through shear rate sweep test, thixotropic test, fixed shear rate test and modeling with two common models in this field. Results showed that both salts affect on the rheological properties of oil well cements but (divalent salt (CaCl_2) has more vigorous effect than monovalent salt (NaCl).

کلمات کلیدی:

Oil well cement, Modeling, Viscosity, Shear stress, Thixotropic

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/961034>

