

عنوان مقاله:

An investigation into the effect of phosphate salts as a retarder For oil well cement slurry setting

محل انتشار:

اولین کنفرانس بین المللی نفت، گاز، پتروشیمی و نیروگاهی (سال: 1391)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Zahra Nasirzade - *Department of applied chemistry, Faculty of science, shiraz branch, Islamic Azad University, Shiraz, Iran*

Hamid Reza Safaei - *Department of applied chemistry, Faculty of science, shiraz branch, Islamic Azad University, Shiraz, Iran*

Peyman Ghatee - *Department of civil Engineer, Faculty of Engineering, shiraz branch, Islamic Azad University, shiraz, Iran*

Hassan Nematollahi - *Work-overdepartment, SZOGPC, Iran*

خلاصه مقاله:

experimental study has been performed to characterize the early hydration and setting of cement pastes prepared with Class G oil well cement at water-to-cement ratios $w/c = 0.35-40\%$, and mixed with phosphate salt as retarder, cured at 25oC. Chemical shrinkage during hydration was measured by system, degree of hydration was determined by thermo-gravimetric analysis. Setting time was tested by Vicat. A boundary nucleation and growth model provides a good fit to the chemical shrinkage data. Retarder and viscosity modifying agents decrease and less hydration products and delay cement nucleation, causing later setting times

کلمات کلیدی:

oil well cement; retarder; setting time; phosphate salt

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/158521>

