عنوان مقاله:

Experimental investigation the effect of diesel on silicate-kcl based drilling fluid

محل انتشار:

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خلاصه مقاله:

Differential sticking is one of the most common and serious drilling problems that always increase drilling costs.The cost of stuck pipe to the industry is in excess of $052 million each year. It can range in severity from minorinconvenience to major complications, which can have significantly negative results, such as loss of the drillstring or complete loss of the well. If the drill string becomes stuck, every effort should be made to free it asquickly as possible because the probability of freeing stuck pipe diminishes rapidly with time. Also, earlyidentification of the cause of the sticking problem is crucial, since each cause must be remedied with differentmeasures. An improper reaction to a sticking problem could easily make it worse. There are several approachedof differential pipe sticking like use of specialDrilling tools such as square spiral drill collars, use of oil muds, frequent movement of drill pipe, specialtreatment on water based drilling fluids etc. Out of these approaches, the most economical approach is specialtreatment on drilling fluids (selection and use of suitable fluid loss controlling agents and lubricant during thepreparation of water based drilling fluids). Earlier, petroleum oils that are either refined or crude have been usedfor this purpose. ButEnvironmental regulations limit it use.The performance of diesel on the silicate-based drilling mud in rheological and lubrication properties wasinvestigated. It was found that a favorable effect on the lubricity properties.With the idea of favorable effect, filtrate and performance efficiency of silicate-kcl based mud system, .thisresearch study work look in to the effect of diesel on lubricate property of silicate-kcl based mud system

کلمات کلیدی:

silicate-kcl besed Drilling Fluid, Differential sticking, rheological properties, lubricate property