

Background

An operator was drilling a lateral section with a 6¼-in bit. The mud weight was continuing to rise from 12.65 lbm/galUS to 14.1 lbm/galUS while the fluid loss remained the same at 8.8 cc. The emulsion stability was also decreasing as the mud weight increased while drilling the lateral section.

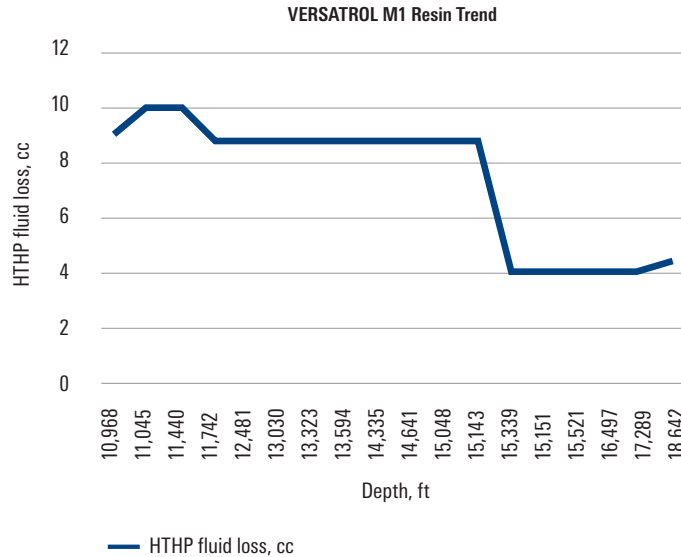
The decision was made to lower the fluid loss for the remainder of the lateral section. VERSATROL M1* blended asphaltic resin was added to the MEGADRIL* oil-based temperature-stable invert-emulsion drilling fluid system at 4.2 ppb. This product was added at 15,143 ft prior to tripping out of the hole to replace a bottomhole assembly.

Technologies

- VERSATROL M1 blended asphaltic resin
- MEGADRIL oil-based temperature-stable invert-emulsion drilling fluid system

VERSATROL M1 Resin Delivers Rapid Decrease in Fluid Loss

Fluid loss cut in half on Oklahoma shale well



The fluid loss decreased from 8.8 cc to 4 cc in 24 h. The fluid loss remained at 4 cc while drilling 3,297 ft in the lateral over a 10-day period. The well was completed with a 4.4-cc fluid loss. VERSATROL M1 resin was only added at initial consumption, as the fluid loss remained the same for the duration of the drilling operation.

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