Case History

PreFix™, ProppFix™, and FracFix™ Lost Circulation Materials Cut Fluid Losses by Over 40%

Pinedale Anticline, Wyoming

Challenge

Reduce fluid losses in the Lance and Mesaverde formations

Solution

Newpark's engineered solution using PreFIX, ProppFIX, and FracFIX mechanical wellbore stabilization fluids

Results

Mitigated lost circulation with an engineered economical solution; reduced fluid losses by over 40%

While drilling deeper into the Mesaverde reserves, lost circulation issues negatively affected the drilling operations. An operator wanted to minimize the waste, reduce costs, and minimize fluid-loss volumes.

Pinedale geology has abnormal-pressured formations requiring higher mud densities and expensive casing programs. Interval fluids cost analysis was performed to study the cost-effectiveness in the use of the slurry comprised of Newpark's engineered materials PreFIX, ProppFIX, and FracFIX lost circulation materials.

Factors considered were total fluid cost, interval length, days on interval, and daily rig cost. Data was gathered from 6 available wells where two wells used Newpark's engineered LCM solution. Prior lab testing allowed the operational team to develop a plan by using engineered slurry of PreFIX, ProppFIX, and FracFIX lost circulation materials.

PreFIX, ProppFIX and FracFIX lost circulation materials proved effective in remediating losses in this extremely difficult and highly fractured wellbore. By confirming regained circulation, a confident material mix was provided for future lost circulation remediation at the rig site. Compared to prior wells with similar rigs utilizing the same equipment, losses averaged over 40% less. As a result of this success, the operator was able to reduce downtime due to lost circulation with the use of PreFIX, ProppFIX and FracFIX lost circulation materials on all wells.

