



South Texas – High Performance WBM Delivers Outstanding Performance and Significant Cost Savings

\$1,469,000 savings realized over 5 well drilling campaign using Newpark HPWBM

CHALLENGE	SOLUTION	RESULT
• High losses in challenging area leading to significant cost over-runs • 5 well drilling campaign	• Newpark proposed cost effective water based fluid system • Proprietary high performance additives recommended	• 69% reduction in cost/bbl compared to OBM • 5 wells drilled as per plan • Significant fluid cost reduction compared to offsets drilled with OBM

OVERVIEW

Operators frequently encounter challenging wells where fluid losses significantly escalate costs when using oil-based mud (OBM), as each barrel of fluid lost incurs substantial replacement cost.

CHALLENGE

Recently, an operator faced this exact issue across multiple wells in a South Texas field. The challenge was to find a cost-effective solution that would allow the wells to be drilled successfully to TD with no fluids-related downtime.

SOLUTION

Thinking ahead, Newpark Fluid Systems (NFS) designed and proposed a high-performance water-based mud (HPWBM) system incorporating NewTex™ and NewPerm™ specialty additives for superior shale inhibition and lubricity. The engineered HPWBM formulation maintained an excellent rate of penetration (ROP), effectively controlled the problematic Midway and Pecan Gap formations and helped manage potential losses, delivering excellent wellbore stability without the high fluid costs associated with OBM.

RESULTS

Switching from OBM to Newpark HPWBM yielded substantial cost savings across the five-well program without compromising drilling performance. The success stemmed from two factors: a significantly lower per-barrel cost and the elimination of plant-built, trucked-in product. At the time of drilling, OBM replacement cost \$120.00 per barrel, whereas HPWBM built on location cost less than one-third the price. Total WBM losses of 17,700 bbls over five wells were comparable to OBM losses on similar wells, however the lower cost/bbl resulted in total estimated savings of \$1,469,000 in direct fluid product costs.