

Shock and Vibration Reduction – 8.50” Sections

Eagleford - La Salle County, Texas

Mechanical Thruster



BACKGROUND

An operator in the Eagleford, drilling 8.50” curve/lateral sections, needed to reduce NPT caused by multiple MWD re-syncs, survey issues, and failures that were a result of excess shock and vibration. The operator needed a solution that would not affect the current BHA and drilling parameters used.

SOLUTION

Cougar Drilling Solutions analyzed the operator’s BHA, well profile and drilling performance requirements. The recommendation was to add the Mechanical Thruster in the BHA to reduce damage by absorbing shock and vibration and to maintain consistent drilling parameters. The Mechanical Thruster was added on top of the non-magnetic drill collars.

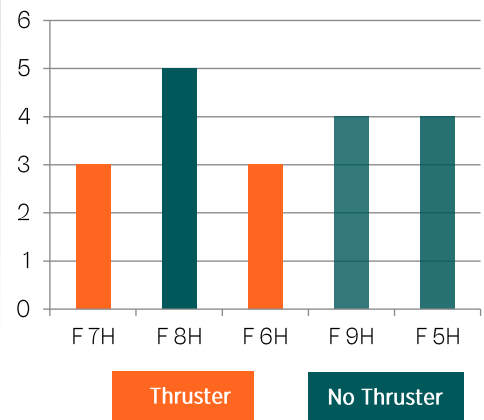
RESULTS

- ✓ Shock and vibration minimized by 50%.
- ✓ No MWD failures.
- ✓ Consistent ROP and drilling parameters maintained to TD.
- ✓ Drilled the wells with the planned BHAs.

~ 50% Reduction
in Shock and Vibration

No MWD
Failures

BHAs Used Per Well



With Thruster - 7H Well

Without Thruster - 8H Well

