

Horizontal Drilling / Drilling Fluid Technology

DFL-A™ Water-based Drilling Fluid Technology Increases ROP 300% for Eagleford Shale Operator

Location: South Texas, Eagleford Shale

Operator's Challenge – In a challenge to drill faster and farther in the Eagleford Shale a major Operator was exploring technologies that would enable them to utilize their existing equipment to accomplish this task. In a lessons-learned review of their historical operations that limit parameters to attain this technological step-change, torque, drag and system operating pressures seemed to be the culprits.

The Operator had been using EGS's DFL-NA in OBM to drill their wells with tremendous operational and technical success and was hoping the benefits of the DFL-A (water-based technology) could help them reach their goals in their water-based systems.

The EGS Solution – After applying DFL-A into the system, the operator began to realize the benefits that EGS's Drilling Fluid Technology had been providing on their other wells. Not only did they reap the operational benefits of:

- Reduced Torque
 - Reduced Pick Weight
 - Reduced Wear (Increased Bit Life)
- and
- Improved Sliding Ability in the lateral



...but they were also able to reach their goals of::

- Reducing their SPP/ECD by 40% and
- Increasing their ROP in the horizontal lateral by 300%

Added Value - By reducing their system pressures by 40%, the rig was able to run at 60% to 70% capacity instead of its normal 90%+ capacity and thus reduce rig down time, were able to run the mud pumps faster thus promoting better hole cleaning and were able to minimize potential of fluid loss to the formation.

Further, by increasing their ROP by up to 300% in the lateral, they were able to drill the horizontal lateral 25% faster than they had ever drilled it before.

With these improvements, the Operator will now be able to increase the technical limits on the current rig fleet that they are employing.