

Artex Energy Group Drills Two Wells in Zone Using High-Performance Water-Based Drilling Fluid, Utica Formation

RheoProfiler rheometer and DrillOps solution visualized fluid and drilling measurements in water-based mud

In the Utica Formation of Noble County and Muskingum County, Ohio, Artex Energy Group needed to drill two exploration wells measuring 20,000-ft MD and 13,000-ft lateral length. Using HydraGlyde* high-performance water-based drilling fluid system, Artex Energy Group stayed 100% in the zone without sacrificing performance while drilling the lateral sections. RheoProfiler* automated rheometer and DrillOps* on-target well delivery solution visualized fluid and drilling measurements in water-based mud (WBM).

Produce images with water-based drilling fluid system

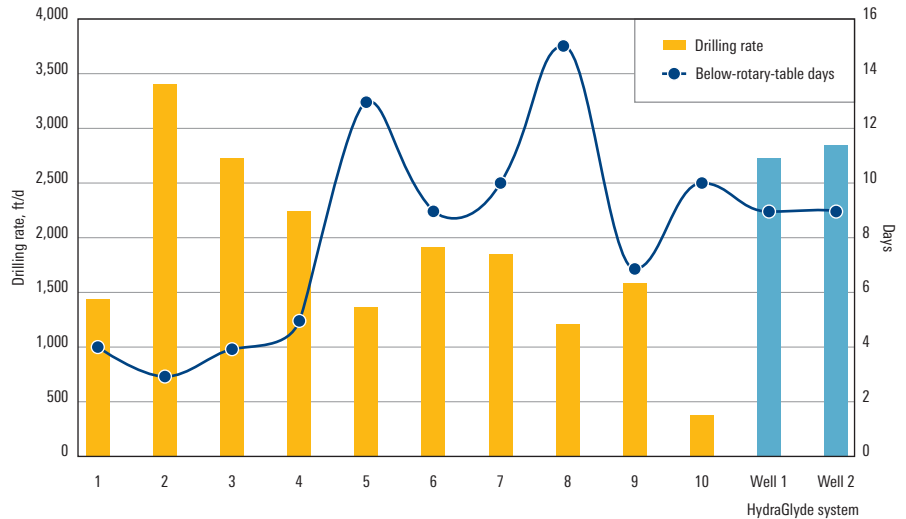
Artex Energy Group had an objective to stay 100% in zone and use a downhole imaging tool for further analysis. The project required a water-based drilling fluid system to produce the images needed.

Deliver wellbore stability without sacrificing drilling performance

The HydraGlyde system delivers oil-mud-comparable ROP, exceptional hole cleaning, and wellbore stability in high-angle-build and long-lateral sections without sacrificing drilling performance or increasing costs.

Stay in the zone while drilling lateral sections

Using the HydraGlyde system, Artex Energy Group drilled both wells under budget and stayed 100% in the zone. The RheoProfiler rheometer and DrillOps solution visualized fluid and drilling measurements for real-time WBM performance tracking. Artex Energy Group tripped out the drilling assembly on both wells and ran production casing to the bottom without issue. Days drilled matched offset well data even while Artex Energy Group controlled drilling to stay in the zone. The drilling fluid cost per foot decreased by 39% compared with the offset group. The total cost of the second well decreased by 28%. Using a very low concentration of HydraSpeed* ROP-enhancing primary lubricant throughout the well enabled surface torque to match performance of an oil-based mud system.



Compared with 10 offset wells in the same area, the wells drilled using HydraGlyde system matched the average days drilled while exceeding the daily footage.



An offset well with a high-oil/water ratio fluid was compared with the surface torque of the HydraGlyde system wells in the same area. HydraSpeed lubricant was added halfway through the first well at 1% volume. The second well maintained a HydraSpeed lubricant concentration of around 1 to 2% volume.

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