

US LAND | TWIST-OFF

Challenge

A major operator experienced two twist-off events while drilling a US land well, resulting in several days of lost time.

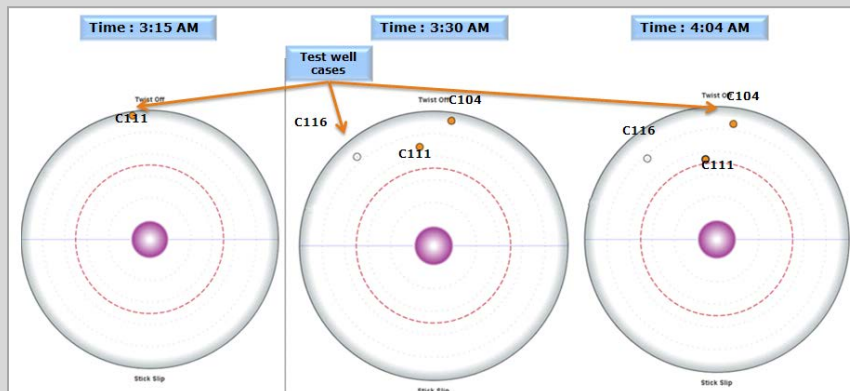
Solution

Verdande Technology conducted a post job analysis with its DrillEdge technology to characterize symptoms leading up to the twist-off events and to build cases that could be used to detect similar patterns in future wells. Verdande Technology's DrillEdge software uses real-time data from drilling operations to index and automatically recall lessons learned, best practices, and situational experience across rigs and assets.

During the post-job analysis of the first twist-off, the DrillEdge system detected numerous events related to maxed out torque, resulting in a case appearing on the radar hours before the twist-off occurred.

The DrillEdge technology began detecting events well in advance of the second twist-off. One case approached the 75% similarity threshold hours before the second twist-off occurred, indicating a strong similarity that the situation in the study well was highly similar to a situation that caused a twist-off event in another well.

If DrillEdge technology had been in use at the time these wells were first drilled, the engineers monitoring the software and the rig crew could have potentially been informed in time to take remedial action. This possibly could have saved the operator several days of non-productive time—amounting to over US \$1 million in savings.



DrillEdge technology radar screens showing response of Middle East and US Land cases prior to the second twist-off on the US Land well.

