Drillers Benefit from Reservoir-to-flare-stack MPD

Expert drilling intelligence is now available in real time.

The Schlumberger integrated offering provides optimization of drilling and production operations. The MPD control system can be precisely scaled to customer needs or specific well demands per level of well complexity. It also features enhanced kick detection to automatically respond with the required choke control solution to reduce environmental impact. Operators can eliminate extra runs and improve well productivity as a result of reduced formation damage. The system significantly reduces nonproductive time resulting from mud losses and potential for stuck pipe events during drilling and tripping operations. Other benefits include lower total cost of ownership and a single point of contact with 100% accountability for all aspects of the system throughout the MPD operation.

The integrated riser joint and all surface equipment are controlled from one platform, allowing operators the flexibility to efficiently switch from conventional drilling to MPD applications or riser gas handling operations.

Quantifying risk, managing downhole conditions
It is important while drilling to detect whirl, bounce and stick/slip motions to preserve the life of the BHA, while progression of vibration type and amplitude helps to modify drilling parameters and minimize energy lost.

To aid casing running, the service also detects micro-cdogleg and spiraling using bending moment data, enabling evaluation of borehole stability over time. Remote interpretations are shared with the rigsite team to help identify optimal surface parameters. Automated quick event detection algorithms are able to indicate plugged bit nozzles and drill-string washout.

Full reservoir-to-flare-stack integration of MPD realizes much of the burden previously placed on operators and drilling contractors, while real-time expert intelligence helps drillers quantify risk and manage downhole conditions, both key to instituting increased technical efficiencies into a critical operation.

To learn more about these technologies, visit Schlumberger at booth 2415.