At-Bit Data Enhances Geological Interpretation

Combined real-time technologies help correctly assess the volume of mud system, detecting deviations from theoretical calculations.

A tandem pill was pumped, resulting in a specific response in the standpipe pressure. Using the highly accurate Coriolis mud weight sensor, the tandem pill was observed on the surface one lag time later. The pill was also automatically projected when it was at the bit. Both sets of data were then superimposed and synchronized, allowing actual versus theoretical lag time to be compared. A lag-time calculation error of 3 minutes was detected, which if left unnoticed could have resulted in inaccurate well stratigraphy.