

GULF OF MEXICO DEEPWATER | LOST CIRCULATION

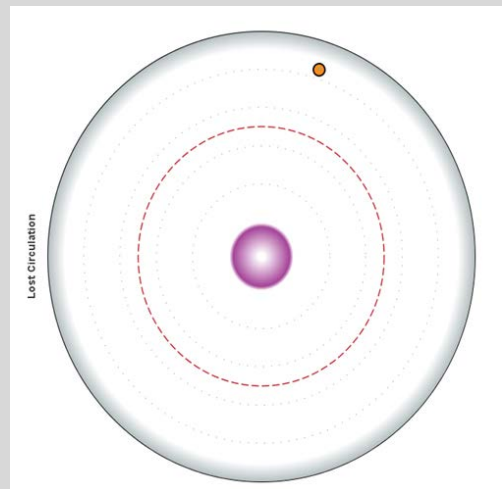
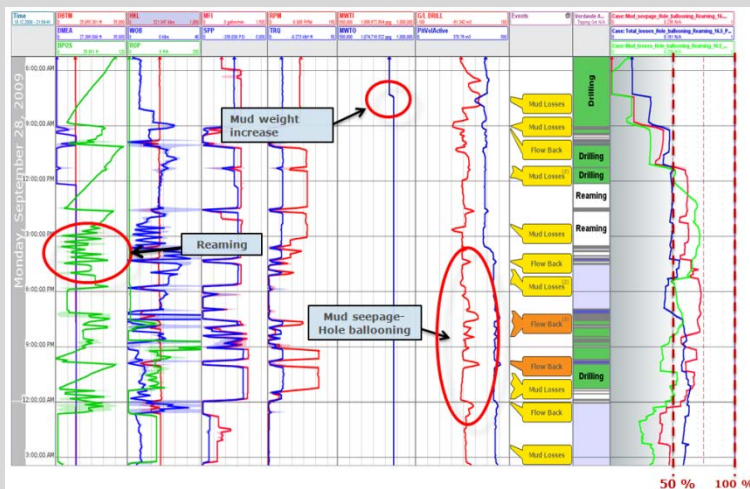
Challenge

A major operator encountered costly non-productive time due to mud losses and subsequent hole ballooning.

Solution

Verdande Technology's DrillEdge™ system was employed in a post-well historical analysis to determine if the losses and ballooning events could have been recognized in advance. The DrillEdge system uses case based reasoning along with real-time information to index and automatically recall lessons learned, company best practices and situational experience across rigs and assets.

Using a combination of information including pit volumes, well and drillstring geometry, ROP and lag times, the DrillEdge system was able to recognize changes in volume that were not accounted for by the drilling process. In a historical analysis of a well with known problems related to mud losses and hole ballooning, DrillEdge first saw indications of losses three days before the customer experienced total losses. During this time, a series of loss events was detected, combined with hole ballooning at connections. Had DrillEdge been employed on this well, these risk associated with these problems could have potentially been better assessed, leading to remedial actions based on company best practices that could have reduced costly non-productive time.



The time log shows mud loss and flowback events. The radar view shows a lost circulation case reacting to events.

