

# CASE HISTORY

## SDI'S gyroMWD IMPROVES DRILLING EFFICIENCY & MINIMIZES COLLISION RISK

### APPLICATION

Drilling Optimization,  
Collision Avoidance

### TECHNOLOGY

gyroMWD, Falcon MP MWD

### LOCATION

Qatar (Offshore)

### CUSTOMER CHALLENGE

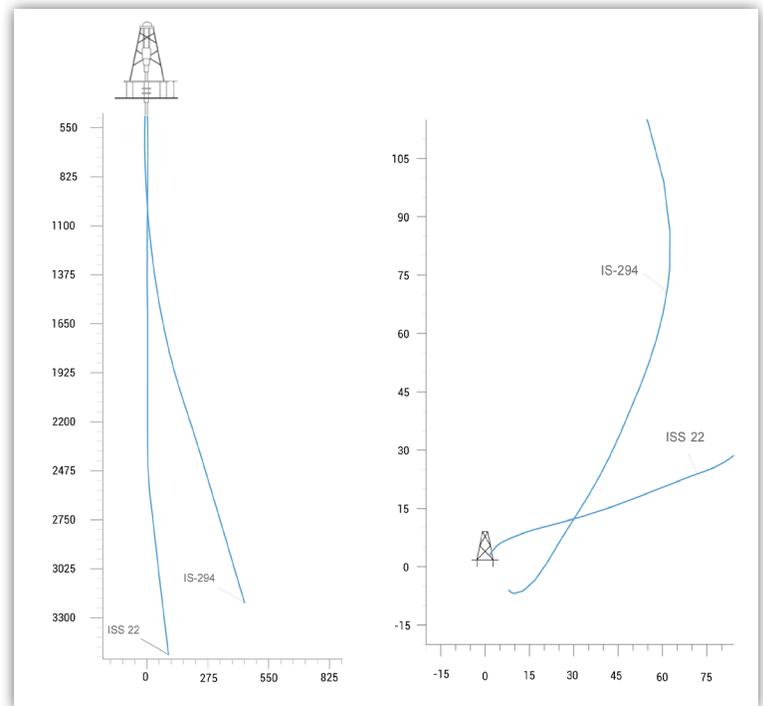
A major offshore operator in Qatar was drilling in an area where partial or total fluid losses were a challenge due to the dolomitic limestone formation. They were exploring a way to improve upon their current drilling practices; actively pursuing opportunities that would reduce drilling time and keep the time that the drill string was stationary to an absolute minimum. They identified an increase in MWD telemetry speed as a possible improvement and a way to minimize their risk of getting stuck.

### SCIENTIFIC SOLUTION

Scientific Drilling proposed a two-step solution that involved modifying the existing gyroMWD tool to meet the client's goals. It consisted of modifying the pulser to allow for longer strokes along with a reduced pulse width to facilitate a faster data transmission system. The combination resulted in a 2.5b/s data transmission process in comparison to the conventional 0.5b/s.

### CUSTOMER VALUE

The adjustments made enabled SDI to achieve a data transmission rate that was five times faster than the conventional setup. SDI reduced the time needed to transmit by an average of 120 minutes per hole section, while providing more frequent tool face and higher resolution real-time gamma log updates. SDI's ability to work with the client to design a fit-for-purpose solution minimized the operator's risk of getting stuck while the drill string was stationary and ultimately contributed to over 4 hours of rig time savings in the batch set operations.



### SDI IMPROVES EFFICIENCY AND MINIMIZES RISK- REDEFINING PROCEDURES AND FUTURE OPERATIONS

With Scientific Drilling's gyroMWD and high speed Mud Pulse, the operator was able to shave off significant rig time and minimize risk of collision per well being drilled - ultimately delivering huge cost savings for all future offshore operations

**Pictured Above: Plot of two wells in close proximity from the batch**

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