



AccuWave EM MWD System Saved Client 14.4 hours of rig time on a 15,000 ft. Eagle Ford Well

An operator, working in the Eagle Ford formation in Crockett County Texas, wanted to see a reduction in drilling cost and minimize non-productive time (NPT). Previous wells drilled in the area had experienced mechanical failures from debris that lead to lost circulation conditions. To avoid NPT time, the client planned to use highly concentrated LCM to reduce mud losses.

To achieve these objectives, Ryan Directional Services provided the AccuWave™ EM MWD system to get reliable high-speed data transmission from downhole to the surface through the formation. Well placement in the reservoir was optimized using real-time directional survey, vibration, gamma data for enhanced positional awareness. The system provided greater positional awareness from data continuously transmitted using low frequency electromagnetic waves. The surface equipment enables accurate decoding of the electromagnetic waves and provides data

Time savings of using AccuWave EM System	
Survey Time	9.4 hours
DD Lead Time	2 hours
No Check Shots	1 hour
BHA Makeup	1 hour
Total Time Savings	14.4 hours

rates face greater than traditional mud pulse telemetry. The AccuWave EM system also eliminated check shots, reduced the number of survey times, provided early warning of inclination changes, and resulted in a total of 15,000 ft drilling distance.

Overall, the AccuWave EM MWD system saved 9.4 hours of survey time, 2 hours of directional driller lead time, 1 hour by eliminating check shots, and 1 hour thru simplified BHA makeup. The well was successfully drilled with 141 surveys and drilled the lateral and curve in a single run.

Challenge

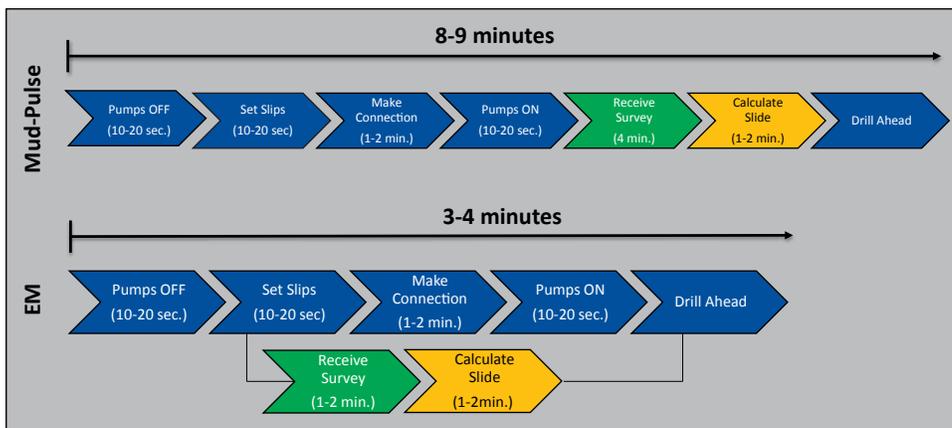
- Goal— reduce drilling cost
- Transmit real-time data before connection to minimize non-productive time
- Occasionally have to pump LCM to reduce mud losses

Solution

- Deployed AccuWave EM MWD system using real-time directional survey, gamma and shock and vibration measurements with unlimited LCM tolerance

Results

- Saved 14.4 hours with greater positional awareness from continuous inclination, reduced number of survey time and finished 141 surveys before connection with zero downtime.



AccuWave delivers fast survey times in harsh conditions