CASE STUDY: EAGLE FORD SHALE, TEXAS, USA

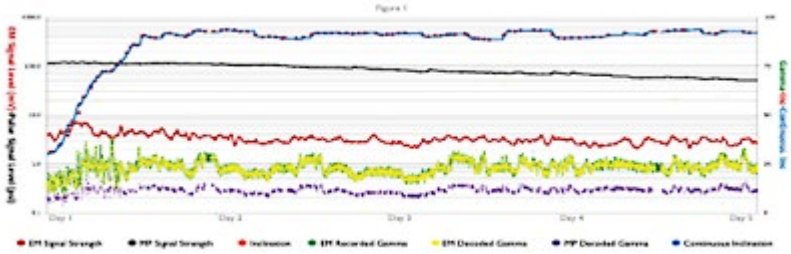
NaviTrak UT helps break vertical section drilling record in Eagle Ford, drills curve and lateral in less than six days and in one run

CHALLENGES

- Drill the curve and lateral of an extended horizontal well through the Austin Chalk at 20,033 ft measured depth
- Drill vertical section to 13,511 ft
- Maintain directional drilling control despite risk of electromagnetic (EM) signal interference in long lateral
- Drill sections in one run and in six days or less, representing record time in the Eagle Ford

SOLUTION

- Baker Hughes deployed its NaviTrak™ UT directional and gamma MWD service to overcome formation-related issues that prevented successful deployment of other EM tools
  - Uses unified telemetry to simultaneously send EM and mud-pulse telemetries on two independent channels
  - Transmits high-resolution EM data on hole inclination, azimuth, and toolface orientation in real-time
  - Switches over to mud pulse if EM telemetry is interrupted to continue receiving directional and gamma data



NaviTrak™ UT collects and transmits a range of data while drilling to maintain directional control and higher drilling rates.

RESULTS

5.9 days
to drill curve and lateral with a record-setting distance of 16,177 ft

One run
to drill curve and lateral, from 3,586 ft to 20,033 ft at TD

95%+ decoding
on EM and 97% on mud pulse in the curve and lateral

10X faster
data transmission rate compared to conventional mud pulse

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