CASE STUDY: DJ BASIN, COLORADO, USA

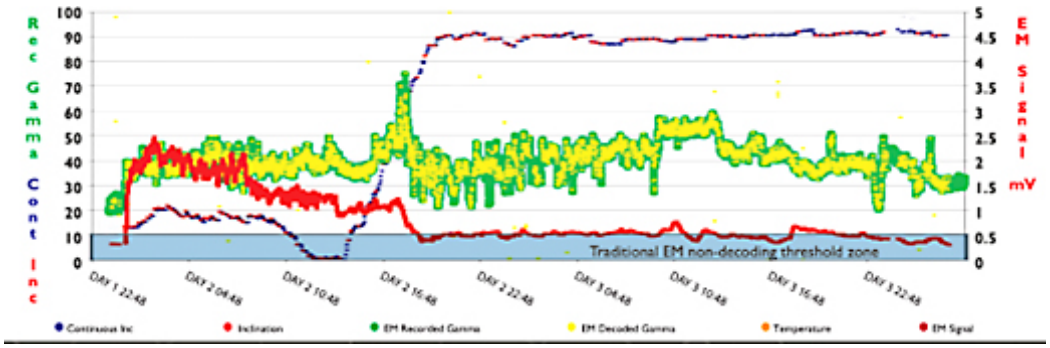
NaviTrak UT replaces mud-pulse telemetry to increase ROP, saves nearly 7 hours on single 11,224-ft run

CHALLENGES

- Replace conventional mud pulse telemetry on multi-pad well to deliver higher average rate of penetration (ROP)
- Improve gamma log data quality and reliability to make more informed drilling decisions while saving time and money
- Overcome limitations of other electromagnetic (EM) telemetry tools to decode EM signals with greater sensitivity than current measurements

SOLUTION

- Baker Hughes deployed its NaviTrak™ UT directional and gamma MWD service to provide:
  - Multimode EM and mud pulse on simultaneous independent channels
  - Proprietary noise canceling and decoding algorithms to decode EM signals as low as 0.01 mV
  - Significant improvements in both ROP and gamma quality



NaviTrak™ UT provided high-quality gamma and increased average ROP by 29 ft/hr, a 15% increase compared to conventional mud pulse.

RESULTS

6.7 hours
saved in drilling time

29 ft/hr
increase in average ROP

9.8 hours
saved on circulating the well

30 to 50 X
greater sensitivity in decoding EM signals

11,224 feet
drilled in single run, a 73-ft increase in MD compared to well using mud pulse

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