

BENCHMARK PERFORMANCE IN THE OKLAHOMA STACK

CASE HISTORY

APPLICATION

Drilling Optimization, Motors

TECHNOLOGY

TiNAN22 6.5" – Performance Drilling Motor
Enhanced Drilling Services (EDS)

LOCATION

Oklahoma STACK,
Blaine County,
Oklahoma

CUSTOMER CHALLENGE

Oklahoma's STACK play (short for the Sooner Trend, Anadarko (Basin), Canadian and Kingfisher Counties) is an area northwest of Oklahoma City that contains several layers of rock each containing large amounts of oil and natural gas. Operating in the STACK presents numerous drilling challenges including staying in the designated zone and wear on the BHA components due to the lithology of the pay zones.

Our Customer wanted to complete a lateral in a single BHA run in the targeted Meramec zone, as well as improve wellbore quality, drilling performance and efficiency.

SCIENTIFIC SOLUTION

To achieve the goal of a single run lateral, SDI had to get longer life out of the drilling motor. In past runs, it was not possible to drill a lateral in one run due to extensive motor wear.

By reviewing past performance using the proprietary SDI Enhanced Drilling Services data analysis, we changed the selected Lateral motor from a 6.5" Titan 22 7:8 5.0 to a 6.5" Titan 22 7:8 6.4 with a jetted rotor. This motor performed to expectation in the lateral.

To deliver the wellbore quality improvements, SDI used a stabilized BHA design and altered drilling parameters for WOB, RPM and flow rate. By optimizing the BHA performance, we were able to achieve the Customer's objective.

CUSTOMER VALUE

By achieving the lateral in a single run, the operator was able to reduce the drilling AFE by 2 days and establish a new benchmark for drilling in the STACK.

The performance of the SDI personnel and technology yielded significant time/cost savings and achieved the Customer's objective. The Customer's trust in drilling the Scientific Way demonstrated the value of our services and our partnership.

