

Case study: Permian Basin

DuraMax improved ROP and footage in the Permian Basin

1 run

Lateral to TD

9.5%

Increase in average footage/day

17.1%

Increase in average overall ROP

An operator in the Permian Basin of west Texas, USA, needed help finding a solution that would reduce time spent drilling the lateral hole sections. The operator turned to Baker Hughes for a solution.

The Baker Hughes team recommended their new **DuraMax™ steerable drilling motor** and **Dynamus™ extended-life PDC drill bit** to improve performance and reduce the number of trips through the lateral section. The ruggedized DuraMax motor design enables operators to rotate the drill string at a higher RPM and with a higher weight-on-bit (WOB) in the lateral section to improve performance.

The 5- $\frac{1}{8}$ -in. DuraMax D50-5065C and a Dynamus DD406T PDC bit drilled the 6- $\frac{3}{4}$ -in. lateral section of 9,529 ft (2904 m) in 145 drilling hours, maintaining an average ROP of 65 ft/hr (20 m/hr).

Compared to an offset well that required two runs, Baker Hughes's DuraMax and Dynamus solution drilled the lateral in one run and increased the footage/day by 9.4% and the average overall ROP by 17.1%, in addition to saving the trip time to change the motor and bit.