

DELAWARE BASIN

TEXAS

Lithology	Limestone interbedded with shale
Well type	Horizontal
Mud type	Water- and oil-based mud
Interval	6¾ in
Depth, run 1	10,364–13,632 ft [3,159–4,155 m]
Depth, run 2	14,390–17,154 ft [4,386–5,229 m]

Background

While drilling lateral sections in the Delaware Basin, the operator was averaging 2,120-ft [646-m], 53-ft/h [16.15-m/h] ROP and 2.4 runs per section. Motor failures caused 19% of unplanned trips.

To reduce the number of motor trips due to elastomer failure and improve drilling efficiency, Dyna-Drill, a Schlumberger company, recommended using a motor with the DynaPower XR* extreme-wear-resistant motor elastomer to increase motor performance and ROP.

Technology

DynaPower XR extreme-wear-resistant motor elastomer

Motor with DynaPower XR Elastomer Delivers 35% Higher ROP and 42% More Footage in Delaware Basin

Extreme-wear-resistant motor elastomer runs at high differential pressure and performs longer than conventional hard elastomers



The operator used motors with the DynaPower XR elastomer in two wells where the field ROP averaged 72 ft/h [22 m/h] and the average footage was 3,016 ft [919 m]. This was a 42% increase in drilling footage and a 35% increase in ROP compared with offset runs. In addition, postjob measurements of the power sections revealed that the technology with DynaPower XR elastomer experienced only half the wear compared with offset wells.

Dyna-Drill

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