#### **TECH REPORT**

#### NIOBRARA BASIN

COLORADO

Lithology	Shale
Well type	Horizontal
Interval	8½ in
Depth	11,362 ft [3,463 m]
Mud type	Water-based mud
Sand content	10%

## **Background**

An operator wanted to drill an 8½-in interval made up of vertical, curve, and lateral sections as fast as possible and with a single BHA. While drilling, the operator used water-based mud with a 10% sand content. To ensure a single run to TD and enable a high torque output for maximum ROP throughout the run, Dyna-Drill, a Schlumberger company, recommended using a motor with the DynaPower XR\* extreme-wear-resistant motor elastomer

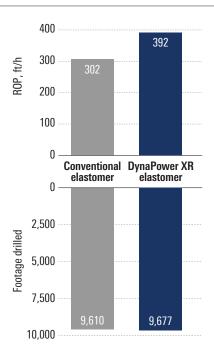
### **Technology**

DynaPower XR extreme-wear-resistant motor elastomer



# Motor with DynaPower XR Elastomer Increases Penetration Rate 30%, Delivers Record ROP of 392 ft/h

Operator drills 9,677-ft interval with vertical, curve, and lateral in one run, Niobrara Shale, Colorado



Using a BHA that included a motor with the DynaPower XR elastomer, the operator successfully drilled the entire 9,677-ft [2,950-m] interval in a single run with a record-breaking ROP of 392 ft/h [119.5 m/h]. This was a 30% increase in ROP compared with the offset run from the same drilling pad.