

MARTIN COUNTY, TEXAS  
MIDLAND BASIN

<b>Lithology</b>	Limestone, dolomite, sandstone, and shale
<b>Bit diameter</b>	12.25 in
<b>Weight on bit</b>	25,000–32,000 lbf
<b>Section length</b>	2,972 ft
<b>Total depth</b>	8,434 ft

**Background**

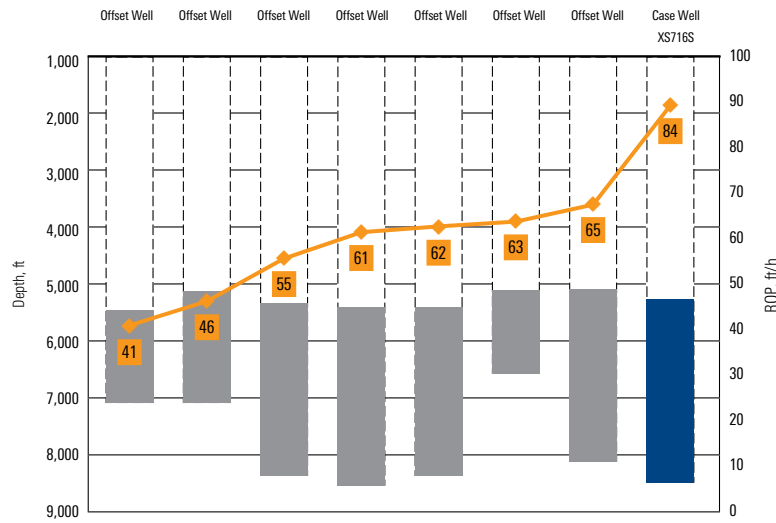
RSP Permian LLC wanted to increase ROP when drilling through multiple formations in the Midland basin. Using conventional PDC bits, the ROP in previous wells had ranged from 41 to 65 ft/h.

**Technology**

- AxeBlade\* ridged diamond element bit

# RSP Permian LLC Improves ROP 35% by Using AxeBlade Bit Through Multiple Formations, Texas

Ridged diamond element bit achieves high ROP through limestone, dolomite, sandstone, and shale formations in Midland basin



*The operator decided to run the AxeBlade bit to TD through the limestone, dolomite, sandstone, and shale formations. It achieved an ROP of more than 84 ft/h, increasing ROP 35% compared with that achieved by the PDC bit and 38% compared to the offset median. This was the highest ROP that had been experienced in previous wells on the same well pad.*

\*Mark of Schlumberger  
Other company, product, and service names are the properties of their respective owners.  
Copyright © 2017 Schlumberger. All rights reserved. 17-BDT-223868