ERT Power Section With PXP Elastomer Completes Verti-Curve in a Single Run

Powered by NOV’s 7-in. 6/7 7.8 ERT, a major operator drills both the vertical and curve section in a single run in Mountrail county, North Dakota.

Challenge:
To provide a directional motor to drill the 8¾-in. vertical and curve section through various formations in Sanish field in a single run. The motor would need to be capable of providing an aggressive build rate while maintaining a competitive ROP.

Solution:
The client selected a 700ERT6778 power section for this challenging run. NOV’s ERT technology features machined lobes, coated with NOV’s PXP™ high performance elastomer. This power section provides higher torque compared to identical configurations using conventional power sections.

Results:
- BHA drilled from 2,350 ft MD to 10,468 ft MD
- Drilled the 8,118 ft interval in 49.9 hours with an ROP of 162.6
- Drill bit performed well receiving a dull code: 1-2-BT-G-X-O-WT-TD
- BHA achieved and maintained a build rate of 12°/100ft
- Eliminated a trip usually spent changing from vertical to curve type BHAs

<table>
<thead>
<tr>
<th>BHA #</th>
<th>Depth In (ft)</th>
<th>Depth out (ft)</th>
<th>Interval (ft)</th>
<th>ROP (ft/hr)</th>
<th>Dull Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2,350</td>
<td>10,480</td>
<td>8,118</td>
<td>162.6</td>
<td>1-2-BT-G-X-O-WT-TD</td>
</tr>
</tbody>
</table>

Power Section Model: 700ERT6778
Outer Diameter: 7-in.
Power Section Type: ERT™
Elastomer: PXP™
Lobe: 6/7
Stage: 7.8
Revs per Gallon: .032
Flow Range: 500-750 gpm

Client: Confidential
Well Name: Confidential
Field/Block: Sanish
County: Mountrail
State: North Dakota
Country: USA
Date: Q3 2019