

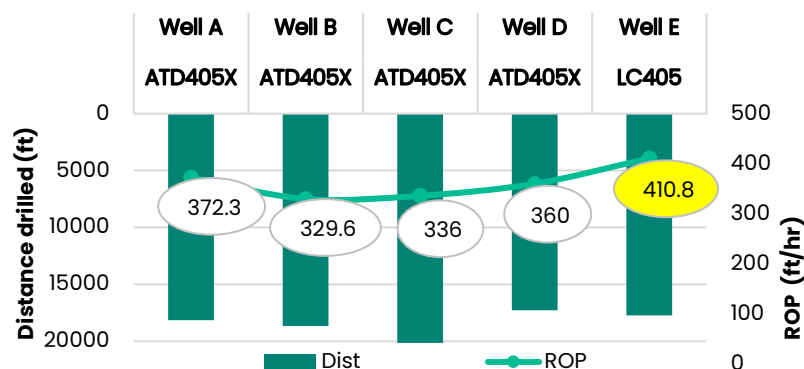
PermaFORCE-TRU paired with Baker Hughes rotary steerable achieves high ROP in curve/lateral application

CHALLENGES

- Drill curve/lateral through shale formation on RSS BHA
- Maintain high ROP in build section
- HFTO and lateral vibrations
- Reduce DLS in lateral
- Reduced overall ROP to meet directional objectives and manage vibrations

SOLUTION

- RSS engineered cutting structure to reduce lateral vibration and HFTO
- DirectKNCT™ matrix shankless PDC technology to improve BUR potential
- Enhanced steerability
- Lucida™ advanced rotary steerable system



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RESULTS

17%
vs. AVG Curve ROP on pad

31% lower DLS
compared to pad average for lateral DLS

7.5 hours saved
compared to pad avg (drilling time only, normalized for distance drilled)