

Voyager Drills Fast and Long Directional 7-7/8" Monobore in DJ Basin Field

Sets Drill Out to TD Field Record of 2.29 Days

7-7/8" V516GH, Colorado DJ Basin

CHALLENGE: Drill the vertical, curve, and lateral sections of a monobore well in the DJ basin with one bit and no trips.

SOLUTION: The Voyager cutting structure allows for maximum ROP yet maintains tool face control to get the job done. The aggressive cutting structure of the bit sacrifices no loss in ROP and provides a tremendous gain with formation matched Force³™ PDC cutters. DIG-IT™ software allows the engineers to examine cutter durability and blade geometry for better performance to improve bit life. Varel's SPOT-DN™ software assists the engineers' design of the cutting structure for maximum ROP leading to record breaking achievements with Voyager products.

RESULTS: This Voyager 7 7/8" V516GH PDC bit drilled 15,539 ft (4736 m) at an ROP of 450 ft/hr (137 m/hr) while building angle to 25 degrees in the vertical section, building the curve section, and completing the lateral section of the well in one bit run . The bit achieved a Drill Out to TD field record of 2.29 days for a 2 section lateral well. The dull grade for the bit is 1-1-WT-C-X-I-NO-TD as can be seen in the photos to the right. The 7 7/8" V516GH Voyager bit contributed to efficient drilling of this DJ Basin well through excellent tracking ability in all three well sections resulting in a new field record benchmark.

