

## Voyager Drills Fast 8-3/4" Build and Turn Section in Saskatchewan Field

### 8-3/4" V613DUX, Viewfield Saskatchewan Canada

**CHALLENGE:** Drill the curve section from 0° to 82° and make a 20° turn to complete the interval on a directional mud motor.

**SOLUTION:** Varel's IMPACTS software package is utilized to help design all Voyager bits. IMPACTS is a collection of proprietary software packages for improving bit performance. Varel's SPOT-DN™ and DIG-IT™ software, part of IMPACTS, assist the engineers with designing a cutting structure for maximum directional responsiveness and to control torque at the bit face based on the software analysis. The cutting structure arrangement provides complete directional control without sacrificing ROP resulting in new field records.

**RESULTS:** This Voyager 8 3/4" V613DUX PDC bit drilled 1275 ft (338 m) at an ROP of 82.9 ft/hr (25.2 m/hr) while building angle in the curve section. The bit achieved BUR's of 8° /100 ft using a 7/8 lobe 5.0 stage motor with 2.38° bend. Bit to bend was 1.92 m. The dull grade for the bit is 1-0-BT-S-X-I-PN-TD as can be seen in the photos to the right. The 8 3/4" V613DUX Voyager bit contributed to efficient drilling with complete tool face control in the curve section while turning which resulted in outstanding ROP.



### 6 1/8" V613PDGX and Direct Offsets

