

# High Energy™ Surpasses Competition's Durability

## 12-1/4" HE04DJMRSV, Wytch Farm, United Kingdom

**CHALLENGE:** To improve durability when drilling the interbedded formations of Wytch Farm, UK. Eleven TCI offsets averaged 520 m (1,706 ft) with a penetration rate of 9.3 m/hr (30.5 ft/hr).

**SOLUTION:** Varel recommended the 12-1/4" HE04DJMRSV for this application. This High Energy bit features sealed journal bearings with chisel-shaped tungsten carbide cutting structures. All Varel TCIs undergo our patented High Energy Tumbled (HET) process proven to increase insert toughness by overcoming the traditional trade-off between wear resistance and fracture toughness of tungsten carbide components making our TCIs harder and tougher.

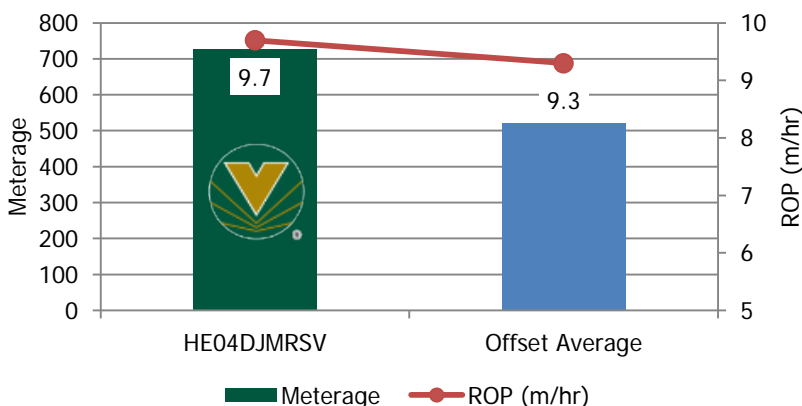
**RESULTS:** Run on a 1.83° bend motor building inclination from 3° to 86°, this 12-1/4" HE04DJMRSV made 785,562 revolutions while drilling 728 m (2,388 ft) to TD at 9.7 m/hr (31.8 ft/hr). This 40% increase on average meterage as well as the above average dull grade of 1-1-WT-A-E-IN-ER-TD demonstrates the longevity of Varel's High Energy series.



This 12-1/4" HE04DJMRSV features Varel's V-Jet Hydraulics. The V-Jet aimed flow stream produces better cone cleaning.



This bit also features Varel's diamond capped TCIs in strategic locations along the back row to provide added protection.



*For more information on this bit and proposed applications please speak to your local Varel representative.*