# Case Study

# **New Cutter Technology Delivers Record Performance**

3.4 Days Faster than Previous Record

#### **APPLICATION**

2<sup>nd</sup> Bone Spring Lateral Sandstone/Siltstone formations High UCS/Abrasion/Thermal Moderate/Low Impact

#### **TECHNOLOGY**

VOYAGER 616 COBRA Cutter Technology RSS – Drive System

#### **LOCATION**

Eddy County, New Mexico

#### **CUSTOMER CHALLENGE**

To improve interval performance compared with prior runs and competitor offsets on RSS to reduce overall days on well

#### **VAREL SOLUTION**

VES Applications Engineering in collaboration with the Drilling Engineer, utilized GeoScience Studies to analyze formation characteristics in conjunction with offset run data and dull studies.

It was determined that there was opportunity for improved performance through enhanced cutting efficiency. A rapid design project was initiated to incorporate a combined solution encompassing the latest 8.5" 616 design development and latest shaped cutter technology.

#### **COBRA PERFORMANCE**

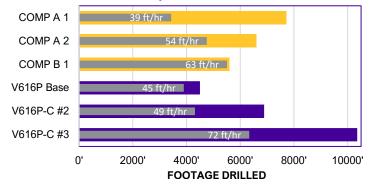
- Compared to baseline performance the first run saw an increase of 53.1% footage drilled and 10.5% higher ROP.
- The second run saw a further increase in performance of 130% footage drilled and 62.3% higher ROP compared to the initial offset.

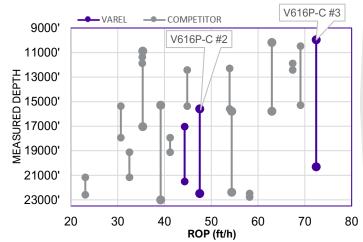
#### **CUSTOMER VALUE**

This was the fastest lateral for this area making TD 3.4 days ahead of the next fastest offset.

Partnership across all parties throughout this well contributed to improving performance to reach TD 12.2 days ahead of plan.

### **Comparative Performance**





## VAREL COBRA Shaped Cutter Technology



