Case Study

9-7/8” Drillout Delivers One-Bit Record Performance

Operator Record – Most Profitably Drilled Intermediate Section in East Texas

APPLICATION
9-7/8” Intermediate Section
Interbedded Shale, Limestone and Silt
Moderate to Hard Rock Strength

TECHNOLOGY
VION™ 616
HYDRA™ Hydraulic Attributes
VENOM™ Shaped Cutter Technology

LOCATION
East Texas
Travis Peak / Cotton Valley
(Haynesville Shale)

CUSTOMER CHALLENGE
Following numerous attempts to complete the 9-7/8” intermediate section in one-bit run while reducing overall time in hole, consistent offset performance required 2-3 bits with moderate performance in ROP. Each additional drill bit required creates an incremental cost impact to the operation’s economics.

VAREL SOLUTION
Through VES’ proprietary 360° Customer Workflow process and VENOM shaped cutter technology, applications engineering identified the right cutter placement strategy to match the application inside of VION 616 design platform.

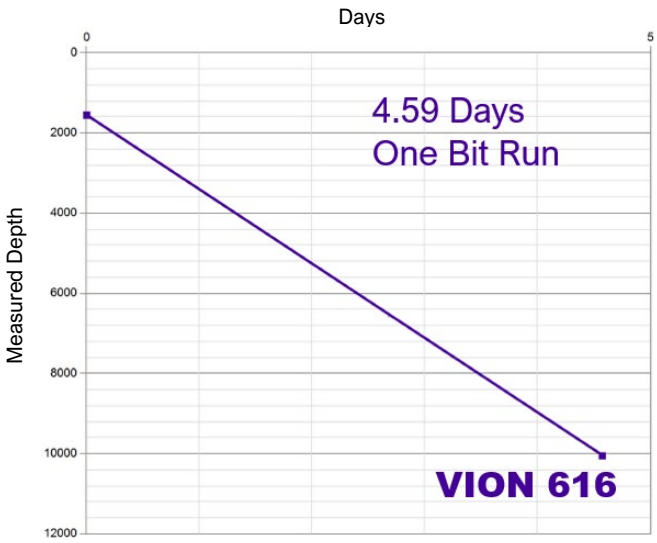
Utilizing in-house proprietary software and analyzing previous dull conditions VES determined the optimal locations to place the cutters for enhanced cutting efficiency.

CUSTOMER VALUE
The bit completed the ~8,500’ interval in one-bit run and achieving a rare performance for this section and formation **at 4.59 days**.

The performance **saved an average of $65,000-$70,000** for every drill bit trip previously required to complete the section.

The bit performance equates to over **64% more footage** drilled than average of all offset performances.

Comparative Performance



VION 616 Dull Photos

“The performance is beyond normal and the process is consistently above the industry standard from Varel Energy Solutions. My experience with VES from start to finish is far different than most which has yielded some incredible results like this. Changing the way business is conducted has been refreshing to see.”

- *Rockcliff Energy Drilling Engineer*

VAREL ENERGY SOLUTIONS