Case Study

New Fastest 16” Vertical Section in KUWAIT

APPLICATION
Onshore – 16” Vertical section.
Interbedded, Abrasive Sandstone, Shale and Limestone formations

TECHNOLOGY
VION™ 716
VENOM™ Cutter Technology

LOCATION
Kuwait
Onshore

CUSTOMER CHALLENGE

The Customer focused on drilling the 16” vertical section using one PDC bit run while achieving the best possible ROP and lowest cost per foot.

The TOP 5 achievement wells in the same field using PDC bit design achieving 21.6 ft/h ROP average across the field.

Record run in the area was set @ 25.2 ft/h.

VAREL SOLUTION

VAREL proposed a specific PDC design leveraging the VION™ bit technology, perfectly designed for ‘tangent’ drilling applications. VION™ bit series is a versatile design delivering greater bit stability and durability into transition zones and abrasive formations.

Solution: 7-bladed, 16-mm cutting structure with matrix body and VES VENOM™ cutter technology.

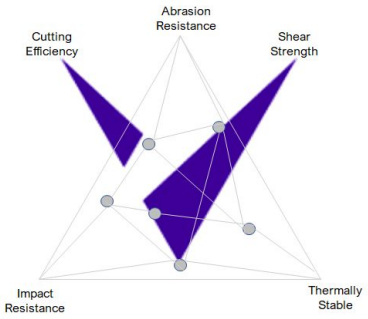
Purpose: VENOM™ cutters methodology is matching the right cutter attributes to any given challenges with focus on efficiency, strength, impact and abrasion resistance.

CUSTOMER VALUE

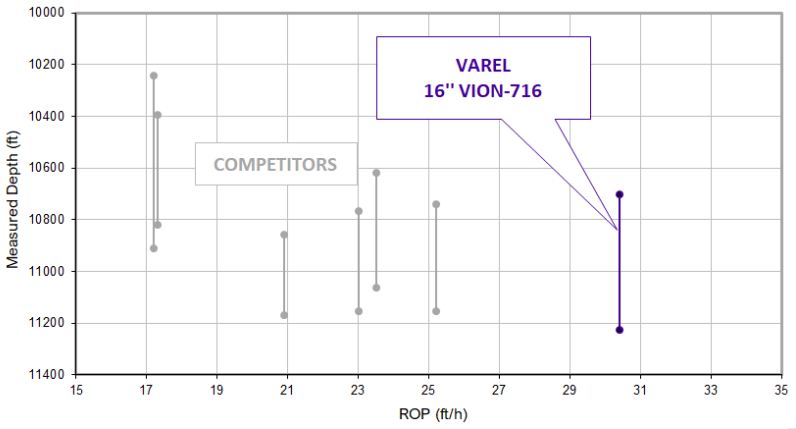
New consistent field record achieved and time saving on the planned objective.

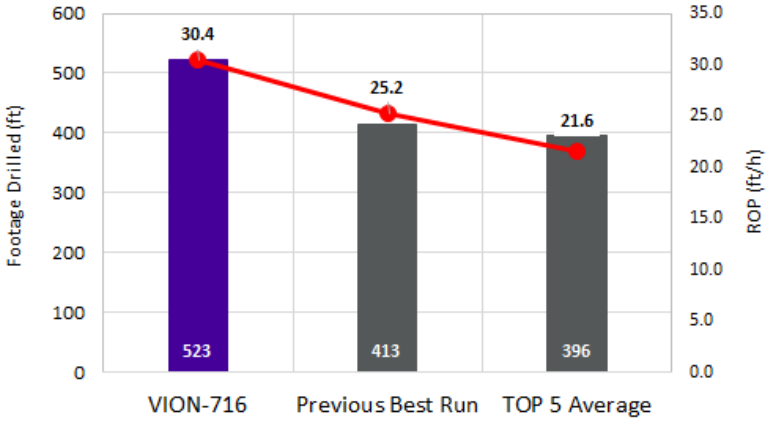
- Drilled a total footage of 523ft with **Field Record ROP of 30.4ft/hr**.
- Achieved **40%** increase in ROP as compared to TOP 5 Field Average performance.
- Achieved the **Lowest Cost Per Foot** with a 44% improvement compare to latest benchmark

VION Matrix PDC design



Performance Comparisons





VAREL ENERGY SOLUTIONS