

Case Study

Latest Record Set in Oman – Fastest 12.25” Vertical Section

APPLICATION

Onshore – 12.25” Vertical section.
Interbedded, Sandstone, Limestone,
Shale Formation
PowerDrive-Power V® RSS

TECHNOLOGY

VION™ 616
HYDRA™ Hydraulics
FUSION+
VENOM ARTIMIS™ Cutters

LOCATION

OMAN
Onshore

CUSTOMER CHALLENGE

The Customer focused on drilling the 12.25” vertical section using a rotary-steerable assembly with the goal of drilling the longest footage with the best ROP – additional challenges required exceptional durability into interbedded and sandy abrasive layers.

The offset wells in the same field using PDC or RC bit were achieving **19.9 m/h ROP average across the field. Record run in the area was set @ 26.0 m/h.**

VAREL SOLUTION

VAREL proposed a specific PDC design leveraging the VION™ bit technology, perfectly designed for drilling through transitions requiring durability and optimum efficiency.

Solution: 6-bladed, 16-mm cutting structure with HYDRA + Curve Nozzle for optimum Hydraulic efficiency, and FUSION+ Impregnated Hybrid technology for increase durability. Specific ARTIMIS Shaped cutters from VENOM Technology

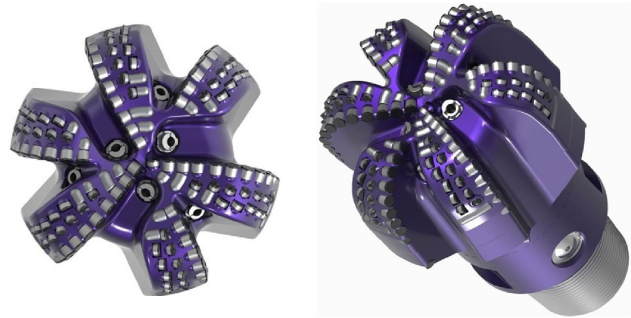
Purpose: The unique ARTIMIS™ Shaped positioning on the cutting structure allow pre-fracturation of the rock increasing efficiency into Hard Heterogenous formations.

CUSTOMER VALUE

One of the best field record accomplished as compared to previous benchmark with astonish pristine dull when POOH : 1-1-WT

- Drilled a total footage of 2052m with **ROP of 30.2 m/hr.**
- Achieved **50%** increase in ROP as compared to Offset average performance.

Matrix PDC VION™ 616 design



Performance Comparisons

