Case Study

New Fastest 16” Deviated Section in ABU DHABI, U.A.E

APPLICATION
Offshore – 16” Deviated section.
Interbedded, Limestone, Dolomite, Anhydrite and Shale formations
Rotary Steerable Drive System (RSS)

TECHNOLOGY
EVOS™ 616
VENOM™ Cutter Technology - ARTIMIS™
Halliburton GeoPilot® EDL RSS

LOCATION
Abu Dhabi
Offshore

CUSTOMER CHALLENGE

The Customer focused on drilling the 16” build up/ deviated section using one PDC bit run pairing the bit with rotary steerable system while achieving the best possible ROP and lowest cost per foot.

The TOP 4 achievement wells in the same field using PDC bit design achieving 115.1 ft/h ROP average across the field.

Record run in the area was set @ 118.7 ft/h.

VAREL SOLUTION

VAREL proposed a specific PDC design leveraging the EVOS™ bit technology, perfectly designed for ‘build’ drilling applications. EVOS™ bit series is a trouble-free design delivering smooth torque, advanced directional control, excellent wellbore quality and dynamic stability.

Solution: 6-bladed, 16-mm cutting structure with steel body bit for optimum Open Face Volume. Shape cutters, the ARTIMIS™ cutters as part of the VES VENOM™ technology.

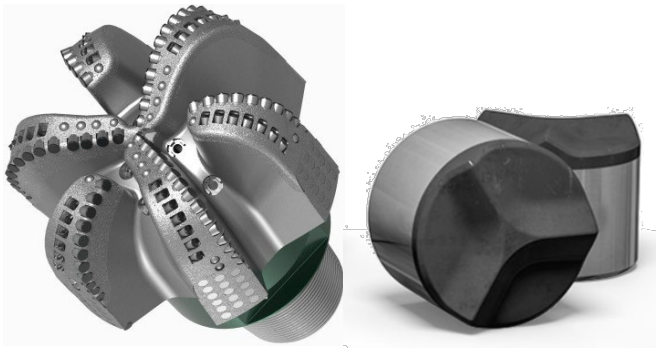
Purpose: ARTIMIS cutters increase efficiency of the shearing action through pre-weakening the rock.

CUSTOMER VALUE

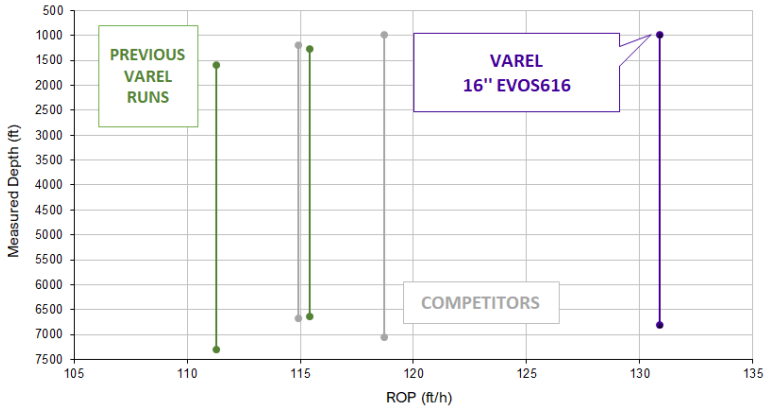
New consistent field record achieved and time saving on the planned objective.

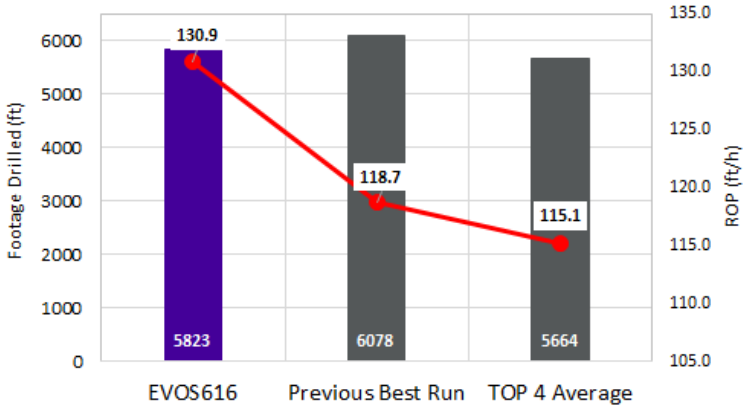
- Drilled a total footage of 5823ft with **Field Record ROP of 130.9ft/hr**.
- Achieved **14%** increase in ROP as compared to TOP 4 Field Average performance.

Steel PDC design



Performance Comparisons





VAREL ENERGY SOLUTIONS