

# Case Study

## 12.25" EVOS-616 New Fastest ROP Record for Onshore Kuwait

### APPLICATION

Onshore– 12.25" Motor BHA  
Medium Hard to Hard formations consisting of Limestone, Marl, Dolomitized Wackestone, Calcareous Shale, & Sandstone.

### CUSTOMER CHALLENGE

The Customer focused on drilling the 12.25" section using one PDC bit to achieve the best possible ROP, maximizing efficiency, performance and minimizing the drilling time. The same bit type was run multiple times in the fields in Kuwait has shown good performance in the past.

The TOP 6 achievements using PDC bit design achieving 27.8ft/h ROP average across the field.

Record run in the area was set @ 43.5ft/h.

### VAREL SOLUTION

VAREL proposed a specific PDC design leveraging the EVOS™ bit technology, perfectly designed for interbedded 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, 16mm Cutters, Steel Body bit incorporating Cobra Cutters. Venom Cutter Technology.

### Purpose:

**Steel body** PDC bits provide better torque management and greater stability and whirl resistance.

**Cobra cutters** - A combination of the Fang shape blended with Artimis ridge. This layout is useful in lateral runs to increase both speed and durability.

### CUSTOMER VALUE

The 12.25" EVOS-616 achieved the fastest run in the field in Kuwait.

- Achieved new ROP record of [94.1ft/h](#).
- Achieved [116.3%](#) improvement in ROP as compared to Previous Best Run in Kuwait.

### TECHNOLOGY

EVOS™ Bit Technology  
Venom™ Shaped Cutter - Cobra

### LOCATION

Kuwait  
Onshore

### PDC Steel Body Design



### Performance Comparisons

