Case Study

Fastest 28” Vertical Hole Section in KUWAIT

APPLICATION
Onshore – 28” Vertical Section.
Interbedded, Sandstone, Limestone, and Shale formations

TECHNOLOGY
28” EVEREST® 113
MILL TOOTH

LOCATION
KUWAIT
Onshore

CUSTOMER CHALLENGE

The Customer focused on drilling the complete 28” vertical section in using one Mill Tooth RC bit run while achieving the best possible ROP and lowest cost per foot.

The previous top 5 wells in the same field using Mill Tooth RC bit design achieving 49.7 ft/h ROP average across the field.

Record run in the area was set @ 70.8 ft/h.

VAREL SOLUTION

VAREL proposed a Mill Tooth RC design leveraging the Everest® technology. Everest® bit series designed as solution drill bit for any type of well profile that is especially suited for surface and intermediate hole sections.

Solution: IADC 113 mill tooth cutting structure with open roller bearing. High temperature and lubricity grease together with patented pressure attenuator.

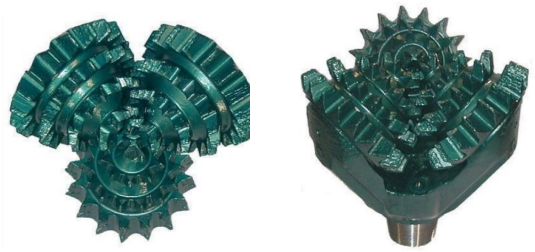
Purpose: Consistent performance and reliable drilling in 28” surface hole section.

CUSTOMER VALUE

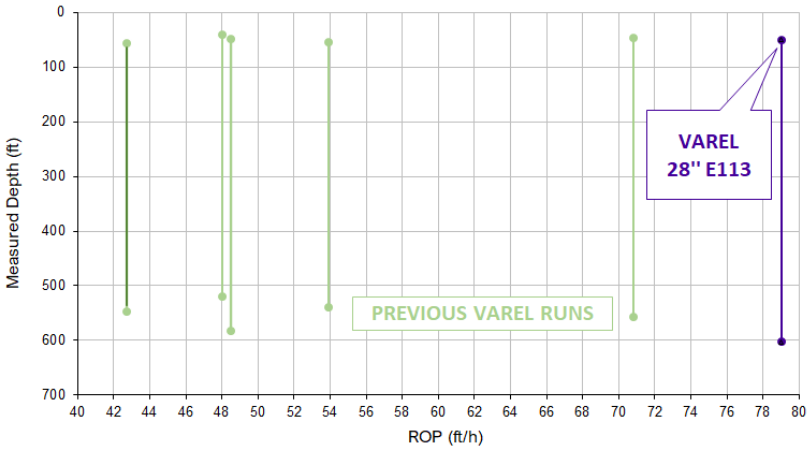
New consistent field record achieved and time saving on the planned objective.

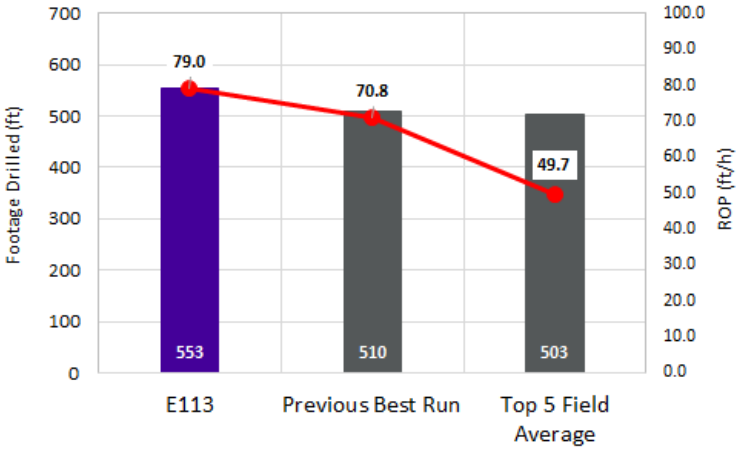
- ROP Field record run with **79.0 ft/h.**
- Achieved **11.6% improvement in ROP** as compared to previous benchmark in the field.
- Achieved the highest ROP and **the lowest cost per foot in the field** and 58% ROP improvement versus the last top 5 performances.

Mill Tooth RC design



Performance Comparisons





VAREL ENERGY SOLUTIONS