

Case Study

Superior Performance Delivered in Challenging 17-1/2" Section – UK Central North Sea

APPLICATION

Challenging long, deviated 17 1/2" section
Tertiary into Palaeocene transitions
Balder Tuff, Sele and Lista formations

TECHNOLOGY

17-1/2" EVOS™ 816 PDC
VENOM™ Cutter Technology (ARTIMIS™)

LOCATION

UK Central Offshore
North Sea

CUSTOMER CHALLENGE

The key objective was to drill the Tertiary and Palaeocene at sufficient ROP and trip in the Sele formation for a planned bit and BHA change. The Balder is known for harsh conditions, often causing significant PDC cutter damage.

The 17 1/2" section in this application has always been drilled with multiple bit runs.

VAREL SOLUTION

VES proposed the EVOS 816 bit with a unique and engineered cutting structure designed for optimum performance in challenging applications. The cutting structure was designed through a joint collaborative effort by VES, Aberdeen University and Oil & Gas Innovation Center (OGIC) Scotland.

CUSTOMER VALUE

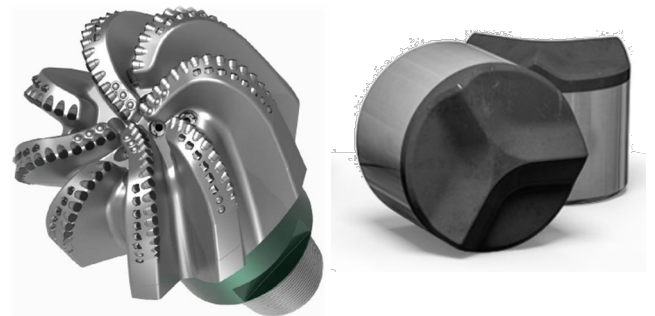
The EVOS platform delivered superior performance compared with relevant offset runs setting a new field record of **885m drilled per day**.

The bit drilled further than planned and tripped in the Sele formation due to a BHA unrelated issue with clear pathway to drill much further.

Run inclination was 24°. **The bit drilled 2,394m of Hordaland, Balder, Lista and Sele formations at an average ROP of 23m/hr.**

The run saved two days drilling (Approximately \$550K).

SYSTEM-MATCHED COMBINATION



17 1/2" EVOS™ 816

ARTIMIS™
Shaped Cutters

RUN COMPARISON CHART

