

Prism shaped cutters improve drilling speeds, drilling efficiencies in North Sea well

CHALLENGES

- Drill 8-1/2 in. section with complicated directional profile (6°/30 meters)
- Maximize rates of penetration (ROP) in tough, high-density sandstone (2.3+ g/cc)
- Optimize drilling efficiencies to overcome equivalent circulating density (ECD) limitations
- Reduce non-productive time

SOLUTION

Incorporated [Prism™ shaped-cutter technology](#) into the existing PDC drill bit design to:

- provide a more aggressive profile to maximize the deployment of mechanical specific energy (MSE)
- reduce cutting size to provide effective hole cleaning with limited ECDs
- Improve point loading for increased drilling efficiency

RESULTS

40%

ROP improvement

60%

improvement in bit aggressiveness

Increased

drilling parameter window

Prism™
Shaped-cutter technology

