

Qatar

Innovative Milling Solution Achieves Success in Highly Deviated Qatar Well

K-Master section mill with Wav-Edge® elements delivers superior durability and swarf control during 9 $\frac{5}{8}$ in. casing milling at 73° inclination

CHALLENGE

As per the plug and abandon scope of work a customer in Qatar required to section mill 110 ft of 9 $\frac{5}{8}$ in., 53.5 ppf, L-80 casing from 15747 to 15867 ft at a 73 deg wellbore inclination enabling a successful rock-to-rock seal of the cap rock.

SOLUTION

8200 K-Master section mill with knives dressed with Wav-Edge ridged milling element.

RESULT

- Successfully section milled the 9 $\frac{5}{8}$ in. casing
- New frontier conquered, deepest section milling job in MENA milling heavy walled 53.5 ppf casing
- Successfully section milled in a highly deviated wellbore at 73 degree hole angle, with minimal knives wear

Unique Technical Solution Delivered to the Client in Qatar

Section milled 9 $\frac{5}{8}$ inch, 53.5 ppf, L-80 casing from 15747 to 15867.7 ft where the wellbore inclination was 73 degrees. The 8200 K-Master section mill successfully completed the window dressed with Wav-Edge® elements. The wear on the knives was less than 10% for a highly deviated well. This newly designed milling element has improved durability through enhanced milling stabilization and provided improved swarf quality, allowing better hole cleaning. The optimized swarf size also allowed better swarf management at the surface flow lines.

