

CASE STUDY

FIXEDBLADE Stabilizer used in hexa-combo RSS BHA in the North Sea UK sector

FIXEDBLADE Stabilizers design and durability contribute to curb torque and vibrations in challenging long horizontal 8 ½" hole section.

CHALLENGE

Avoid excessive high torque and vibrations;
Eliminate K-revs restrictions;
Ensure high reliability factor.

SOLUTION

Replace traditional roller reamers with innovative FIXEDBLADE design stabilizers with a tapered recess profile.

RESULTS

Steady torque readings with minimum string torque fluctuation throughout the run;
Low levels of downhole drilling vibrations;
No visible wear on BHA components;
No reaming or back reaming required;
Bit was still in good condition and fit for re-run.

FIXEDBLADE deployment

The FIXEDBLADE stabilizers were utilized in 2 long horizontal 8 ½" drains for an operator in the UK sector of the North Sea. The KPIs for both drains were to minimize string torque and vibration while drilling with RSS hexa-combo bottom hole assembly and eliminate k-revs limitations.

In order to address the rotation hours restriction, the traditional roller reamers were replaced with an 8 ¼" Fixedblade design stabilizer. The design characteristics of the Fixedblade allow stiffer stabilization and the smoother geometry of tool and blades ensure a softer interaction with the formation while the tapered recess profile promotes enhanced displacement of cuttings and fluids along the tool.

This approach eliminated a potential trip to replace the rollers and showed low steady reading of both string torque and downhole drilling vibration.

Furthermore, there was no need for any backreaming while POOH while bit, drive system, M/LWD and stabilizers tools did not show any wear.

