Redline Reamer

With industry-leading PDC cutter innovations and drill bit designs, ReedHycalog[™] has consistently overcome the challenges of drilling in Canada, conquering demanding applications in the foothills of the West and enduring harsh offshore environments in the East, enabling bits to drill further and faster than ever before.

In response to the consistent decrease in drilling time while trip speeds remain unchanged or even increase further, NOV recognized the need for a solution to address this issue. Thus, NOV developed our first-generation Wellbore Conditioning Tool called the Dog Leg Reamer (DLR). With thousands of successful runs, the product team continuously improved the design and made modifications tailored to the unique challenges encountered in various regions worldwide.

The Redline Reamer, which when incorporated into your drilling assembly, effectively conditions the wellbore by slightly enlarging it. This results in reduced torque generated by the string, while simultaneously agitating and removing accumulated cuttings. NOV's proprietary Multifunctional Advanced Placement Software (MAPS[™]) ensures optimal placement of the Redline Reamer in the drillstring, maximizing its efficiency.

Like Redline drill bits, the Redline Reamer is compatible with ReedHycalog's industry-leading grades of polycrystalline diamond compact (PDC) cutters. When used in conjunction with a Redline bit, the cutting elements are perfectly matched, guaranteeing the best results regardless of the application. This flexibility in cutter selection ensures the most efficient and cost-effective solution to overcome today's technical limits in drilling, tripping, and completion challenges, spanning from the Montney to the Mississauga.

For more information on the Redline Reamers features and benefits, **click here**.

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Features

One-piece construction

The Redline Reamer is manufactured from a single piece of steel, containing material properties that optimally match the connection tool requirements. The one-piece construction ensures a strong, robust design that is properly paired with the adjacent drillstring components.

Dual-height, dual-function blade design

By utilizing active blades set higher than the passive blades, the tool both conditions and slightly enlarges the wellbore to significantly improve the efficiency of the tool. This enlargement ensures that the bit will be able to pass through the wellbore without the need for backreaming and that casing or completions can be landed quickly and successfully.

Multifunctional Advanced Placement Software (MAPS)

MAPS, our exclusive, in-house-developed software, enables Redline Reamer placement in the bottomhole assembly, where it is most beneficial from a borehole conditioning perspective. Accurate placement also ensures there are no negative effects on the bending stresses or contact forces at any point in the interval through which the tool will be run.

Low-torque cutting structure

The Redline Reamer generates less than 5% of the reactive torque generated by the bit with which it is used. In most applications, this results in reduced surface torque when compared to similar offset runs that do not include the Redline Reamer in the string.

Bi-directional cutting structures

Enhanced cutting structures ensure that the tool is actively improving the wellbore when drilling ahead, as well as when the string is rotating and moving in either direction.

Maximized tool internal diameter

This intentional design helps to minimize pressure loss through the tool. It also allows fishing of most retrievable measurement-while-drilling (MWD) components.

Re-engineered blade layout

Our tool's blade layout offers maximum protection to the cutting structure during drillout and increases the blades' efficiency when agitating cuttings on the low side of the wellbore in high-angle directional applications. The rounded, continuous blades have been designed to afford greater gauge protection in highly abrasive applications while improving sliding efficiency in high angle positive displacement motor applications.

Large selection of premium PDC cutters

The cutter type on the Redline reamer can be optimized to suit the demands of each application.

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