

BHA & Bit Directional Pre-Analysis

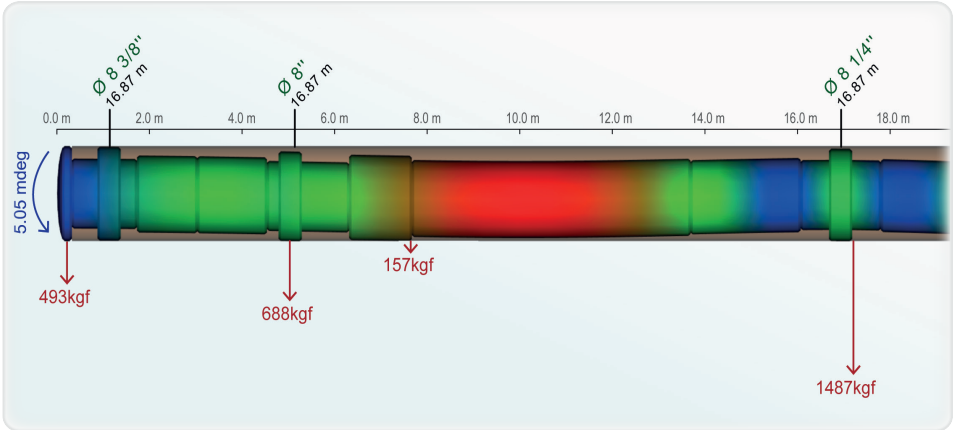
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Objectives

- Challenge service companies bit-BHA proposal to improve directional performance
- Anticipate the coupled bit-BHA directional performance against rock strength
- Improve design of the bit-BHA to reach the directional objectives
- Provide the best bit-BHA solution without compromising ROP

Benefits / Pre-Well Real Time

- Independent benchmarking of directional drilling solutions
- Accurately model all BHAs and reduce the number of days required to drill a well
- Achieve shoe-to-shoe drilling with a single BHA
- Reduce the cost per foot by choosing the correct bit-BHA (RSS BHA are not needed every time!)



Deflection, tilt, bending stress and contact points of an RSS BHA

Includes

- Bit-Rock interaction model, steerability assessment, accounting for formation UCS
- Fixed & Equilibrium curvature calculations
- Modelling of all types of RSS, steerable motors, URWD and VGS systems
- Sensitivity analysis on multiple parameters (hole overgauge, inclination, WOB, TFO, Stabiliser gauges and positions, etc...)
- Optimisation of sliding/rotating or activation pattern

Deliverables and Timing

- Earliest result delivery within 4 days after reception of full and usable set of data
- Delivery of final PowerPoint® or written report within 2 weeks, intermediate reports on demand
- Result support from our most experienced Drilling Champions, upon request
- Result presentation in client's office (optional)
- Real-time support available onsite or remotely (optional)