

# Wellbore Trajectory Prediction

Ref: DD04

## Objectives

- Predict coupled bit-BHA directional behaviour before the run
- Evaluate and mitigate the BHAs disposition to create detrimental borehole oscillations
- Optimise BHA design and drill bit selection
- Identify and avoid sensitivity to multiple operating parameters
- Determine unknown reasons for counter performance in a post-mortem process

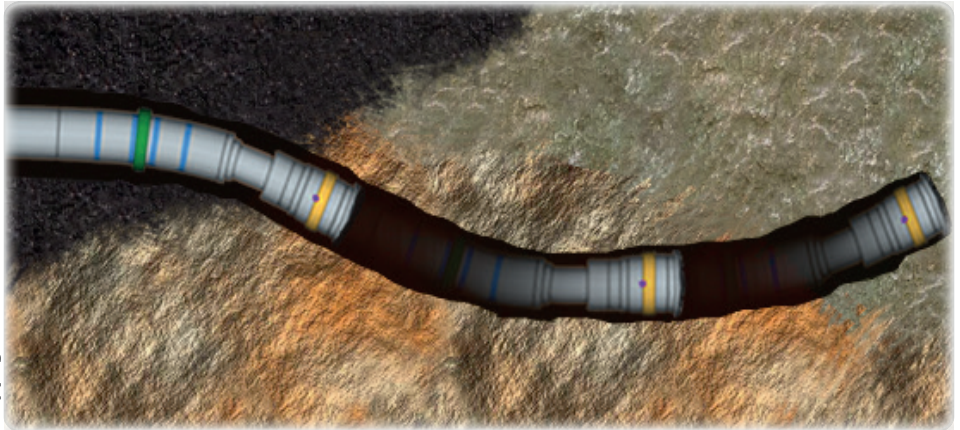
## Benefits /

Pre-Well

Real Time

Post-Well

- Implement the most cost efficient mitigation measures to increase your drilling performance
- Reduce NPT and hidden lost time by avoiding effects of hole spiralling and increased friction
- Reduce borehole tortuosity to ease RIH operations hole for future casing or completion operations
- Reduce uncertainty on drill-ahead and landing strategy (e.g. in complex geology)



Step-by-step computations accounting for coupled bit/rock formation and BHA interaction

## Includes

- Bit-Rock interaction model, steerability assessment, accounting for formation UCS; Interbedded geology; Dip & Strike effect
- Optimisation of sliding-rotating/activation pattern and directional drilling parameters
- Sensitivity analysis on multiple parameters (hole overgauge, inclination, WOB, TFO, Stabiliser gauges and positions etc...)

## Deliverables and Timing

- Result delivery within agreed days after reception of full and usable set of data as a function of well count
- Delivery of final PowerPoint® or written report within agreed 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)