

# Advanced Annulus Barrier Qualification

Ref: WI04

## Objectives

- Combine DrillScan Casing Centralisation Placement service [WI03] with Curistec cementing expertise
- Qualify the cement sheath as competent safety barrier by ensuring uniform distribution and appropriate cement design
- Avoid abnormal annulus pressure developments during the life-cycle of the well
- Ensure appropriate stand-off along the shoe track and casing string by simulating centralisation
- Ensure proper choice of centraliser type and quantity to achieve a fit for purpose solution

## Benefits / Pre-Well Real Time

- Ensure proper well integrity for the well life-cycle combining DrillScan's and Curistec's solutions
- Improve safety by enhancing cement barrier effectiveness and meet company and legal requirements
- Prevent loss of production and/or reservoir damage by gas migration through insufficient cement
- Reduce hidden lost time and potential failure by suboptimal centralisation program or cement design
- Reduce costly cement integrity investigation and avoid remedial operation



Cement sheath barrier qualification along the casing string

## Includes

- Curistec cementing expertise (heat transfer, density, rheology, rock mechanics,...)
- Casing standoff simulation throughout the entire trajectory
- 3D deflection of the casing using unique stiff-string Torque & Drag & Buckling model
- Fit for Casing While Drilling purpose (optimise string design to achieve standoff and directional objectives)
- Advanced centralisers modelling (bow spring, rigid...) and placement recommendation

## Deliverables and Timing

- Earliest result delivery within agreed days after reception of full and usable set of data
- 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)