

# CASE STUDY

## Offshore: STACK GUARD™ Saves Drilling Contractor & OEMs Money

STACK GUARD™

### The Challenge

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A global drilling contractor was in the process of cold stacking one of its rigs and needed assistance in selecting the correct preservation fluid for their bonnets. Due to the uncertainty of the oil and gas market, the drilling contractor needed to ensure the preservation fluid would last a minimum of five years, the preservation fluid would not affect the bonnets performance once ready to start up again, and that the preservation fluid would prevent corrosion. The drilling contractor contacted Quaker Houghton, asking for our technical expertise in assisting their rig to choose the correct preservation fluid.

### The Solution

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Our experts went to the drilling contractor's site to discuss their needs during cold stack operations, in which we recommended our preservation fluid, STACK GUARD™. The drilling contractor selected our recommended product and filled the bonnet prior to being cold stacked in a non-climate-controlled warehouse. With the recent turnaround in the economy for oil and gas, the drilling contractor wanted to see if the rig could be reactivated into the field.

They hired a company that specializes in providing subsea engineers to drilling contractors to disassemble, clean, inspect and reassemble the bonnets/connector/Annulars. When the engineering company inspected the equipment, it was to their surprise that after seven years of being in the same fluid and not once being cycled through, the equipment was close to new condition. There was no need for rework or repair any seal grooves and zero corrosion present in the bonnets or internal components, saving the drilling contractor \$50,000 - \$75,000 per bonnet. With eight bonnets on the rig, that is a total savings of \$400,000 - \$600,000 and no downtime, resulting in additional savings.

### The Benefits

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- Long-term corrosion protection in liquid and vapor phases
- Long-term resistance to microbial infection
- Excellent lubricity
- Low temperature storage
- Compatible with BOP fluids, water-glycols and water-based subsea control fluids

### The Product

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STACK GUARD™ is a ready-to-use preservation fluid recommended for the internal protection of wellhead control stacks, motion compensation and other hydraulic equipment that, after periods of storage, will be commissioned to operate with water based hydraulic fluids. STACK GUARD™ incorporates corrosion inhibitors to provide both liquid phase and vapor phase corrosion inhibition, effectively preventing corrosion-taking place in and above the liquid level. This is important when pockets of air could be left in a system or hardware. STACK GUARD™ also incorporates lubricity Additives and can be used for FAT testing specifically of BOP control equipment.





The bonnets were in nearly new condition after being cold stacked with STACK GUARD™ for seven years

## Customer Testimonial

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"The BOP components have been sitting up for over 7 years with STACK GUARD™ fluid being the preservation medium. These components have not been cycled since the bonnets were preserved. All of the components were basically in as-new condition and all that was required to be reassembled was to wipe things down with clean rags and some penetrating oil, along with new seals."

- Director of Operational Excellence at the contracted engineering company

