Case Study - QA/QC Inspection

Quality Management Program for Downhole Tools in Deepwater Drilling Program

Challenge
While preparing for a multiple rig deepwater drilling program in the Gulf of Mexico, an operator identified the high risk of downhole tool failure and the associated impact on non-productive time and well integrity. To minimize this risk the operator recognized the need to develop and enforce their own fit-for-purpose standards and procedures for inspection, assembly, and testing of drilling and completion tools.

Solution
T H Hill provided the operator with a dedicated team of highly skilled personnel to develop minimum requirements and procedures for drilling and completion tools. A quality assurance program was created utilizing industry standards as a foundation and incorporating typical well conditions, drilling operations, lessons learned, and input from subject matter experts. The operator’s specification was communicated and shared with their vendors, and a group of dedicated field personnel, under the guidance and direction of a Project Manager, were charged with ensuring inspections, assemblies and testing complied to with the specification. An auditing program was also implemented to ensure all non-conformances were properly resolved by vendors to eliminate recurrence.

The team’s improved focus and understanding of the requirements resulted in a higher rate of identification and correction of non-conformances, which would have negatively impacted drilling operations.

T H Hill Advantage
Since its start-up in 2011, the dedicated quality assurance program has continued to drastically reduce non-productive time associated with quality issues. In 2014 the operator realized zero non-productive time due to quality issues. Over the course of a three-year period, T H Hill identified and corrected over sixty non-conformances categorized as extremely high probability of rig non-productive time equating to an estimated savings of over $60,000,000 for the operator.