

Major international operator uses Well Barrier Schematic workflows to successfully manage large well population

Well barrier principles provide a common approach to viewing well integrity, improving the consistency of managing well risks.

CHALLENGE

A major IOC sought a common approach to evaluate the mechanical integrity of wells.

SOLUTION

The Wellbarrier illustration tool, with Wellbarrier principles and Wellbarrier schematics, provided a comprehensive way to define and evaluate well integrity.

RESULTS

This consistent approach improved the efficiency, accuracy and speed of the processes for evaluating wells and managing risk.



Application

A multinational company adopted the Wellbarrier illustration tool, to manage its large and diverse well population—the tool was applied for deepwater operations. The well integrity team took the following approach to prepare Well Barrier Schematics for wells: well barrier training; data gathering, categorizing well groups and defining well barrier elements; well barrier schematic drawings and verification. The well barrier principles, with Well Barrier Schematics, provided a comprehensive method to define and evaluate the wells' mechanical integrity. The process was simple and readily applied to various well types throughout the entire well portfolio.

Benefits

- The software helped users to quickly reflect the status of the well barrier envelope and assured them that any planned deviations were in conformance and compliance with internal policy and local legislation.
- By utilizing the Wellbarrier illustration tool, as opposed to multiple Excel formats, a change in the barrier envelope could be documented offshore within minutes.
- The software is easy to use and enabled the rapid drawing of proposed barrier definitions. This provided a better understanding of the well barrier and well integrity status among stakeholders, streamlined approvals, and helped coordinate management of change documentation

Conclusion

With its well portfolio now effectively managed and operating more efficiently than ever before, the operator concluded that understanding and applying well barrier principles should be considered a fundamental skill of every petroleum engineer.

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