Wellbore Integrity SOLUTIONS

Cased Hole Fishing Success: Mastering the Retrieval of Upper and Intermediate Completions Offshore of Brazil

Precision Recovery Strategy Implemented for Stainless Steel Completion Using Advanced BHAs.

Successful fishing operation saves cost and run time.

Wellbore Integrity Solutions' (WIS) Red Baron team meticulously planned the recovery operation to successfully retrieve the upper and intermediary completions, which included a Tubing Seal Receptacle (TSR) Mandrel made of 4305 stainless steel with a Hydraulic Packer Hidrow One, and a TSR of 4630 stainless steel with a ratch latch locator anchor assembly. The objective was to complete this operation with minimal runs and within a short time frame, which was achieved in approximately five days. To address this challenge effectively, the operation was strategically divided into two stages.

A carefully planned stage approach for operational completion.

In the first stage, the initial Bottom Hole Assembly (BHA) was equipped with an 8 1/8 inch overshot and a 4 3/8 inch OD Nitralloy grapple. The fish recovery process began cautiously, with overpull increments of 10 klbs every 10 minutes, avoiding jarring until reaching 145 klbs. Minimal movement of approximately 7 meters was observed until the jar was activated, releasing the packer after only three impacts.

In the second stage, the BHA was equipped with an 8 1/8 inch OD overshot and a 4 5/8 inch OD Nitralloy grapple. The recovery process continued with similar overpull increments until reaching 170 klbs. The successful recovery was confirmed by observing a free anchor, resulting in the retrieval of 100% of the fish at the surface.

CHALLENGE

To efficiently recover both the upper and intermediary completions, the operation involved the following components: a Tubing Seal Receptacle (TSR) Mandrel made of 4305 stainless steel and a Hydraulic Packer Hidrow One, as well as a TSR Mandrel made of 4630 stainless steel with a Ratch Latch Locator Anchor Assembly. The objective is to minimize the number of operational runs and overall time.

SOLUTION

- Leveraged WIS' expertise in recovering TBR/PBR assemblies, stainless steel components, and ratch latch seal assemblies.
- Utilized advanced components, including Nitralloy grapples.
- Divided the operation into two stages to optimize two BHA configurations.
- Planned precise overpull increments of 10 klbs every 10 minutes.
- First completion string: Executed recovery meticulously, omitting jars until 145 klbs of overpull.
- Required only three jar impacts for release after securing the fish.
- Second string operation mirrored the first: Achieved release at 170 klbs of overpull.

RESULTS

- Achieved 100% successful fish retrieval as planned.
- Received customer praise for precise and efficient execution.
- Earned full customer confidence and satisfaction with team support, both on-site and in the office.