

An Efficient Solution to Cut and Pull Casing, Offshore Indonesia

An innovative, motorized casing cutter BHA, enabled the use of a snubbing unit in a plug and abandonment (P&A) campaign instead of a conventional rig.

CHALLENGE

To achieve cost efficiencies in a P&A campaign, a customer wished to consider the use of a snubbing unit instead of a conventional rig as the difference in spread costs was significant. The ability to cut the casing was also an identified risk, due to the limited power and torque capabilities of the snubbing unit.

SOLUTION

An innovative, motorized casing cutter BHA was proposed to the customer to execute the job. The use of this BHA configuration allowed sufficient power to the cutter to ensure a successful cutting operation.

RESULTS

- A significant cost-saving solution was implemented successfully.
- The motorized BHA resulted in a successful cut in a few minutes with positive indication observed at the surface.
- The 9 $\frac{5}{8}$ inches casing was also subsequently retrieved successfully.



The Wellbore Integrity Solutions (WIS) team in Indonesia successfully completed a 9 $\frac{5}{8}$ casing cut and pull operation using a snubbing unit.

A major customer in Indonesia was assessing cost-efficient solutions for a P&A campaign. The use of a snubbing unit instead of a Jack Up Rig was considered to be a good solution to achieve cost objectives. The Wellbore Integrity Solutions team in Indonesia completed a thorough analysis and risk assessment in collaboration with the customer to provide an optimized solution for casing cut and pull operations. One of the biggest challenges was how to deliver the torque requirements with the power limitations of the snubbing unit. To enable the casing cutting operations, the team proposed the use of a mud motor run in tandem with the hydraulic casing cutter. The cut was made successfully in a few minutes with a positive indication of cut observed at the surface. The casing was also subsequently retrieved without issue. This solution provided significant cost savings to the customer.



WIS hydraulic casing cutter tandem with 7 inch OD mud motor.

Casing cut successfully after a few minutes.