



Technology in Action



Peak Power Jar

Major International Oil Company, Angola

Technical Challenge:

Retrieval of equipment lost in the well and fast-track production restart.

Well Type:

5 1/2" oil producer (66degree deviation at 2,977m / 59.8degree deviation at 2,039m).

Peak Solution:

Peak Power Jar, HD-FRC Pulling Tool & Non-Releasable Overshot

The Challenge:

While trying to mill a Parker Sub at 2,562m using an E-line conveyed Tractor and Mill Assembly, the toolstring became stuck. The E-line cable head weak point was pulled and all wire was recovered leaving a very expensive fish in the well with locked-in production.

The major task was to cover the high cost rental Tractor and Mill Assembly stuck in the well so that milling operations could be resumed and the well returned to production.

Considerations:

There were delicate components to the Tractor and Mill Assembly and jarring too hard too soon would potentially break the tools and make further fishing extremely difficult.

Prior to the fishing package deployment and in conjunction with a UK service company, Peak conducted several onshore acceptance tests to determine best grapple point and simulate the jarring/recovery operations. All of the tools were tested successfully and the Peak UHD package was utilised.

Summary:

Peak designed, manufactured and tested contingent recovery tools including a 4.5" Extended Overshot to fish 4" OD, also a 3.35" Non-Releasable Overshot to engage 1.46" OD, and a 3.150" Non-Releasable Replacement Rope Socket to engage the 1" Titan Fish Neck to facilitate heavy jarring.

A UK service company was mobilised to supply the Peak Ultra Heavy Duty (UHD) fishing package with a Peak Systems Specialist. Operations commenced and the Peak 3.35" Non-Releasable Overshot with Dual HD Fish Neck (2.375" - 2.5" Slips) was planted onto the fish. The Peak 2.6" HD-FRC Pulling Tool with 3.2" Integral Bell Guide was then run to engage the Non-Releasable Overshot.

At surface, the Peak Power Jar was set to fire at 1,500lbs. The Power Jar was fired 37 times downhole and the Tractor and Mill Assembly was recovered successfully.

Value to Customer:

All operations were carried out without delay or incident and the high cost rental tools were recovered, allowing the well intervention programme to be resumed, returning the well to production.

For more information please contact: info@peakwellsystems.com

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