

Case Study

Bespoke Products

Bespoke Solution to Release Tubing Conveyed Perforating Guns From Suspension System in Highly Deviated Well

The Challenge

Tubing Conveyed Perforating (TCP) Guns deployed in a highly deviated well failed to release from the suspension system after detonation.

The gun suspension system incorporates a contingent release mechanism, however, the shifting tool used to activate the suspension system became stuck in the shifting profile whilst releasing the guns, resulting in the full weight of the suspended guns being taken up by the wire. This lead to an inevitable wire breakage and resulted in a difficult and expensive fishing operation for the customer with significant NPT.

Considerations

The following key requirements and concerns were highlighted:

- Should be simple and easy to redress
- Must work in a sand environment at high angle
- Solution must be quick and easy to deploy so maximum production can be reinstated in the shortest possible time
- Must apply sufficient force to activate the gun suspension system release after the wire and toolstring have disconnected



Location: Offshore Russia **Customer:** International Oil

Operator

Well Type: Highly deviated,

high-rate gas well

Products/Services:

Custom designed 7-in Activation Tool

Zero

Wire breaks during operation



Successful integration with existing tractor system



Peak's Solution

Peak designed, manufactured, and tested a custom designed Activation Tool that could be run on slickline or braided line, together with the required shifting tool.

Upon landing on the gun suspension system, downward jarring was applied to the Peak Activation Tool in order to release the Activation Tool from the wire on which it was run.

Further downward jarring enabled the Peak Activation Tool to manipulate the shifting tool in order to release the gun suspension system.

As the wire used to transport the tools downhole was no longer physically attached to the tools, the Activation Tool, shifting tool and gun suspension system could all move down the wellbore without the fear of breaking the intervention wire/cable that would otherwise result in a difficult fishing job and prolonged non production time (NPT).

Value to Customer

All operations were carried out safely and efficiently:

- Production on the well commenced immediately after the operation was carried out
- The Peak Activation Tool can be deployed on slickline, minimizing cost and rig time
- Peak mobilized at short notice as the client had anticipated this scenario and ordered the tool in advance
- The Peak Activation Tool successfully integrated with existing tractor system



▲ Customized 7-in Activation Tool

Product: Customized 7-in Activation Tool

info@peakwellsystems.com

© 2019 Peak Well Systems Pty Ltd. All rights reserved. This material and everything contained herein is the property of Peak Well Systems Pty Ltd and is prepared for information purposes only. Nothing contained within these materials shall be treated as a representation to be relied on by any person or an offer for sale or contract of any kind whatsoever. Any reproduction or distribution without the express written consent of Peak Well Systems Pty Ltd is strictly prohibited.

