Case Study
84 Hours Operating Time Saved with I-Wheel™ Tandem Sub

Challenges

A client in Texas wanted to deploy a tool string for an oriented perforating pumpdown operation involving over 127 runs. To avoid damage to the fiber and control lines, the tool string needed to maintain an orientation within a 20° window. A means of optimally orienting the tool string and reducing friction was required.

Solution: I-Wheel™ Tandem Sub

The I-Wheel™ Tandem sub reduces friction when deploying tool strings into horizontal wells. As the I-Wheel™ is able to rotate around the tandem sub shaft, it dramatically reduces the torque required to orient the tool string. This feature assists with rotating the guns to shoot in the desired orientation.

An additional benefit of the I-Wheel™ Tandem Sub is the lift provided along the tool string. Lifting the tool string off the low side of the well greatly reduces sensitivity to debris and facilitates running in hole and pulling out of hole.
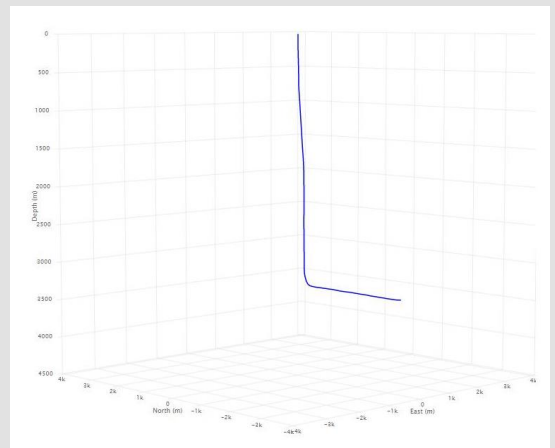
Success in 127 Runs Over Two Well Pads

Impact Selector recommended strategically placed the I-Wheel™ Tandem Sub throughout the gun strings deployed in all 127 runs to ensure successful orientation.

The first-time success rate for gun orientation in earlier operations without the I-Wheel™ Tandem Sub was only 50%. Using the I-Wheel™ Tandem Sub in the string resulted in the guns being oriented correctly on the first attempt 95% of the time.

Remedial activity to correct unsuccessful gun orientation typically requires significant additional operating time, pumping time, and consequently higher volumes of fluid usage. This results in significantly increased cost to the client. Ultimately, the I-Wheel™ Tandem Sub saved the client 84 hours of operating time and logistical benefits.

Method now adopted as SOP for future customer wells.

SMART Planner™ model of well profile.
Total depth of the well was14,900ft / 4542m

Impact Selector Products/Services
• I-Wheel™ Tandem Sub

Data Sheet

PDF

I-Wheel™ Tandem Sub