

InflataLOK™ Enables Rigless Offshore Installation of an Insert-Progressing Cavity Pump in Nippleless Tubing.

Challenge

A major operator required the installation of an insert progressing cavity pump (I-PCP) in 3-1/2" production tubing to bring a suspended well into production. The project took place on an offshore platform in South East Asia. Although the production tubing did have a pump seating nipple (PSN), it was not utilized due to concerns of corrosion and mechanical integrity for flush by operations. A J-slot (weight set) I-PCP anchoring device represented a risk due to the well profile with setting depth of around 3,600ft MD and 51 Deg inclination. Another challenge was limited control of axial loads as the operation was conducted using a barge crane with sea state making an impact.

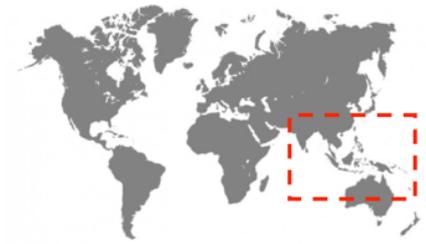
Solution:

The solution for this challenge was IPI's **InflataLOK™***, which is the world's first nipple-less I-PCP anchor system utilizing inflatable packer technology. It was designed for rigless deployment in extended-reach deviated applications where rods cannot provide the required axial loads to set a J-slot anchor mechanism or in wells where PSN's have not been installed. However, its ease of use and reliability is proving it as an optimal solution for most I-PCP installations.

The system provides a method for sealing and anchoring an I-PCP by utilizing inflatable packer technology in conjunction with a hydraulically-actuated slip mechanism. The system is set by applying differential pressure within the tubing annulus, which is made possible by incorporating a set of seal cups. Its setting sequence has 4 distinct steps, which are all pressure activated (seal packer, grip packer, anchor slips, and intake sub). Mechanical integrity is confirmed by holding pressure within the tubing against the inflated packers prior to activating the intake sub. Once tubing integrity is confirmed, the final pressure step causes the intake sub to open, which provides a non-tortuous internal flow path allowing the operator to complete the I-PCP space out and place the well into production.

Results / Created Value:

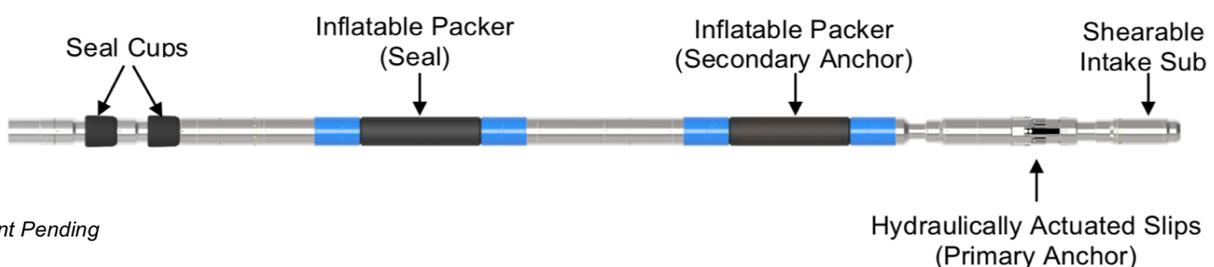
The I-PCP was successfully set and tubing integrity was confirmed in a single run using **InflataLOK™**. The client was able to bring the well back into production without having to bring a rig to site. The operation was successfully executed in a timely manner without operational issues, which generated substantial savings in operational time and costs.



Region: Asia Pacific
Customer: Tier-1 Operator
Well Type: Oil Producer

Key Facts:

- Field Proven in Asia Pacific
- Field Proven in the Middle East
- Available for 2.875", 3.5" and 4.5" production tubing
- Successfully deployed offshore and onshore
- Confirms Tubing Integrity
- Non-tortuous flow path.
- Provides axial and radial anchor



*Patent Pending