



PERFORMANCE BULLETIN

DSI’s PBL® Bypass System was deployed by a major operator during a workover operation offshore the Oceania region. The PBL tool was cycled multiple times in order to boost circulation to clean out the wax residue from the ID of the casing. Additionally, by activating PBL’s auto-lock feature to drain the string while tripping out of hole, the operator was able to increase the tripping speed and save considerable rig time by not having to use a mud bucket.

Overview

The DSI PBL circulating sub was requested by a major operating company through a leading service company contracted to perform WBCU and milling operations. A 4.3/4"OD PBL Dual Port Auto-lock Bypass system was mobilised for this project and the tool was included in the string design as a contingency measure to boost circulation, if required.

Project summary: Re-entry / workover offshore. Performing jetting sub, scraper and milling operations w/- various BHA configurations in 867.50m of liner in well inclination of 31-82 degrees.

PBL operation

The operator had highlighted the presence of extensive wax build-up in the casing string. Phase one of the operation consisted of performing a rotating jet assembly operation to clean the wax residue from the ID of the casing. However, due to circulation restrictions on the jetting sub, the contractor was unable to circulate high enough flow to generate the annular velocity needed to clean the hole. The operator made the decision to activate / open the PBL tool after each jetting operation to divert the flow through the PBL tool, hence allowing greater circulating rates needed to clean the hole. PBL positioned higher up in the string above the jetting sub.

Results / Benefits

- The PBL tool was successfully functioned and cycled open and close 5 times during the workover campaign at various depths in order to boost circulation and clean the annulus.
- The PBL tool was locked open during one trip out of hole due to the string pulling wet. **The tripping time was significantly reduced** since the mud bucket was not required during connection breaks. **This resulted in substantial savings for the operator as well as creating a safer operating environment on the rig floor (no mud spillage and one tool less to be operated on the rig floor).**
- The operator was extremely impressed with the PBL tool’s performance as well as its simplicity of operation and will most likely use it again for its future campaigns.



Workover operation offshore – Oceania region



DSI PBL auto-lock feature in action. Draining the string while tripping out of hole.

The PBL Bypass System demonstrated its value to the operator by delivering the circulation boost needed to clean out the residual wax build-up from the casing ID when the jetting operation alone was unable to achieve the required outcome. Additionally, activating the auto-lock feature of PBL tool enabled the operator to save valuable rig time by draining the string while tripping out of hole, hence eliminating the need to operate a mud bucket during the connection breaks.