

DSI's PBL® Split Flow Technology Marks Major Milestone in Hole Cleaning Efficiency in Malaysia



Challenge

DSI recently achieved a major operational milestone by completing a successful hole cleaning operation using the 4 3/4-in. PBL® Split Flow Bypass Tool in the 6-in. section of a well for a major operator in Malaysia. This marks the first deployment of DSI's Split Flow technology in the country, reinforcing the tool's reputation for reliability and adaptability in demanding drilling applications across Southeast Asia.

Execution

The 6-in. section was drilled to total depth (TD) of 7,900 ft MD, with the 4 3/4-in. PBL® Split Flow Circulating Sub, which was strategically placed in the bottomhole assembly (BHA) to provide flexibility in circulation and improve wellbore cleaning efficiency.

Following drilling operations, the well was backreamed to the 7-in. liner, at which point the PBL® tool was activated. A dart was deployed, successfully landing in the tool seat and shifting the sub into Split Flow mode.

Once activated, 78% of the flow was diverted through the PBL® ports, while 22% continued through the lower BHA, creating a balanced circulation pattern that optimized hole cleaning without compromising BHA cooling or downhole pressure management. By increasing the flow

rate to 600 GPM, a **114% improvement**, the operation achieved effective jet cleaning of the liner top, efficiently removing cuttings and debris in a single trip. This eliminated the need for additional circulation runs and significantly improved operational efficiency.

Results & Benefits

The deployment confirmed the robust performance and reliability of DSI's Split Flow technology under challenging downhole conditions. By combining high flow capacity, responsive activation, and precision flow diversion, the PBL® tool demonstrated its capability to enhance wellbore conditioning and reduce overall nonproductive time (NPT).

The success of this operation was the result of close collaboration between the operator's drilling team and DSI's global engineering group, whose real-time technical support ensured flawless execution from planning to completion.

This milestone establishes a strong precedent for the broader adoption of DSI's Split Flow system across Malaysia and the wider Asia-Pacific region, offering operators a proven solution for improving hole cleaning efficiency, managing circulation, and maintaining well integrity in complex drilling environments.

