# **PERFORMANCE BULLETIN**



# A major Norwegian operator controlled severe losses by performing cementing operations through the PBL<sup>®</sup> Bypass System, saving huge amount of time and money.

## Challenge

While drilling the 12 <sup>1</sup>/<sub>4</sub>" hole section, a major Norwegian operator faced severe loss of circulation. The challenge was to implement an efficient cementing operation to cure the losses, while also cleaning any remaining cement from inside of the drill pipe. This procedure would minimize NPT, prevent an unwanted and expensive trip out of hole and maintain clean internal conditions within the workstring.

#### Solution

DSI's agent in Norway, TFS Services, supplied an 8 ¼" multi-cycle PBL<sup>®</sup> circulating sub, which was positioned approx. 35m above the bit. Placing the PBL<sup>®</sup> sub within the lower BHA allowed the cement to be placed as close as possible to the lost circulation zone. Once the cement had been displaced to the correct position, two sponge balls would be pumped down the workstring in order to ensure that any cement contamination was removed.

# **Execution & Results**

- The cement was successfully placed across the lost circulation zone through the activated PBL<sup>®</sup> sub,
- The sponge balls successfully cleaned the drill pipe, exiting to the annulus via the open PBL<sup>®</sup> sub, which was fitted with enlarged side ports,
- Following deactivation of the PBL<sup>®</sup> sub, full returns of drilling fluid were seen to surface when breaking circulation,
- Firm cement was drilled to TD, the losses were cured and the 9 7/8" liner was successfully run to the total depth and set,
- At least one dedicated trip was saved by displacing the cement and sponge balls through the open PBL<sup>®</sup> sub.

## **Conclusion & Recommendation**

The PBL<sup>®</sup> circulating sub successfully confirmed the feasibility of performing cementing operations and cleaning the drillpipe in one single operation, eliminating at least one round trip and saving the operator approximately \$200,000.