# **PERFORMANCE BULLETIN**



**PBL®** Multiple Activation Bypass System was successfully utilised in drilling the entire length of a problematic well section without experiencing stuck pipe, resulting in saving multiple days of rig time and money.

#### Challenge

An E&P company was drilling an exploratory well in the Northern region of Pakistan. Drilling through a carbonate formation in a 12-1/4" hole section, total losses were observed with gas influx. Initially, LCM was pumped through the string which was later plugged. This situation did not allow the operator to POOH as no circulating tool was installed in the BHA. Several days were spent trying to control the losses through the annulus. Finally, the DP had to be perforated to establish circulation prior to POOH. It took several days for the operator to resume drilling operations, resulting in a major loss of rig time as well as the loss of expensive drilling fluid.

It is pertinent to mention that the operator had to drill 250m of the remaining fractured formation.

## Solution

The PBL<sup>®</sup> Multi Activation Bypass System with extended catcher sub was made part of the next drilling BHA.

## Execution

- A PBL<sup>®</sup> sub with extended catcher was used, allowing for 10 full cycles if required. The operator observed losses several times but was able to successfully handle the losses by displacing LCM through the PBL<sup>®</sup> sub ports.
- The following advantages were gained by using PBL<sup>®</sup> subs:
  - Losses were cured in a timely manner,
  - The section was completed within the stipulated time frame,
  - The PBL<sup>®</sup> sub was functioned 7 times using activation/deactivation balls,
  - NO component of BHA was damaged due to LCM pills, Use of the extended catcher sub prevented the need to POOH, due to the high number of cycles available.

#### **Conclusion & Recommendation**

Having DSI PBL<sup>®</sup> subs in the drilling BHA can enable operators to handle losses in a timely manner, which ultimately results in major saving of rig time, as well as the continuous loss of expensive drilling fluid. The DSI PBL<sup>®</sup> Multiple Activation Bypass System should be made an essential component of the drilling BHA.



BYPASS SYSTEMS BY DSI