



CHALLENGE

A major operator in the Danish North Sea required a plug to be set in the upper tubing of their well. The initial set of the plug did not pass the pressure test due to CaCO_3 scale in the tubing. The customer considered using an i-broach & brushes on slickline and/or jet/bead blasting on coiled-tubing to remove the scale. However, due to the successful use of WASP® to efficiently remove scale on 30 previous wells for the customer, the delays caused by mobilizing other equipment & the probable duration of the operation, they decided to immediately mobilize WASP® instead.



Scale Removal

HIGHLIGHTS

4-1/2" tubing
 CaCO_3 scale

CONDITIONS

Depth: 115 m (375 ft)
Temperature: 20 °C (68 °F)

OUTCOME

- Blue Spark, the Wireline provider and the client's teams were able to load out the equipment and personnel in one day
- The modular, compact design of WASP® allowed the entire kit (with backups) to be flown in one helicopter trip
- WASP® cleaned the scale from the tubing section and tubing hanger, resulting in a successful plug set and test
- 4 days of rig time and considerable cost were saved

"Great teamwork by all at TEPDK, Altus and Blue Spark to get the personnel mobilized to Denmark and the WASP® tool loaded to the rig out in such a short timeframe. Flying this tool out via chopper allowed operations to continue without extensive delays and the WASP® tool solved an issue that could have otherwise taken up to 4 days longer to solve. The WASP® is an indispensable tool in our scale remediation package – we have great confidence that it can efficiently and effectively solve any scale issues we encounter. Thanks for your help. I look forward to working with you guys again".

- Dave Molony, Decommissioning Engineer,
Total Denmark

SOLUTION

Remove scale from the upper completion of the wellbore using electro-hydraulic pulsing technology

- WASP® equipment mobilized in 24 hours
- The WASP® 275 tool was transported by helicopter (including a complete backup set of tools) in a single flight to the rig (no special permitting required as there is no HAZMAT)
- A 7.5 m (25 ft) interval was treated in an operating time of 6.25 hours

