



CHALLENGE

A major North Sea operator had a SSSV that had been inoperable and the well had been shut in for several years. The SSSV flapper was stuck in a partially open position and it would not close or pass an inflow test. There was also a Wireline brush stuck below the SV flapper at an unconfirmed depth. Calcium Carbonate scale was seen in the flow tube area and in the tubing above the SSSV.

HIGHLIGHTS

Conventional oil field
Deviated well

LOCATION

Norwegian North Sea

CONDITIONS

Depth: 550 m (1,800 ft)



Scale Removal

OUTCOME

- An increase in control line returns was noted after the 1st WASP[®] run, indicating the flow tube and flapper were reactivated
- A successful inflow test was performed on the SSSV after the 2nd run
- Subsequently, the Wireline Brush was fished from beneath the SSSV, the well was perforated in 2 new zones and brought back online
- Production was commenced after being shut-in for several years

SSSV made operational again

Scale formed on top of flow tube



Photo provided by Operator

SOLUTION

Remove CaCO₃ scale from the SSSV to restore functionality using electro-hydraulic pulsing technology

- The Blue Spark WASP[®] 275 (Wireline Applied Stimulation Pulsing) tool was run on third-party E-Line with a No-Go so as not to contact the flapper
- The flow tube was cleaned during the first run in the well (the flow tube was now moving)
- The No-Go was removed and a second run was made to treat the flapper directly, as well as the entire length of the SSSV

