CHALLENGE

The well of a major operator in Equatorial Guinea was slugging and required a replacement of the Gas Lift Valves (GLV). It had been noted that scale was present during previous interventions. Acid was considered, but injectivity could not be established. A roller brush could not be deployed either, as the inclination of the GLM/GLV was too high.

HIGHLIGHTS

Offshore well
Horizontally drilled
Perforated/Sand Screen Completion

LOCATION

Equatorial Guinea

CONDITIONS

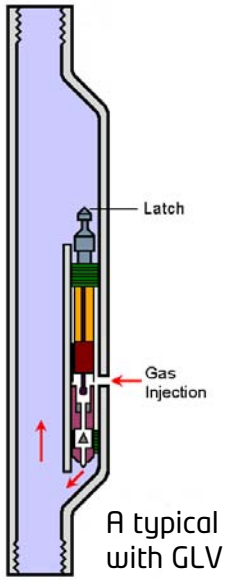
Depth: 6,000 ft MD (1,830 m)
Temperature: 60 °C (140 °F)

Scale Removal

OUTCOME

- Before running WASP®, three attempts were made with a wireline tractor/stroker combination to retrieve the GLVs, but none were successful.
- After only one treatment of the SPMs with WASP®, the tractor/stroker tool was able to retrieve both GLVs on the first attempt. For the lower SPM, this was due to the ability of WASP® to clear scale from the orientation sleeve and complex shapes like the GLV latch.

Scale successfully removed from the SPM and the GLV retrieved



A typical SPM with GLV

SOLUTION

Clean scale from the Side Pocket Mandrels (SPMs) to help retrieve the GLVs using electro-hydraulic pulsing technology

- The Blue Spark WASP® 275 (Wireline Applied Stimulation Pulsing) tool was run on third-party E-Line using a wireline tractor for conveyance into a highly deviated section of the well
- The lower SPM was treated followed by the upper SPM on the same run in the hole. The lower SPM was known to have scaling issues.
- For both SPMs, the orientation sleeve, the GLV latch area, and the GLV gas orifice were all treated
- A tractor/stroker run was made to retrieve the GLVs

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