

CASE STUDY

Restoring SSSV Integrity Through Targeted Scale Removal

THE CHALLENGE

A major operator in the Middle East was experiencing significant scale build-up within several Subsurface Safety Valves (SSSVs), impacting safety valve performance and increasing concerns around valve integrity.

Initial testing revealed that the SSSVs were not performing within their expected operating parameters. Failed Pressure Build-Up (PBU) tests and inconsistent control line fluid returns indicated that scale accumulation within the valves was likely affecting the functionality of critical internal components.

With safety valve integrity becoming an increasing concern, the operator required a cost-effective intervention solution capable of removing scale from critical valve components without the need for more complex and expensive remediation techniques.

THE SOLUTION

Oilenco mobilised its 4.500" Bullheading Jetting Sleeve, specifically designed to deliver targeted jetting to critical areas of the flow tube recess and flapper area within a Subsurface Safety Valve (SSSV) by bullheading treatment fluid through the tool from surface.

The Bullheading Jetting Sleeve features upper and lower jetting port subs that target specific areas within the safety valve, with fluid distribution determined by the applied pump rate. This ensures that fluid can be directed precisely to the areas most susceptible to scale build-up. To ensure deployment flexibility, the sleeve was supplied with a range of extension configurations, enabling the jetting ports to be accurately positioned within different OEM safety valve designs across the operator's field.

The sleeve was deployed on slickline and landed in the SSSV no-go profile prior to bullheading operations commencing. Once in position, fluid was pumped through the tool, with the jetting ports creating localised turbulence around the critical areas of the safety valve, helping to break down and remove scale deposits affecting valve performance.

VALUE CREATED

Following recovery of the Bullheading Jetting Sleeve from the first well, the SSSV was re-tested and successfully passed the inflow test. Expected control line fluid returns were also observed, confirming that valve functionality had been restored.

Encouraged by these results, the operator deployed the tool in a second well experiencing similar scale-related issues. Following bullheading operations, the sleeve was recovered and the SSSV integrity successfully verified, confirming effective scale removal and successful remediation of the valve.

The campaign demonstrated how the Bullheading Jetting Sleeve provides a cost-effective solution for restoring SSSV functionality while minimising operational downtime and preserving well integrity. Following the success of the intervention campaign, the operator has adopted the Bullheading Jetting Sleeve as its preferred method for SSSV scale remediation across the field.



FURTHER INFORMATION

call +44 (0)1224 548700 or email info@oilenco.com.