

CASE STUDY

SSX-SPAN™

Systems

CHALLENGE:

To lock Open SCSSV installed in a Mono-bore Subsea Completion in Deepwater Gulf of Mexico.

Provide positive lock with large serviceable I.D.

SOLUTION:

Unique one trip Intervention with the Owen X-Span® SST Suspension Hanger system, using Electric wireline for easy conveyance of the installation.

RESULTS:

Successfully locked open the failed SCSSV flapper .

Removal, analysis and replacement of the SCSSV.

Performed second successful deployment on another well.

OVERVIEW

An Operator in the Gulf of Mexico needed to lock open a Surface Controlled Subsurface Safety Valve (SCSSV) that had failed in the closed position. It was planned that the SCSSV would be removed and replaced during a future intervention. The SCSSV needed to be locked open without further damage to allow analysis of failure and eliminate the risk of flapper debris falling in to the wellbore causing issues with later interventions. Several options such as packers, thin wall expandable cylinders and special made collet tools were considered.

SOLUTION

It was decided to use the Owen Oil Tools SSX-Span Suspension system which has been successfully deployed in various applications to suspend tubulars and sand screens in well bores. The SSX-Span Hanger system for this application incorporated forty feet of the X-Span large bore sections with a muleshoe on the bottom of the assembly to ease passage through the SCSSV. The complete assembly was run on electric line with an Owen Oil Tools multi stage setting tool and GRCCCL for depth correlation.

RESULTS

The SSX-Span system was set above the SCSSV with the X-Span sections deployed across the failed SCSSV flapper providing a positive lock in the open position without further damage. The Operator performed the same intervention on a second well with the same requirements and successful results. The operator benefited from continued production until valves could be replaced during scheduled work overs.

Note: SPE -184805-MS

