eRED® Valves Yield Multimillion Dollar Savings

FIVE WELLS COMPLETED WITHOUT WIRELINE INTERVENTION

VIETNAM

CHALLENGES
Minimize HSE and well intervention risks while reducing OPEX and improving the timescale
- Complete six wells with minimal intervention
- Keep safety standards high

SOLUTION
Two deep-set eRED® valves were deployed in each well, one above and one below the production packer
- eRED valves used as remotely operated downhole barriers to perform a multitude of tasks

RESULTS
With seven-and-a-half day’s savings over the six-well campaign, the eRED valves delivered multimillion dollar savings to the project
- Saved 30 hours of rig time
- No well interventions while rig on critical path
- Zero HSE incidents

OVERVIEW
Talisman-partnered Thang Long Joint Operating Company (TLJOC) wanted to minimize HSE and well intervention risks while reducing OPEX on six platform producers in offshore Vietnam. All six wells were of similar design and followed the same basic program.

Halliburton deployed two remote open close deep-set eRED® valves in each well, one above and one below the production packer.

With each eRED valve tailored to perform multiple remote open/close sequences, five of the six wells were completed with no wireline intervention while the rig was on the critical path. With seven-and-a-half day’s savings over the six-well campaign, the eRED valves delivered multi-million dollar savings to the project and greatly reduced risk to personnel and the operation as a whole.

CHALLENGE
This project involved the completion, cleanup and suspension of six platform producers in the Hai Su Tran and Hai Su Den fields, offshore Vietnam, for the Talisman-partnered Thang Long Joint Operating Company (TLJOC).

The project objective was to minimize HSE and well intervention risks while reducing OPEX and improving the timescale. Should intervention be unavoidable, the mandate was to use a cost-effective, low risk option. In short, the aim was to complete all six wells with the minimum of well interventions without compromising on safety.

SOLUTIONS
Halliburton recommended the eRED valve, which can be remotely opened and closed without requiring any form of intervention, saving significant rig-time over conventional wireline plugging methods. All six wells were of similar design and followed the same basic program.
Two deep-set eRED valves were deployed in each well, one above and one below the production packer. The valves were preinstalled into their respective sub-assemblies and pressure tested onshore, before being run in hole in the open position.

In this configuration, the eRED valves were used as remotely operated downhole barriers to perform a multitude of tasks - such as tubing tests and packer setting - without any interventions.

Detailed upfront planning allowed parts of the operation to be carried out without the rig over the well - releasing it to work elsewhere. This method of working known as SIMOPS (simultaneous operations) provided additional operational benefits and efficiencies as wireline interventions could be performed off the rig critical path and more than one well could be worked on at any time.

RESULTS

With each eRED valve tailored to perform multiple remote open/close sequences, five of the six wells were completed with no wireline intervention while the rig was on the critical path. The features of the tool provided additional flexibility to the overall operation reducing the frequency and helping to ensure any critical intervention was carried out off-line under SIMOPS.

Seventy-two remote activations were carried out from a planned 76. With each activation eliminating an intervention or providing further operational efficiencies, 10 wireline runs were removed from the installation phase, resulting in an estimated 30 hours of rig time saved on each well.

An additional five wireline runs were also removed from SIMOPS on each well – a savings directly attributed to the operational flexibility of the eRED valves.

With seven-and-a-half day's savings over the six-well campaign, the eRED valves delivered multi million dollar savings to the project. Furthermore, by reducing the frequency of wireline interventions compared with conventional methods, considerable risk to personnel and the operation was also reduced.