CASE STUDY
Reference no. CS.CT.UK.WA

ALTUS Intervention

MAKING INTERVENTION SMARTER

COILED TUBING & PUMPING

Integrated services support multi-frac operation in UKNS

Country: UK
Year: 2019
Technologies: **Coiled Tubing ● Real-time Coil ● Live Link DynaSlot Tubing Punch ● Frac Plug Milling**

- Integrated service delivery model with coiled tubing and e-line services
- Reverse circulation cleanout through Real-time Coil
- Dynaslot system run in tandem to give required flow area
- Real-time data supplied via Live Link from offshore coiled tubing unit during operations
- Well brought successfully online post intervention operations

CHALLENGE

A major North Sea client initially completed a well to allow a total of four fractures to be performed to unlock production rate in a tight matrix dominated formation. The well completion had been designed to enable manipulation of frac and production sleeves and to allow the required frac treatments to be placed in the correct zones. However, after issues with the completion, a composite plug and punch approach was required to isolate and fracture each zone.

SOLUTION

Altus Intervention mobilised a 2-3/8" Real-time Coil (RtC) spread combining e-line and coiled tubing capabilities, with an experienced multi-disciplined crew who were able to utilise their skills across e-line logging, perforating and coiled tubing operations.

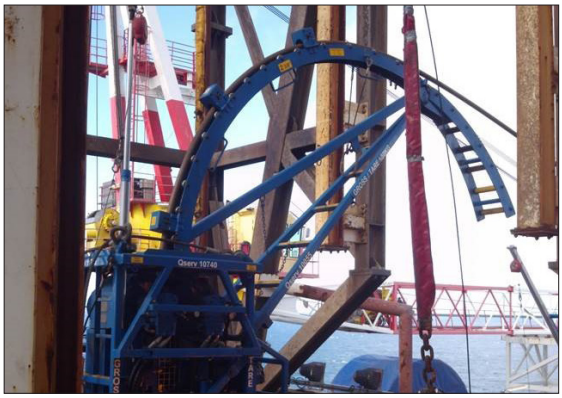
Each plug was set in a combined run with a tubing punch, minimising trips in hole. After each frac was completed, RtC tripped in hole and performed a reverse circulation cleanout. The RtC real-time downhole pressure gauge allowed the offshore crew to maintain BHP within strict operational parameters.

Following the completion of all frac zones a final cleanout was performed before all three composite plugs were milled out (no returns taken to surface).

During the intervention, the Live Link data transfer system was utilised to transfer all RtC parameters onshore in real-time. The live streaming data provided onshore decision makers with up to date information to optimise ongoing operations.

RESULTS

During the three-month campaign, 25 RtC trips in hole were completed with all data streamed live onshore. RtC plugged and punched four separate zones allowing proppant fractures to be pumped. Post frac, RtC removed 16Te of proppant through reverse circulation.



This successful intervention enhanced production from the well and proved the approach for future similar jobs in the field.

Our priority is to provide sustainable competitive solutions to our clients, and through this integrated approach we were able to deliver this whilst maximising operational efficiencies and mitigating risk.