

COILED TUBING

Integrated Services for Multi-well Coiled Tubing Campaign

Country: UK
 Year: 2021
 Technologies: Coiled Tubing • Real-time Coil • LiveLink • Fluid & N2 pumping • Thru-tubing tooling • Production logging & formation evaluation tooling • Downhole camera

MAKING INTERVENTION
SMARTER

- Four wells completed successfully with an overall production increase & minimal downtime
- Real-time data supplied via LiveLink from offshore coiled tubing unit during operations
- Well integrity issues remedied and in-hole problems diagnosed then solved
- POB optimised with multi-disciplined coiled tubing and logging crew

CHALLENGE

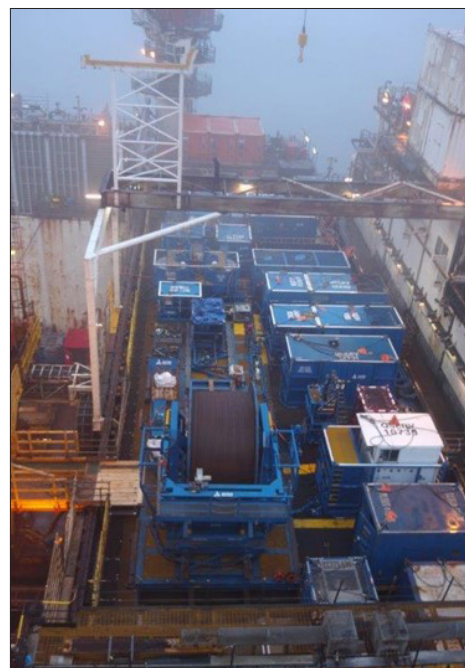
A major North Sea client required immediate remedial coiled tubing interventions on four wells to restore/enhance production:

Well 1 – deep well (> 20,500ft MD) with tree integrity issues and wellbore fill restricting potential production. Formation evaluation required to identify water/debris producing zones possibly affecting production.

Well 2 – tree integrity issues with fish in well restricting access to the reservoir. Formation evaluation required to determine remedial work.

Well 3 – barium sulphate scale blocking wellbore access. Liner ID analysis required to identify set depth for WSO plug.

Well 4 – large, mobile debris (from suspected liner breach) blocking access and production from the reservoir. SRO camera to examine SPMs and liner damage then formation evaluation to determine water/solids remedial requirements.



Coiled tubing equipment

SOLUTION

Altus Intervention mobilised a Real-time Coil (RtC) spread combining logging and coiled tubing capabilities with an experienced multi-disciplined crew who were able to utilise their skills across logging and coiled tubing operations.

Complementary technologies in the equipment spread also included a bespoke extended reach string to optimise operations and a suite of production logging tools to allow formation evaluation.

With tree integrity issues solved and access gained to the perforations, the RtC system c/w production logging and formation evaluation tooling was then used to identify areas of concern.

The suite of remedial options available included:

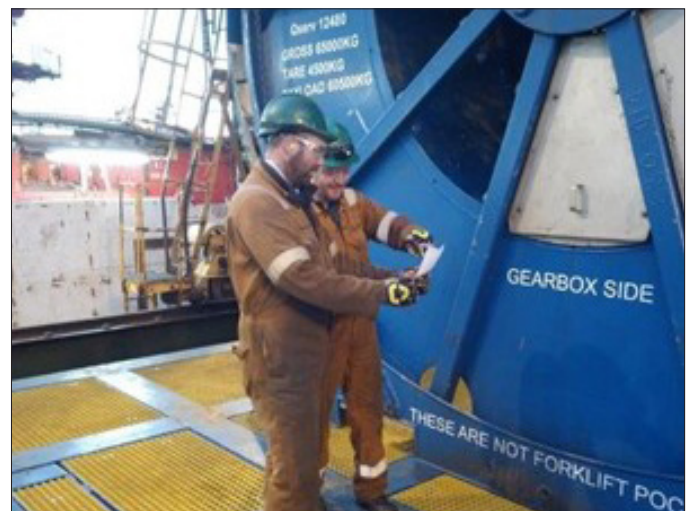
- Electrically set WSO plugs
- Insert screens
- Hang-off screens
- Perforating guns
- Dynamically under balanced guns
- Inflatable squeeze packer system

RESULTS

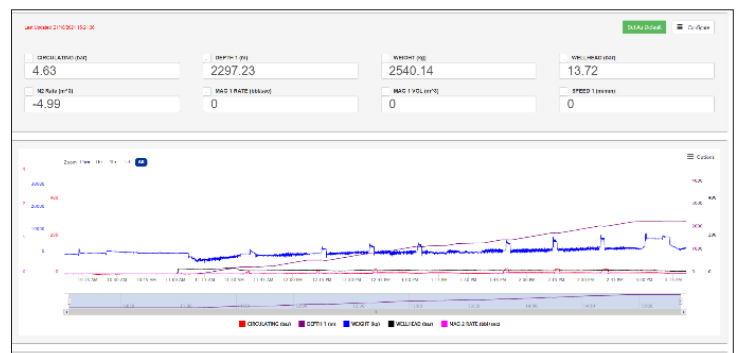
Integrity was restored on the required wells and all operations were successfully completed in a safe and efficient manner. The RtC combined with the intelligent LiveLink allowed for vital well data to be captured and maximised the capability and efficiency of each run.

The crew were praised highly by the client for their professional and can-do attitude and the addition of a mechanic to the crew was noted as a great benefit for the long campaign. Furthermore, the high standard of intervention equipment applied was also highlighted.

This integrated services approach allowed the client to have one point of contact throughout the operations, optimised POB, and ensured maximum operational efficiency for the client.



Multi-skilled Altus crew



Live streamed data: LiveLink and real-time downhole camera working in conjunction to identify downhole issues