

COILED TUBING

Real-time Coil operation enhances production from three platform wells

Country: UK

Year: 2020

Technologies: **Coiled Tubing** • **Real time Coil** • **Live Link** • **Perforating**

MAKING INTERVENTION
SMARTER

CHALLENGE

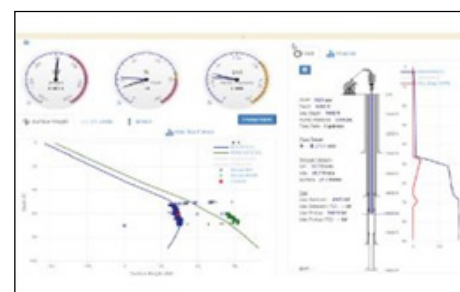
Production had declined from three wells in the North Sea. The Client suspected that asphaltene deposits and perforation scale build up was accountable for the decrease. To restore productivity, the client specified a cleanout and re-perforation campaign.

SOLUTION

The Altus Intervention team reviewed all well and platform data and recommended a 2" Coiled Tubing (CT) package enabled with the Real-time Coil (RtC) system. To ensure an efficient cleanout of the asphaltenes, the fluidic oscillator tool (FOT) was utilised, along with a targeted chemical treatment. With access gained to the perforations, Altus Intervention worked closely with our perforation partner to specify an integrated perforation system suitable for the wells.

Two out of the three wells allowed the perforation system to be surface read out correlated on depth, and the guns then fired electrically from surface. Due to ID restrictions in the completion of the third well, a more conventional approach was defined, with a Tubing End Locator (TEL) being used to provide accurate depth correlation before a hydraulic firing head was used to detonate the perforation system. To complete operations on each well, a CT gas lift was performed to bring the wells back in to production.

The integrated service provision of the conveyance, cleanout and perforation services allowed the team to mobilise a multi-disciplined crew, optimising POB.



Live Link with all relevant tool parameters seen in real-time

RESULTS

All well objectives were achieved during the 2-month campaign offshore. Each well was efficiently cleaned out using the FOT and targeted chemical treatment, with residual solids being lifted from the wellbore during the CT run. With access to the reservoir gained, the Altus team conveyed the perforation guns to target depth and in circa four intervals per well, re-perforated the required zones. Whilst operational, all job parameters were streamed live to the onshore team using the Live Link system. Access to this data enabled quick and effective decision making ensuring good job progression and minimised well downtime.

Throughout the scope, project challenges were overcome through efficient teamwork between all parties, allowing the objectives to be completed within the estimated time schedule.