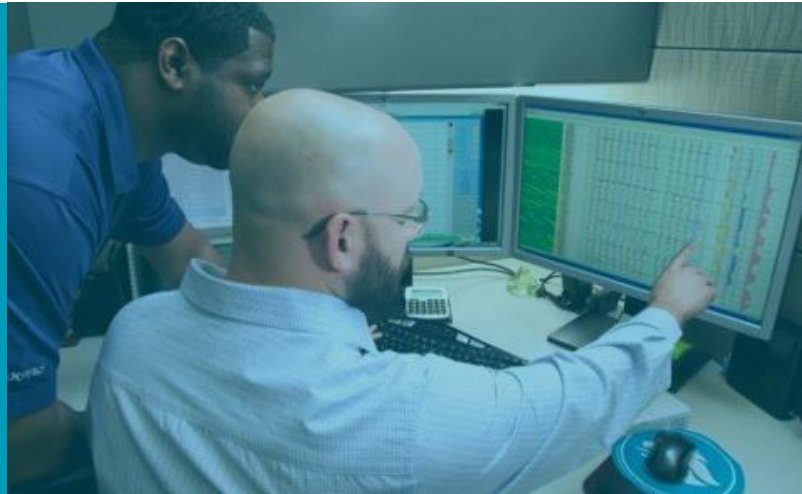


Expro Excellence

Expro Well Intervention elevates well abandonment candidate to the best producer in the field

Well Intervention and Integrity



Objectives and background

- A low-rate oil and high water cut well in a mature North Sea field was a potential abandonment candidate
- The customer elected to run behind pipe saturation monitoring to see if potential bypassed oil zones could be identified and subsequently produced
- The customer selected Expro's Pulsed Nuclear RAS service to evaluate changes in water and gas saturation behind pipe
- Interpretation would be performed within hours of data acquisition allowing immediate intervention with Expro's Bridge Plug or Perforating Services to either isolate water production or perforate into the bypassed oil zone

Expro Excellence

- Expro worked with the customer to model nuclear responses before going to the wellsite. This generated reference logs for the different displacement scenarios
- The surveillance program featured a simple capture log giving sigma data and inelastic capture ratios for water and gas identification
- Expro's QikView™ software was used for data integration, visualization and interpretation
- Expro analysts onshore processed the data as it was acquired allowing the customer to immediately move to Expro's Perforating Service to capitalize on the previously bypassed oil zone
- A wireline deployed perforation run was performed the day after the Pulsed Nuclear logging and the well put on production test the following day

Value to the client

- Expro's Pulsed Nuclear RAS Service was run and data interpreted within a day
- During the same rig-up Expro's Perforating Service was successfully run and the well placed back on production
- Post intervention, the following well performance aspects were observed:
 - A 25-fold increase in oil production – from 256 bbls/d to 6,290 bbls/d
 - The wells water cut was reduced from 88% to 11%
- This 2-day operation transformed an underperforming oil well into the best producer in the field, with the intervention costs recovered within days thanks to the significantly enhanced production

