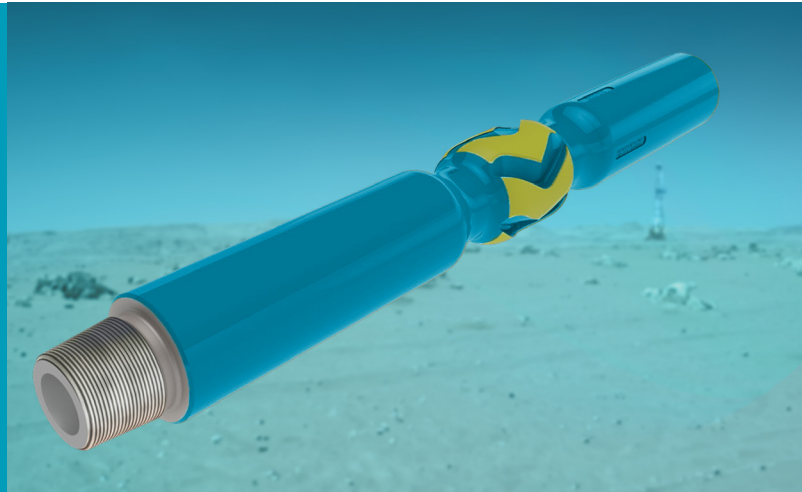


Expro Excellence

# CBI™ Tool significantly enhances hole cleaning for Middle East customer's record lateral 12 1/4" well

Well Construction | Drilling Technologies



## Objectives and background

- In this campaign, wells were designed to drill 12 1/4" lateral sections as oil pre-set wells to the 9 5/8" casing point in a field environment composed of limestone, dolomite, and anhydrite (Sulaiy and Hith formations). At 10,250 feet, the well was the longest lateral planned in the customer's history for this hole size. Without a proper hole-cleaning tool, this horizontal well would have experienced difficulty removing cuttings effectively. This inability might have resulted in a tight hole, stuck pipe, slower drilling, and/or excessive torque and drag on the drill-string, potentially preventing the operation from reaching total depth
- The objective was to sustain an 89° inclination from 11,002 feet to section total depth at 21,282 feet. All challenges of concern were associated with the hole cleaning process while drilling the long 12 1/4" lateral section

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- In response to these challenges, it was recommended to install 37 of the 5.5" Series CBI™ tools at a frequency of one tool per three stands on the 5 7/8" Drill Pipe XT-57

## Value to the client

- With the use of Expro's CBI™ tool, the customer was able to drill 10,250 feet of the 12 1/4" section successfully, without any hole cleaning issues (tight hole, stuck pipe, etc.). In comparison with an offset well the circulation time was reduced 10%, extensive reaming before each connection (twice per stand) was eliminated, and there was a substantial drop in pick-up weight as more CBI™ tools were exposed to the open hole section
- ECD trend significantly lower than simulated readings
- Open hole friction factor dropped from 0.40 at start to 0.25 at total depth
- Pill efficiency optimized from one pill at every stand, to one pill at every five stands
- No dedicated short/wiper trip performed due to thorough hole cleaning

### Safety



### Operational efficiency

