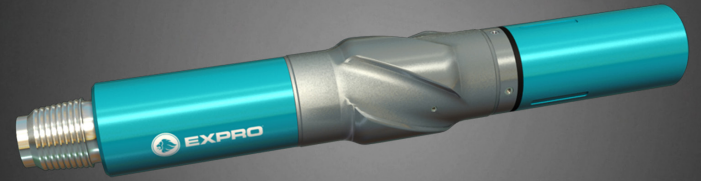


Expro Excellence

# HI TOOL<sup>®</sup> helps set global RSS record in 17 ½" vertical section for IOC in the Middle East

Well Construction



## Objectives and background

- Major international client sought a solution to improve the drilling performance while drilling 17 ½" vertical section with RSS
- High lateral shocks, BHA whirl and hole spiralling is commonly met while drilling vertical sections
- High drill string vibrations are the single most common cause for BHA failures
- The sensitive electronics in the RSS and M/LWD tools are directly affected by the shock levels. Bit performance, drilling parameters and ROP are also affected by high vibration levels through the drill string
- The customer took a proactive approach by planning to apply the right technology to diminish the drilling vibrations, eliminate NPT risk and improve the overall drilling performance

## Expro Excellence

- HI TOOL<sup>®</sup> was proposed as an optimum "fit for purpose" technology for our customer challenges
- HI TOOL<sup>®</sup> is a unique solution designed to mitigate lateral vibrations by dissipating the shock load to the wellbore away from the lower BHA
- HI TOOL<sup>®</sup> is designed to act as a flexible geared connection when placed in the BHA. HI tool allows for transferring uninterrupted efficient torque to the BHA and the bit after the shock load is dissipated through the blade body of the tool to the wellbore
- Having lateral shocks eliminated through HI TOOL<sup>®</sup>, more protection will be ensured for the lower BHA precious components. It will also allow the bit to drill while sitting steadily flat on bottom, which results in better cutting structure, wellbore quality and improved ROP

## Value to the client

- Experienced low level of downhole vibration which enabled the tool to last for 360 circulation hours and 432 operating hours which is considered a global record for 9 ½" RSS push the bit system
- The phase was completed in just 20 days, instead of the AFE planned 29, which is a remarkable improvement over offset wells of 50 - 65 days
- Helped to improve the overall ROP with steady bit cutting structure achieving 21.9 meters per hour

## Enhanced production

