Case study: Offshore, Vietnam

GaugePro Echo enlarged slim hole to set liner and save well

An operator offshore in Vietnam needed to set a liner in a challenging slim hole without compromising the drilling operation.

Baker Hughes was called on to open the 6-in. hole to 7-in., perform a sidetrack, set a 5-in. liner, and drill and ream a long lateral, all in one run. The operation had to be performed before the operator could resume production on the well, so time was critical.

The Baker Hughes team implemented a bottomhole assembly (BHA) consisting of the **GaugePro™ Echo digital reamer**, **AutoTrak™ rotary steerable system**, and **OnTrak™ resistivity Gamma Ray imaging service**. The GaugePro Echo reamer was digitally activated via downlink, and under reaming commenced. Throughout the under-reaming operation, tool performance and confirmation of the enlargement diameter was monitored in real time.

The GaugePro Echo Series 6 cut and reamed a total of 6,070 ft (1.15 mi or 1,850 m) with a 2.8° dogleg, using the rotary steerable AutoTrak system. The entire operation was performed smoothly in one run, with a ROP of 94 to 131 ft (30 to 40 m) per hour. No specification vibration was recorded and the 5-in. liner was set with no issues. This was the first time we had deployed our GaugePro Echo digital reamer in the Asia Pacific area.

Baker Hughes completed the job successfully with no operational risks, saving the well for this operator. Production was resumed in several days' less time than the operator anticipated.

The Baker Hughes GaugePro opened the hole to 7 in. and set a 5-in. liner with no disruption to the drilling operation.

Challenges

- Slim hole well with 2.8° dogleg
- Liner to be set with no operational disruption
- Short time frame due to halted production

Results

- Well opened successfully and liner set with no issues
- Cut and reamed a total of 6,070 ft in one run
- Saved production and several days of time
- Avoided operational risks