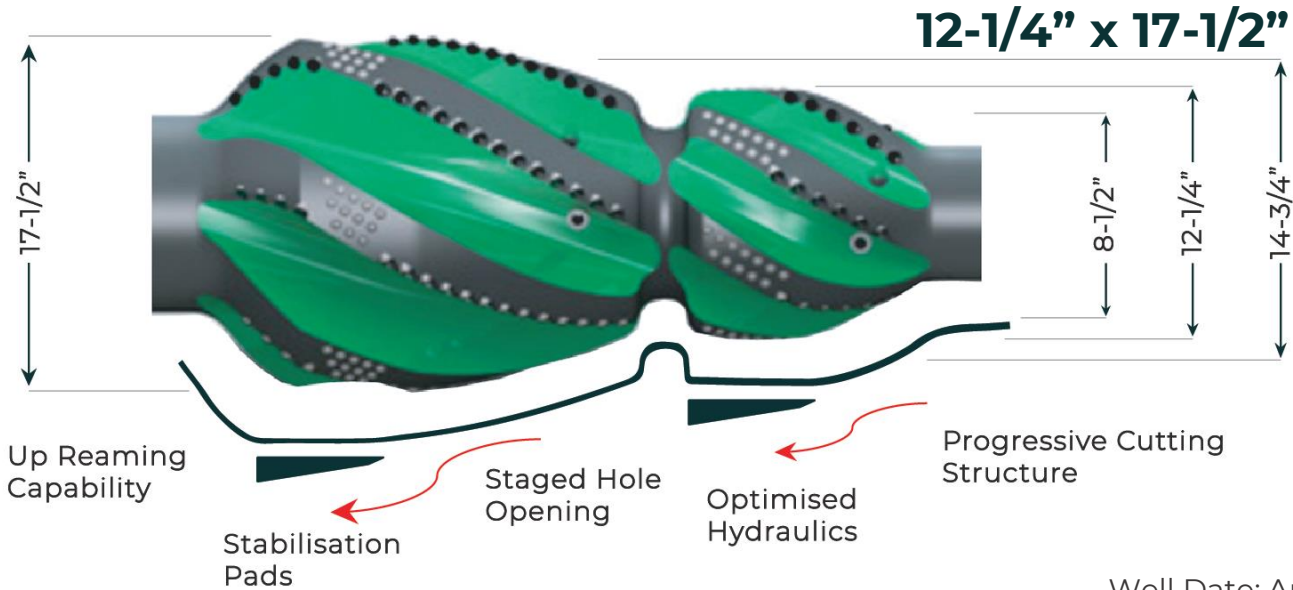


OMNI-MBR

OMNI MULTI BORE REAMER RUN HISTORY



Well Date: April, 2015

WELL Directional well in the **K5.4 (PCSB)**, SK302B field located in Offshore Sarawak, Malaysia.

WELL OBJECTIVE The objective of the well was to directional drill a pilot hole prior to opening up to 17-1/2".

HOLE ENLARGEMENT OBJECTIVE The hole was tracked and enlarged to 17-1/2" diameter to run and set the casing.

BOTTOM HOLE ASSEMBLY The OMNI-MBR multi staged opener was run with an 8-1/2" bullnose and 12-1/8" near bit stabilizer in tandem with the OMNI-MBR.

PERFORMANCE The OMNI-MBR hole opener tracked and opened **144 meters** to 17-1/2" hole from vertical at **0.54 degrees** inclination with rate of penetration of **26 m/hr** in one run.

DULL CONDITION The final dull condition was **1-1-WT-A-X-IN-NO-TD**. The OMNI-MBR was in a rerunnable condition.

- RESOLVES the parted to TD by previous hole opener competitor while maintaining stability.
- BHA design (Bullnose + HO) performed better than previous competitor BHA (Bit + HO) because with no cutting structure on Bullnose helped to guide the BHA into pilot hole without any formation engagement.

