SAMURAI Cutter, in ONE Single Trip, Enables Operator to: Install a Plug, Pump Cement, Displace a Well and Cut the Casing

Challenge
Statoil, a major operator, challenged Archer to find a solution to set a plug, pump cement, displace a well, and cut the casing in just one run.

Solution
Archer’s SAMURAI big bore multi-function pipe cutter is a ball-activated cutter that allows for both pumping through (max 6500 lpm) and pressuring up (max 345 bar) string without knives extending. Combined with its 2 1/4” ID and flow path design, cementing operations can be performed with the SAMURAI cutter in the string.

In this particular job, the SAMURAI cutter was run together with a mechanical 13 3/8” plug (Archer’s LASTLOCK®) to establish permanent cement barriers (1431 mMD) and make two cuts (776 mMD and 663 mMD) in the 13 3/8” casing during the same run.

Archer’s Tornar® circulation sub was also included to avoid pulling wet during pull out of hole (POOH) after activating the SAMURAI cutter.

Result
Plug installation and cementing was performed according to plan. Overall the time savings of the combined run was up to 2 hours. This was the first field trial for the SAMURAI cutter. It was concluded that the SAMURAI can potentially save more time for future operations.