



# WELL CONTROL KILL UNDERGROUND BLOWOUT

## Regain pressure control

### BACKGROUND

A new well was accidentally drilled into an existing gas production well at a depth of 611m.

The accident triggered an underground blow-out in which large quantities of gas were produced from a 3536m deep reservoir into the 611m formation.

The drilling rig was severely damaged by the blow-out and the newly drilled hole finally collapsed. The blow-out caused also a continuous gas flow from the 611m formation to surface at various locations. All attempts to kill the production well by bull heading kill fluid through the damaged 5,5" production tubing failed.

### OBJECTIVE

The objective was to rig-up a Snubbing unit on top of the X-mass tree of the existing gas production well. A 2-3/8" kill string was then to be run into the damaged 5,5" completion and used to dynamically kill the well by circulating kill weight mud.

### EXECUTION

- The 340k Snubbing unit was air lifted into Nigeria from The Netherlands using two cargo airplanes.
- A 7-1/16" 10M Snubbing BOP stack was installed directly on top of the 5-1/8" X-mass tree of the existing gas production well.
- The Snubbing unit was equipped with a rotary table in order to enable rotation of the kill string while passing the leak point at 611m.
- A special guide shoe was fabricated and installed at the bottom of the kill string to enable passing the damaged completion at 611m.



### RESULTS

- The Snubbing unit was mobilized without problems and rigged-up directly after arriving on location.
- The kill string was successfully installed. Rotation was required to pass the damaged completion at 611m.
- The well was successfully killed directly after installing the kill string.