



## CASE HISTORY

Drilling and Completions

Casing Annulus Packer + Port Collar

### HORIZONTAL RADIUS CEMENTING

Build-Section of Horizontal Well Requires Cementing

Location: Nigeria



*Casing Annulus Packers and Port Collars*

**CHALLENGE:** Horizontal wells offshore Nigeria are constructed by setting casing 800 – 1,000 ft above the reservoir. The build section and horizontal well are then drilled with a single BHA size. As water-bearing sands are encountered above the reservoir and thus in the build section, cementing is required without loss of cement into the horizontal wellbore (reservoir).

**SOLUTION:** A 4-1/2 in. XtraCAP (CAP) and Port Collar (PC) are run as part of the liner and positioned below the build section. An inner string and Combo Tool are run inside the liner and the assembly conveyed on the drill pipe. The liner hanger is set and running tool released. The Combo Tool is then picked up to locate the CAP and PC. Pressure is applied to the work string to inflate the CAP. The PC is opened and annulus circulated and conditioned. Cement is then displaced into the annulus with planned coverage above the liner hanger. The PC is closed, the Combo Tool pulled to the top of the liner, and circulation established to remove any cement from above the liner hanger.

**RESULTS AND BENEFIT:** Approximately 50 wells per year in Nigeria are completed using this one-trip cement the radius method.