



Weatherford®

REAL RESULTS

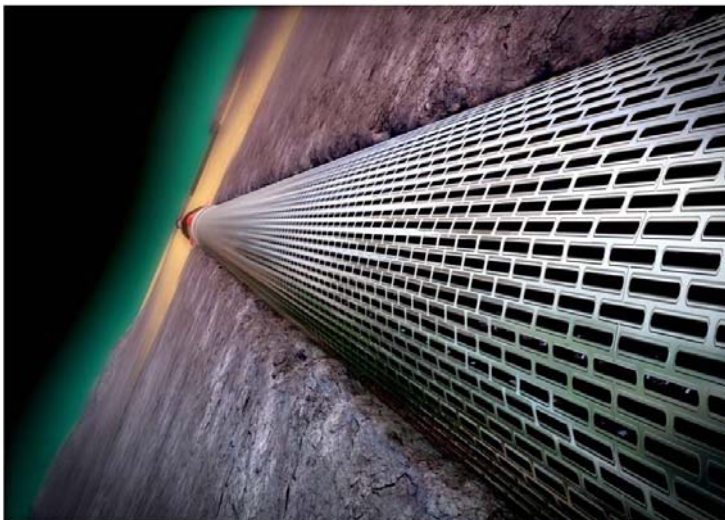
ESS® System Achieves Sand Control and Zonal Isolation in Deepwater Wells Offshore Nigeria

Objectives

- Achieve compliant sand control in multiple zones offshore Nigeria.
- Install a multi-zonal completion with zonal isolation, allowing a selective upper completion to be installed.

Results

- ESS expandable sand screen system was installed and expanded successfully in an 8 1/2-in. open hole to achieve sand control and zonal isolation in six water-injector wells with 9 5/8-in. casing and two oil-producer wells with 10 3/4-in. casing.
- The ESS completions were installed and expanded from a drillship operating in deep water.
- All eight ESS completions were installed without incident.



Compliantly expanded sand screen in an 8 1/2-in. open hole.



Two oil-producer ESS completions were deployed from this semi-submersible rig.

Location

Offshore Nigeria

Water Depth

4,298 ft (1,310 m)

Well Type

Oil producer and water injector

Hole Angle

27° to 52°

Setting Depth

9,796 to 11,945 ft (2,986 to 3,641 m)

Completion Length

515 to 1,125 ft (157 to 343 m)

Products/Services

- 7-in. ESS expandable sand screens
- EZI™ expandable zonal isolation tool
- EXR liner hanger



Weatherford®

REAL RESULTS

Value to Client

- Weatherford's capability to provide the client with the necessary equipment and personnel resulted in a reliable sand-control system. Minimal crew and equipment assets resulted in enhanced safety and optimal operational efficiency when compared to gravel-packing operations.
- Weatherford's ability to supply equipment from other ESS® projects in West Africa at short notice enabled the client to complete the wells as scheduled.

The ESS system was run using an EXR liner hanger, and all eight wells were successfully installed and expanded. Weatherford's ESS system prevents sand production, provides borehole support, and combats aggressive corrosion conditions.

Open Hole ERC Deployment String	
Schematic	Description
	Polished Bore Receptacle (PBR)
	10 3/4" Liner 65.7 # L80
	10 3/4" x 7" EXR Liner Hanger Casing Wt Size: 65.7#
	10 3/4" Shoe @ 3119 Mtrs
	Crossover
	7" # 29 Vam TOP HT SC Blank Pipe L.H.
	4 x 7" Expandable Sand Screen Joint 150 Micron Weave
	7" # 29 Vam TOP HT SC Blank Pipe L.H.
	7" EZI Joint
	7" # 29 Vam TOP HT SC Blank Pipe L.H.
	8 1/2" Open Hole
	7" EZI Joint
	7" # 29 Vam TOP HT SC Blank Pipe L.H.
	2 x 7" Expandable Sand Screen Joint & 1 x 7" Expandable Sand Screen Pup Joint 150 Micron Weave
	2 x 7" # 29 Vam TOP HT Blank Pipe L.H.
	Bull Nose
T.D @ 3415 Mtrs	