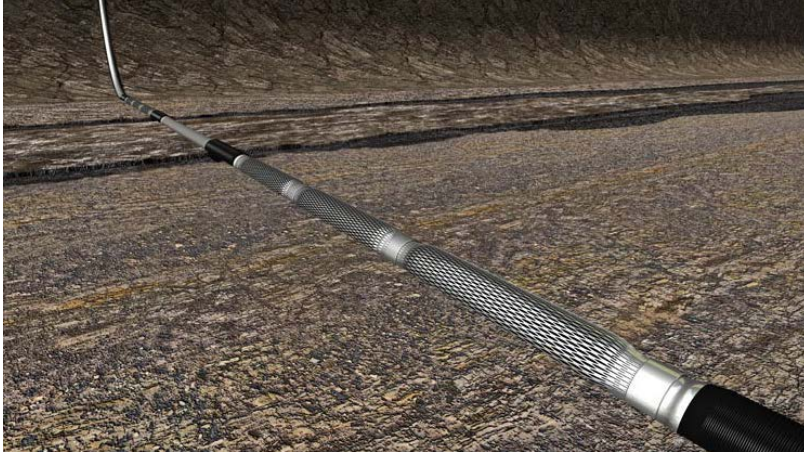


# ESS<sup>®</sup> Expandable Sand Screen Provides One-Trip Installation, Zero Sand-Control Failures in 54 Wells



The ESS system comprises a string of sand-screen joints with a large post-expansion diameter compliant to the openhole size, which eliminates annular flow and improves inflow performance.

## Objectives

- Complete a shallow oil well that has sand-control issues and short pay zones.
- Install a sand-screen system. Previous core-sample testing revealed that the field contained sand formations with high uniformity coefficients and fines percentages. These conditions made standalone screens unsuitable.

## Our Approach

- Weatherford recommended using the ESS expandable sand-screen system, which expands compliantly against the open hole. The system helps to prevent annular fines dispersal and migration and costs less per foot (meter) than conventional gravel-pack systems.
- In a single trip, the Weatherford team deployed the ESS system to setting depth, set an EXR hanger, and expanded the screen.

## Value to Client

- The ESS system was deployed, set, and expanded in approximately 10 hours, which is significantly less than the average installation time for a conventional gravel pack. By reducing operational time, the ESS system lowered personnel and rental-equipment costs.
- The sand screen in the ESS system expanded compliantly to the wellbore without the need for pressure pumping services, which reduced exposure to health, safety, and environmental (HSE) risks.
- From the end of 2002 through early 2016, Weatherford installed ESS systems in 54 of the client's shallow-water oil wells. Since those wells came online, none have had recordable sand-control failures.

### LOCATION

Sarawak, Malaysia

### WELL TYPE

Oil, directional, offshore

### HOLE SIZE

6 to 6.125 in.

### CASING DIAMETER AND WEIGHT

7 in., 23 lb/ft (31 N-m)

### WATER DEPTH

114 ft (35 m)

### PAY-ZONE LENGTHS

18 to 263 ft (5 to 80 m)

### PRODUCTS/SERVICES

- ESS expandable sand screen
- EXR hanger
- Expandable top and bottom connectors
- Bullnose
- Swellable packer

