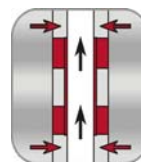




Weatherford®



High Productivity



Effective Isolation

REAL RESULTS

ESS® Expandable Sand Screen Saves Expense of Deepwater OpenHole Gravel Pack, Helps Achieve High-Production Rate

Objectives

- Install a sand-control system with flexible multi-zone capabilities to safely and efficiently control unconsolidated and poorly sorted sands while isolating shales during the field's expected lifespan.
- Deploy and install this sand-control solution in a single trip.
- Design and implement a hole- and mud-conditioning program that would allow the field's production potential to be maximized with this sand-control system in place.

Results

- A single-trip ESS expandable sandface completion was successfully installed, using oil-swellable elastomer packers to isolate shales. This system would allow future zonal isolation should it be necessary later.

Value to Client

- Using the ESS system allowed the operator to avoid the high costs and operational complexity of a deepwater, openhole gravel pack while helping to achieve high levels of sand-free production with minimal completion skin.
- Conditioning mud during drilling greatly reduced cleanup circulating times and thus rig costs.
- Additional time and rig-cost savings were achieved by using a single-trip integral hanger and sandface completion.

Using Weatherford's ESS system helped Murphy Oil achieve high levels of sand-free production with minimal completion skin.

Client
Murphy Oil Corporation

Location
Deepwater Malaysia

Type of Well
Offshore openhole oil producer in 4,365 ft (1,300 m) of water

Hole size and Angle
8-1/2 in., 53°

Casing type and size
9-5/8 in., 53.5 lb/ft

ESS Size
5-1/2 in., 150 micron

Well Total Depth
9,344 ft (2,848 m)

Openhole Length
1,073 ft (305.6 m)

Products/Services
ESS system

String	Description
	9 5/8-in. x 7, 29.7 lb EXR hanger
	Packer element center
	Packer slips center
	7 5/8-in. blank
	7 5/8-in., 29.7 lb blank casing
	7 5/8-in. blank
	7 5/8-in. swell packer with 5m element
	7 5/8-in. blank
	7 5/8-in. blank
	5 1/2-in. ETC, 150p
	5 1/2-in. ESS Joints, 150p
	5 1/2-in. EBC, 150p multi-zone type
	7 5/8-in. blank
	7 5/8-in. blank pup, 10 ft
	7 5/7-in. blank
	7 5/8-in. swell packer with 5m element
	7 5/8-in. blank
	7 5/8-in., 29.7 lb blank casing
	7 5/8-in. blank
	7 5/8-in. swell packer with 5m element
	7 5/8-in. blank
	7 5/8-in. blank pup, 10 ft
	7 5/7-in. blank
	5 1/2-in. ETC, 150p
	5 1/2-in. ESS Joints, 150p
	5 1/2-in. ESS pup, 150p
	5 1/2-in. EBC, 150p multi-zone type
	7 5/7-in. blank
	7 5/7-in. blank
	7 5/8-in. Bullnose