

REAL RESULTS

North Sea No Match for Multilateral/Expandable Sand Screen Combination

Objectives

- Install a subsea multilateral junction with an intelligent completion across two separate reservoir intervals to allow commingled production from two zones on either side of a sealing fault. The operator wanted to use proven technologies in this high-profile, hostile-environment well.
- · Control costs and operational risks.
- · Control sand production.
- · Control the production from either lateral.

Results

- Weatherford's proven StarBurst[™] Level 4 multilateral system was successfully deployed and perforated from a semi-submersible.
- A 1,824-ft (556-m), 5 1/2-in. ESS® expandable sand screen system was installed in the main bore.
- A 1,862-ft (567-m), 4 1/2-in. ESS system was installed in the lateral—the longest single-trip expansion to date.

Value to Client

- Two reservoir intervals in different fault blocks were commingled at the junction and produced to surface, resulting in an incremental benefit of US\$11 million to BP.
- The combination of the StarBurst multilateral system and the ESS system provided a low-cost, low-risk alternative for accessing lateral deposits.
- Onshore testing of whipstock perforation equipment for the multilateral junction established guaranteed offshore success.



Weatherford's *StarBurst* multilateral and *ESS* system provided BP the stability needed for the rough waters of the North Sea.

Client BP

Location

West of Shetlands, North Sea

Well Depth

6,463 ft (1,970 m) MDSS

Main-Bore Casing

9 5/8-in. (244-mm), 53.5-lb/ft L80

Products/Services

- StarBurst multilateral system
- ESS expandable sand screen system

"The StarBurst system was chosen primarily for its simplicity, cost effectiveness and tolerance to debris during construction. The junction was constructed with zero nonproductive time due to the care and attention to detail from everyone involved in both the planning and execution."

-Ken Horne, BP