

# **REAL RESULTS**

## World's First Rigless Abandonment of Five Subsea Wells Offers Safe Alternative to Mobile Drilling Unit

## **Objectives**

- Abandon five subsea wells while meeting all regulatory standards without the use of explosive severance devices and problematic downhole procedures.
- Avoid damage to pipelines and other nearby installations.
- Minimize costs.

### Results

- Weatherford's R100 marine drill, fitted atop a moonpool, M23 and M24 series marine casing cutters, and mechanical outside-latch single-trip (MOST<sup>™</sup>) tool were used to successfully carry out the five subsea abandonment operations.
- A combination of Weatherford technologies was used to execute the world's first surface recovery and safe storage of oil-based drilling fluids. Bridge plugs, inflatable packers, and 150-ft (46-m) cement plugs were set in the wells.
- Seal assemblies were backed off and recovered using a left-hand work string or were milled out when problematic. To facilitate the placing of T-plugs, 9 5/8-in. (244-mm) and 13 3/8-in. (340-mm) casing strings were removed.
- Weatherford crews were able to cut, pull, and recover 18 3/4-in. (508-mm) subsea wellheads, 30-in. (762-mm) conductor, 20-in. (508-mm) casing, and the retrievable guide base from the seabed in a single trip.
- The entire campaign was completed in 40 days, incurring no accidents or lost-time issues.

# Value to Client

 The safe abandonment of the five subsea wells provided the operator—and the industry—a viable alternative to conventional, high-cost abandonment practices, such as the use of mobile offshore drilling units (MODUs) or severance technologies (explosives) that can harm the environment and cause operational problems.

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The ram rig lowered Weatherford's M24 cutting tool through the moonpool down to the seabed and cut the casing. The *MOST* tool pulled the cut casing and wellheads to the surface.

Location North Sea

Well Type Subsea

**Sea Depth** ±460 ft (±140 m)

#### **Products/Services**

- Abandonment and fishing services
- MillSmart<sup>SM</sup> technology
- MOST tool
- M23 and M24 casing cutters

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