

NEST Tool Sets WidePak™ Straddle Packers Without Explosives, Isolates Trouble Zones, Saves \$20,000 in Operating Costs

Objectives

- Isolate a trouble zone in each of two deep, 3 1/2-in. wells and return each well to production.
- Avoid using explosives for setting the tools, and avoid the added cost of a wireline or e-line unit.

Our Approach

- After a thorough pre-job analysis, Weatherford deployed two 272×181 WidePak straddle packers to isolate a leaking side-pocket mandrel in Well 1 and a water-intrusion zone in Well 2.
- To avoid the inherent safety risks and import times for using explosive setting tools, Weatherford also deployed the nonexplosive setting tool (NEST). The setting tool was fully tested at the surface to ensure downhole functionality.
- Using the third-party slickline already onsite, the team ran a WidePak straddle packer system to a setting depth of 2,294 ft (699 m) in Well 1 and a setting depth of 11,674 ft (3,558 m) in Well 2. The operation was completed in two runs per well, and the NEST was activated by a timer.
- The operation effectively isolated the trouble zone in each of the two wells. Both wells returned to full production.

Value to Client

- The Weatherford WidePak straddle system effectively isolated a water-intrusion zone and leaking side-pocket mandrel in two wells.
- By eliminating the need for explosive setting tools, the operation enhanced operational safety and reduced storage hazards.
- By using the existing slickline unit, the team saved the operating expense and personnel requirements for a wireline or e-line unit. This saved the operator approximately US \$20,000 and reduced personnel from five to two.

Using only the existing third-party slickline unit already onsite—and without incurring the safety hazards of explosive setting tools—Weatherford isolated a trouble zone in each of two wells.



LOCATION

Offshore Balikpapan, Indonesia

WELL TYPE

Gas producer

NUMBER OF WELLS IN CAMPAIGN

2

WELL DEPTHS

Well 1: 13,908 ft (4,239 m)

Well 2: 13,328 ft (4,062 m)

COMPLETION (WELL 1)

3 1/2-in. (9.2 PPF / L-80) 2.99-in. ID with a 2.81-in. minimum restriction

COMPLETION (WELL 2)

3 1/2-in. (9.2 PPF / L-80) 2.992-in. ID with a 2.75-in. minimum restriction

Setting Depths (Well 1)

Upper packer: 2,329 ft (708 m)

Lower packer: 2,344 ft (714 m)

Setting Depths (Well 2)

Upper packer: 11,659 ft (3,553 m)

Lower packer: 11,674 ft (3,558 m)

PRODUCTS/SERVICES

- WidePak two-trip straddle packer system
- NEST

