

Firma™ Abandonment Solution

Saves 94 Days Valued at \$8.9 Million During a Rigs-to-Reef Operation in the Gulf of Mexico

Objectives

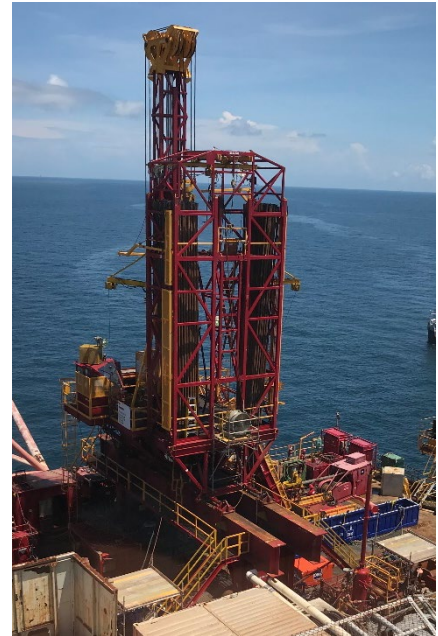
- Cut 58 conductors without quality, health, safety, or environmental (QHSE) incidents.
- Reduce personnel on board (POB).
- Complete operations within the budget and schedule given by the customer.

Our Approach

- As part of a Firma abandonment solution, Weatherford service teams were contracted to cut 58 conductors of either 22 or 26 in. (558 or 660 mm) in an ongoing platform abandonment operation on a deepwater rig in the Gulf of Mexico. The customer estimated that it would take 196 days of rig time, valued at US \$15.4 million, to cut and prove all 58 conductors.
- The Weatherford team used the Rig-Free® heavy-duty pulling-and-jacking unit (PJU) to enable easy transition from well to well. The team deployed 9 1/2- and 12-in. (241- and 304-mm) A1 M24 casing cutters to sever or cut varying casing and conductor sizes. These field-proven technologies helped to simplify the operation.
- To start the conductor-cutting operation, the Weatherford team performed cut-and-prove verifications in the first three wells by boring and pinning conductors. The regulatory agency, the Bureau of Safety and Environmental Enforcement, allowed for operations to continue without the need for boring, pinning, and verification. Removing these requirements helped to reduce overall operational time.
- As a safety precaution, the team strategically installed S135 retention strings, which extended 2 ft (0.6 m) above the cuts, in 25 of the outermost wells. With all conductors cut through, these retention strings prevented conductor shifting before the rigs-to-reef operation.
- Throughout the operation, a Weatherford project manager served as a singular point of contact between the Weatherford rig crew and the customer. This resulted in efficient, reliable communications.

Value to Customer

- Using the Firma abandonment solution enabled completing the operation without QHSE incidents.
- The PJU combined with the multidisciplinary, cross-trained teams reduced POB by more than 50% compared to a conventional operation. Weatherford completed this operation with only two crews on board and a project manager stationed remotely in the customer's office.
- With efficient heavy-duty, fit-for-purpose equipment and skilled teams, the operation finished 94 days ahead of schedule to save the operator US \$8.9 million in operating time. Each cutting operation took just over 1 day per well, which included time to reposition the PJU from well to well. All conductor-cutting operations were completed with less than 1% nonproductive time.



The Weatherford Rig-Free pulling-and-jacking unit provides a foundation for offshore well abandonment and intervention operations.

LOCATION
Gulf of Mexico

WELL TYPE
Offshore, oil, abandonment

CONDUCTOR SIZES

- 22 in.
- 26 in.

CASING SIZES

- 10-3/4 in.
- 13-3/8 in.
- 16 in.

CUTTER SIZES

- 9-1/2 in. (241 mm)
- 12 in. (304 mm)

CUT DEPTHS
1,167 to 1,175 ft (355 to 358 m)

PRODUCTS/SERVICES

- Firma abandonment and slot recovery solutions
- Abandonment services
- Fishing services
- Project management services
- Rig-Free pulling-and-jacking unit
- A1 M24 casing cutters

