

Well Abandonment: Complete Integrated Solution

Delivering the right abandonment approach
for your well by drawing upon global,
cross-organizational expertise





Leveraging global, cross-organizational expertise to deliver the right abandonment solution for your well

Through our dedicated Well Abandonment and Intervention business unit, we deliver single-source, complete solutions for all abandonment operations, including pre-job planning, risk and cost analysis, compliance, engineering, scheduling, execution, and contingency planning. We leverage the niche expertise of our people around the world and place these subject-matter experts into the role of managing your project. We combine our integrated approach with our life-of-well service capabilities and comprehensive array of technologies to guide your well abandonment from beginning to end. Additionally, our Well Engineering Project Management (WEPM) group provides project management solutions.

Our well abandonment work is done right the first time—safely, efficiently, reliably, and permanently. We use advanced intervention technology to dismantle your well infrastructure while protecting personnel and mitigating environmental hazards, which enables you to avoid leaks, pollution, and the associated cleanup costs. We can also help you navigate complex operational regulations and requirements to ensure you remain in compliance.

Types of Well Abandonment

Fixed Platform

Whether your need is for slot recovery or well abandonment, our conductor removal services encompass all operational phases on fixed platforms. We have an array of tools and cutting technology that help reduce your expenses, enhance safety, and ensure compliance with stringent, ever-evolving regulations. One such tool is the Endura™ dual-string section mill, which removes the inner and outer casing strings to expose the open hole. This enables you to set a cement plug against the hole to create a reliable and permanent seal that prevents the migration of hydrocarbons.

Subsea

We provide industry-leading service in cutting and retrieving multiple casing strings during subsea wellhead retrieval for more efficient, economical operations. We have successfully recovered more than 1,500 subsea wellheads using semisubmersibles, jackup rigs, and monohull vessels. A mainstay in our integrated plug-and-abandonment services is the mechanical outside-latch single-trip (M.O.S.T.™) tool, which runs on drillpipe to remove casing efficiently by latching onto wellheads using mechanically activated arms.

Rigless

Our proprietary Rig-Free® pulling-and-jacking unit helps you restore and extend the life and profitability of mature wells while significantly offsetting abandonment costs. With a small footprint and modular design, the unit is easy to transport and ideal for use on platforms with downgraded derricks, structural limits, and limited platform space.

Well Abandonment Services and Technologies

- Well Engineering Project Management (WEPM)
 - Rig-Free® Technology
 - Intervention Services
 - Plugging Services
 - Tubular Running Services
 - Conductor Removal Services
 - Cutting Technology (Wellbore/Topside)
 - Rental Services
 - Subsea Wellhead Services
 - Fluid Services
 - Specialty Services
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A Weatherford Exclusive

The M.O.S.T.™ tool is ideal for subsea well abandonment, where it can cut and recover multiple casing strings in a single trip. It also enables recycling of the wellhead, saves significant amounts of rigtime, and minimizes damage to seal surfaces.

**Rigless
abandonment incurred**

**0 accidents
or lost-time
issues**

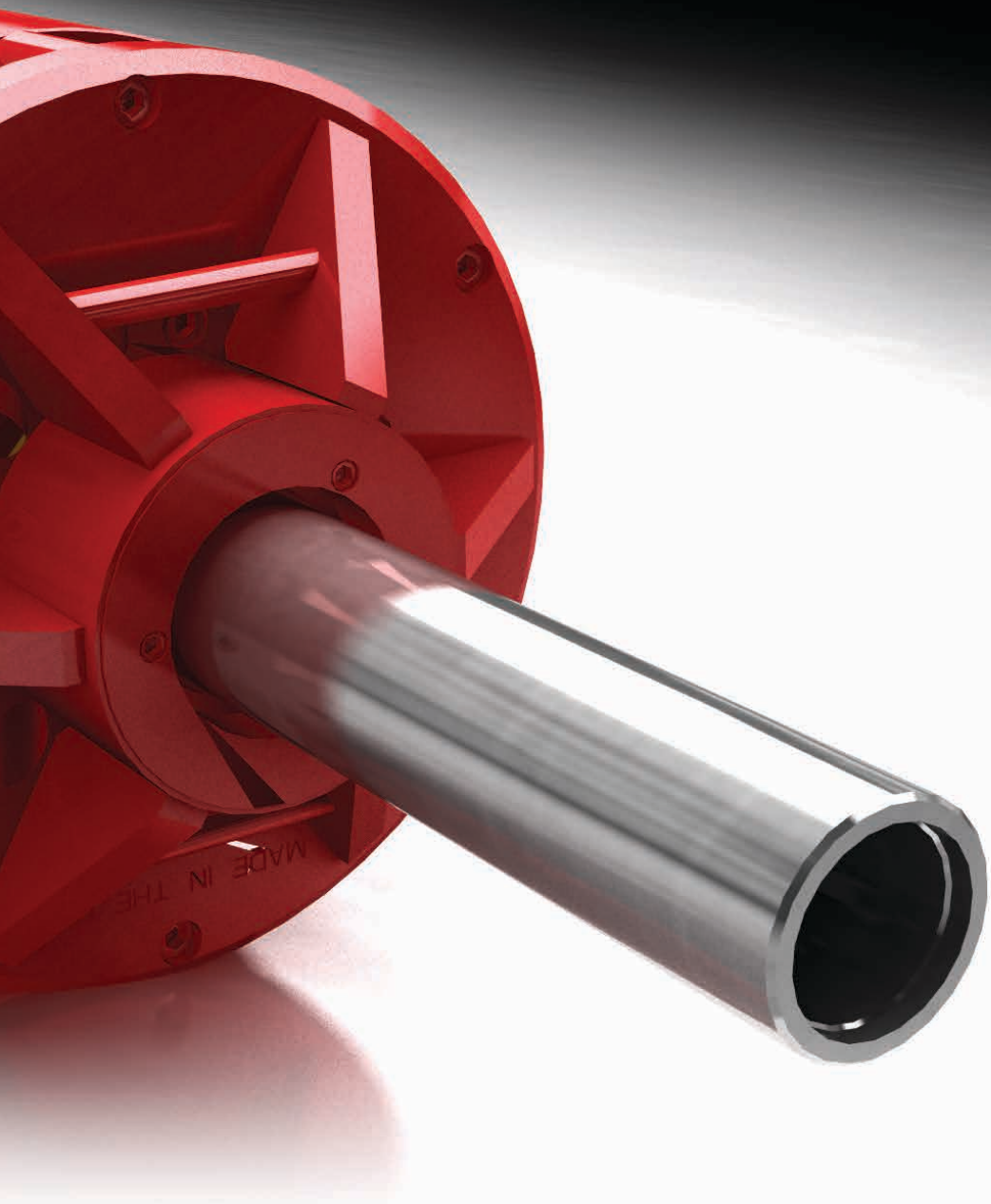
As the provider of the world's first rigless abandonment, Weatherford deployed a marine drill, casing cutters, and the M.O.S.T. tool to provide a safe alternative to conventional abandonment practices, such as costly mobile offshore drilling units or explosives that can cause operational problems or environmental harm. The operation incurred no accidents or lost-time issues, and the abandonment of all five subsea wells was completed within 40 days.

Location: North Sea

**Saved operator
\$6.7 million
and 66 days
of rig time**

Weatherford managed the plugging and abandonment of 10 wells, including the design and deployment of a portable pulling-and-jacking unit, on a 15° hurricane-damaged platform. Because the operation was completed within 299 days and without any lost-time or environmental incidents, the operator saved US\$6.7 million and 66 days of rig time.

Location: Gulf of Mexico



More than
1 million
man hours
without any injury or
environmental incident

To manage the abandonment of 40 wells in the Northwest Hutton field, Weatherford combined coiled tubing, wireline, and cutting, pinning, and pulling systems. The operation required more than 1 million man hours, which were free of any injuries or environmental incidents.

Location: North Sea

Completed well
abandonment

28 days early

Weatherford managed the platform abandonment of 15 multistring wells within 62 days, which saved the operator 28 days of rig time. The crew logged 26,000 hours without environmental, lost-time, or safety incidents.

Location: Japan

Our unique project management approach to well abandonment relies on cross-discipline problem solving throughout our global organization, and pairs this knowledge and experience with our innovative technologies to produce an effective, custom solution for your well. For more information about we can improve your well abandonment operations, visit **weatherford.com**.



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