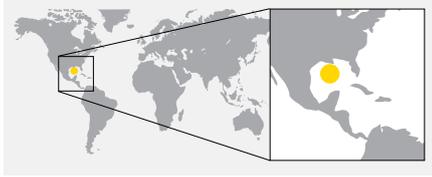


New Temporary Abandonment Method Proves to be Company Standard by Reducing Risks and Saving Multiple Rig Days upwards of Several Million Dollars



Region: Gulf of Mexico (GOM)

Customer: Major Operator

Field: Green Canyon

Well type: Oil & Gas

Case benefits

- Safer and lower cost operations
- ISO VO gas-tight protection for extended periods
- Dependable retrieval in varying well fluids

Key capabilities

- High differential pressure ratings
- No set weight needed below for testing
- High performance elastomer

Typical Applications

- Long term suspensions in harsh well conditions
- Well head removal and replacement
- BOP and riser testing and maintenance

Challenge

A GOM customer in the expansion phase for their two main projects needed to temporarily abandon the wells for a few months to over a year until completions after batch drilling. The methods used caused them prolonged rig days and complex installations of barrier requirements.

Traditionally the customer would drill the well to Total Depth (TD) then install cement retainers and cement plugs at various depths and liners sizes to satisfy requirements for environmental safety well integrity. This method proves lengthy and costly due to the added steps of cementing and tool needs. As a further consequence of this method the re-entry to the wells presents costly operations of drilling the plugs and retainers to re-establish TD for production zones.

During time consuming drilling operations debris from the cuttings and retainer components add to mud conditioning and associated disposal costs. This debris further complicates rig operations and can cause additional clean-up trips during the completion phase.

Solution

After many temporary abandonments (TA) using the cement plug method the customer looked to Archer, recognizing the **LOCK® retrievable bridge plug technology** to be used in the application due to performance in many well conditions. This gave the customer a further advantage of being able to install the tie-back casing string and displace the well to a solids free intermediate brine to lessen risks of debris and ease rig clean-up costs.

Archer's LOCK retrievable bridge plug provided total well security while requiring no weight from tail pipe to fully set enabling multiple plugs to be set. In a single run, the LOCK was capable of testing the newly displaced and tied back well prior to completion using the incorporated high differential ball valve.

During the re-entry phase the LOCK retrievable bridge plug offered confidence to the operations due to its track record of 100% retrieval success. The convenience of Archer's all in one run and retrieval tool eliminated the need for multiple tools to reposition the packer when required. High circulation rates were also obtained to further clean and condition the well.

Result

The Archer LOCK retrievable bridge plug method of long term TA was successful by increasing operational efficiency and safety while reducing overall costs. This was achieved by eliminating high risk operations such as running cement retainers and drilling cement plugs.

Environmental safety increased by eliminating cuttings and debris handling as well as drilling fluids cleanup and disposal. The total time reduction equates to overall money savings for the customer **upwards of several million dollars and up to a week of rig time.**

