

RezConnect™ Well Testing System

Full Acoustic Control of Drill Stem Test

Offshore – Deepwater – Pre Salt - Brazil

Overview

A powerful demonstration of the RezConnect™ Well Testing System was performed for a Halliburton customer in a South American deepwater environment. The job was conducted from a semisubmersible rig, at a water depth of 7,053 feet. The 17,600 feet deep well was in a pre-salt region. During this well test, Halliburton wirelessly transmitted data from the seabed to the downhole tools using repeaters sequenced along the workstring, resulting in a completely wireless transmission system across the seabed equipment to the downhole tools.

Despite the challenging conditions, the RezConnect system successfully communicated at 100% throughout the well test, demonstrating the reliability of downhole wireless technology.

The well test valve was acoustically operated multiple times. Every command issued provided a response seen on surface, both by the response of the reservoir and the acoustic feedback response. During the sampling period of the well test, the customer chose to activate all three sets at once collecting 3600 cc of fluid samples. A confirmation was received on the surface that the sampling process had taken place, which was verified upon the removal of the tool from the well. This Halliburton technology elevated the testing operations to a higher performance level and improved quality standards.



CHALLENGES	SOLUTIONS	RESULTS
Inherent safety and economic risks of deepwater operations	<ul style="list-style-type: none"> RezConnect Well Testing System Efficient team and equipment to provide world class service 	<ul style="list-style-type: none"> 100% successful wireless communication Reduced risk Minimized well intervention during the DST
Dynamic reservoir evaluation	RezConnect Well Testing System	Real time, reliable data provided RIH and POOH time savings
Bottom Hole uncertainties	RezConnect Well Testing System's use of downhole tools with status feedback capability	All valve positions and equipment status communicated in real time, which reduced uncertainties



Industry First Fully Acoustically Controlled Job

Have a dialogue with your reservoir.™

RezConnect™
100%
Well Testing System
COMMUNICATION
"Throughout the well test"



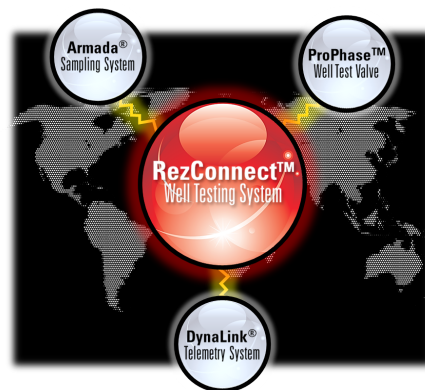
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Well testing continues to be a vital process for oil companies to accurately characterize their reservoirs. In offshore deep water wells the hydrostatic pressure can be significant, allowing for limited additional pressure to be applied without exceeding the casing test pressure. This limits the ability to activate multiple DST tools using conventional methods such as applied annular pressure. Without feedback to surface, whether pressure or otherwise, operators have to assume that tools functioned correctly. Assumptions, rather than facts, can be dangerous and costly when well testing in deepwater environments.

The RezConnect™ Well Testing System is the industry's FIRST fully acoustically actuated Drill Stem Test (DST) system powered by Halliburton's proven DynaLink® Telemetry System.

It offers a complete well testing solution for acoustic control of DST tools, with measurement and analysis of well-test data in real-time. It also provides real-time surface verification of DST tools operational status and acoustic activation of bottom hole fluid samplers.

You can make informed decisions faster with the RezConnect system that can result in DST modifications to decrease rig time costs, and increase reservoir returns!



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