

HERO™ Bridge Plug Maintains Pressure Integrity in Challenging Well Shut-In Operations

FIRST HIGH-EXPANSION BRIDGE PLUG INSTALLED FOR SONATRACH PROVIDES DEPENDABLE API 11D1 V0 BARRIER

NORTH AFRICA

CHALLENGE

- » Provide a reliable slickline-deployed V0-grade high-expansion retrievable bridge plug (RBP) with a capability to pass tight restrictions and to set within larger tubing IDs
- » Provide shut-in pressure integrity to enable gauge data recordings

SOLUTION

HERO™ high-expansion V0-grade RBP:

- » Helps ensure reliable slickline deployment and retrievability
- » Provides shut-in pressure integrity

RESULT

- » Achieved repeatable success in setting and retrieving the HERO RBP
- » Enabled Sonatrach to use a single HERO bridge plug in multiple wells, due to the plug's redressability
- » Provided repeatable pressure integrity performance to enable gauge data recordings
- » Saved Sonatrach 38 total days of pressure integrity over the course of three jobs, and realized retrievable success on each job

Sonatrach needed a high-expansion retrievable bridge plug (RBP) to provide reliable performance for well shut-in purposes. The shut-in would allow well data to be collected from as close to the formation as possible; however, tubing restrictions prevented access to the lower-most casing depth.

CHALLENGE

Sonatrach required a low-cost, slickline-deployed retrievable mechanical barrier. The wells contained landing nipple restrictions above the target setting depth. A mechanical barrier was needed to provide pressure integrity for well shut-ins with up to 18 days duration down hole. Due to remote conditions, the RBP was also required to have a field-friendly redress for multi-well use.

In this oil-producing land-well in northern Africa, the RBP had a tight restriction to pass through before setting within a larger tubing size and providing pressure integrity to enable gauge data recordings.

SOLUTION

Standard RBP or packer options are typically suited to 3.688-inch restrictions, making them unable to pass through the 3.452-inch restriction and set within the required tubing size.

The HERO™ high-expansion RBP provides the capability to pass a 3.452-inch restriction and to set within 4½-inch, 13.5-lb/ft tubing. The HERO RBP has been qualified as an API 11D1/ISO 14310 (grades V3 and V0) mechanical barrier.

RESULT

A single HERO RBP was utilized on three separate post-redress occasions at this location, with sustained performance levels on each installation and retrieval operation. Over these three jobs, Sonatrach achieved 38 total days of pressure integrity, along with retrievable success. This quick three-day operational turnaround saved Sonatrach valuable standby time and costs.



HERO™ Bridge Plug

HCT1564-003



operational
turnaround



Key Feature

Contributing to the success of the high-expansion HERO bridge plug is its ability to pass through tight restrictions, and then to provide pressure integrity in larger tubing IDs.

Contributing to the success of the high-expansion HERO bridge plug is its ability to pass through tight restrictions, and then to set at target depth and provide pressure integrity in larger tubing IDs. In addition to being slickline deployable, this RBP offers repeated and reliable performance, and is debris tolerant for ease of retrievability after multiple days down hole.



HERO™ high-expansion RBP shown as it is run-in-hole

HCT1564-001



HERO™ high-expansion RBP shown set

HCT1564-002

www.halliburton.com

Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.

H013452 01/20 © 2020 Halliburton. All Rights Reserved.