ISO-Flex™ High-Expansion Retrievable Bridge Plug Overcomes Well Obstruction During Temporary Abandonment Workover, Saves Operator Six Rig Days

Objectives

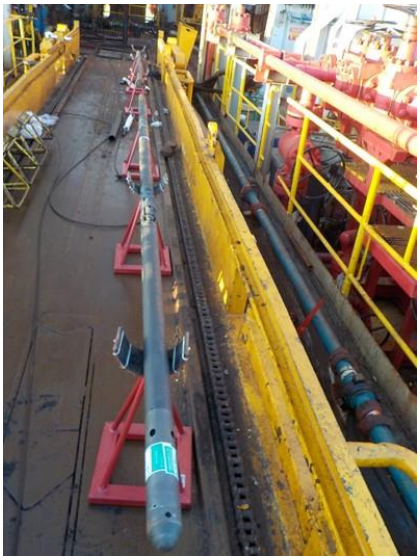
- Perform a temporary abandonment in an injection completion by restoring its secondary barrier within the well. During a caliper-logging run for a previous workover operation, an existing nipple-profile was confirmed to be fully corroded and unusable. This made it impossible to install a standard slickline plug that met the operator's well-abandonment regulation needs.
- Install a reliable well barrier beyond the corroded nipple-profile obstruction using through-tubing techniques to overcome the challenge of not having a proper setting-profile within the well.
- The temporary-abandonment solution must provide a high-expansion type bridge that could pass through the existing completion ID of 3.562-in., unfeasible for conventional monobore bridge plugs.

Our Approach

- Following a thorough pre-job analysis of specific wellbore challenges, Weatherford well-services specialists formulated a nippleless well-barrier solution to address workover issues. The team selected the ISO-Flex high-expansion retrievable bridge plug for its ability to create a V0-rated, temporary barrier below restricted tubing with recoverable convenience. The ISO-Flex provides a mechanical barrier and large, direct-to-the-wellbore equalization area that is ideal for sub-hydrostatic applications. Its multi-conveyance methods allows for deep or shallow deployment, setting, and retrieval using industry-standard conveyance techniques.
- A drift run was performed to ensure the well was clear of any obstruction. In addition, a caliper run was made to confirm the tubing conditions at the plug's setting depth. The Weatherford team deployed the plug using wireline conveyance and the ISO-EasySet setting tool with an electromechanical, non-explosive setter to establish the barrier. Once the intended depth was reached, a setting command was sent from surface and the ISO-Flex bridge plug was set as planned.
- After releasing the wireline cable from the plug, a pressure test was performed per the operator's specifications to confirm plug effectiveness and that the temporary abandonment was successfully achieved.

Value to Customer

- The ISO-Flex solution effectively created a temporary barrier below the restricted area with recoverable simplicity. This allowed the operator to save six operational rig days over the minimum time required by heavy workover operations.
- The robust API 11D1 V0 well-barrier solution was deployed in the same operational timeframe as a standard profile dependent barrier, but with a greater level of reliability for the well-abandonment project.



Weatherford ISO-Flex high-expansion retrievable bridge plug provides a robust and reliable well barrier with minimum deployment operational time. The ISO-Flex system is a mechanical barrier with a large, direct-to-the-wellbore equalization area that is ideal for sub-hydrostatic applications. Its multi-conveyance methods allows for deep or shallow deployment, setting, and retrieval using industry-standard conveyance techniques for added speed and simplicity.

LOCATION
Brazil

WELL TYPE
Offshore, deepwater, injection

HOLE SIZE/ WELL ANGLE
4-1/2 in./54°

COMPLETION ID
3.562-in.

WATER DEPTH
5,544 ft (1,690 m)

SETTING DEPTH
7,746 ft (2,361 m)

PRODUCTS/SERVICES
- Well Services
- ISO-Flex high-expansion retrievable bridge plug
- ISO-EasySet setting tool

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