Casing-Recovery Solutions with TITAN® System

Performs Openhole Cut and Pull, Avoids 8 Extra BHAs Saves 28,000 Tripping Feet and 94.5 Rigtime Hours

Objectives

- Following the successful deployment of the Trident® system on this well to perform two cuts, circulate the annulus clean, and recover the free casing to surface, 334 ft of casing extending into open hole remained to be recovered. This remaining casing needed to be recovered to complete the slot recovery and facilitate an open-hole sidetrack.
- The challenge was to avoid the conventional approach that would have required multiple trips using a combination of pipe cutting and jarring BHAs or pilot milling which would generate large amounts of unwanted swarf. These conventional methods would also consume significantly more rigtime.

Our Approach

- The team elected to use the Titan system, a multifunctional bottomhole assembly that enables casing to be cut and pulled using the downhole power tool (DHPT), and, if required, additional cuts made without having to pull out of hole (POOH).
- This technology allowed the customer to recover the remaining casing section from the open and create space for the sidetrack, while also building into the run the contingency of being able to cut the casing again and recover a section of casing back to surface.
- The system was run, and the casing engaged. It was not possible to pull the casing from 7,328 to 7,572 ft. Therefore, the system was repositioned, and a cut was made at 7,482 ft. Once again, the casing would not move, and the system was repositioned for a second cut at 7,446 ft. The casing was pulled free using the DHPT by applying 963,000 lbs. at the casing. The casing was recovered back to surface, and this created a 140-ft open-hole window, sufficient for the client to perform their open-hole sidetrack.

Value to Customer

- The agility and flexibility of the system to make multiple cuts in the same run resulted in saving 94.5 hours, 8 trips, and 28,000 ft of tripped pipe.
- The ability of the DHPT to pull 963,000 lbs. directly at the fish eliminated the need to use jarring as a method to recover casing and saved wear on the derrick, top-drive system, and post-jarring inspections that require time and personnel to work at height.
- Not having to pilot mill saved time and the issue of handling up to 18,300 lbs. of swarf, and the complications that the swarf creates for pressure control equipment at surface.
- The trip avoidance reduced the time personnel had to spend in the redzone, and due to the fact, the operation saved rigtime and lowered the carbon footprint associated with the rig activities.

Weatherford Trident and Titan systems feature engineering capable of reaching hidden energy reserves and sustainably abandoning nonproductive wells within complex environments. These exclusive cut-and-recovery technologies form an integrated, single-trip system that reduces rigtime and drives cost efficiency with safe, repeatable performance.

LOCATION
Deepwater Gulf of Mexico

WELL TYPE
Offshore, Oil

OPENHOLE SIZE
17-1/2 in.

CASING SIZE
13-5/8 in.

CASING CUT DEPTHS
7,482 ft (2,280 m) and 7,446 ft (2,269 m)

DOWNHOLE POWER TOOL SET DEPTH
6,980 ft (2,127 m)

SPEAR SET DEPTH
7,238 ft (2,206 m)

PRODUCTS/SERVICES
- Casing-Recovery Solutions
- Trident® and Titan® casing cut-and-recovery systems
- Downhole Power Tool (DHPT)

Weatherford®