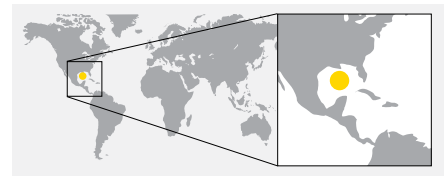


Case study: Deepest TIMELOCK™ Setting Completed

Archer's TIMELOCK makes a record-setting depth in North America



Region: North America

Customer: Major Operator

Well type: Production Well

Challenge

A major operator was conducting a program consisting on batch drilling, followed by batch completions in 2016. The drilling was conducted in approximately 3682 ft (1150 m) of water.

In view of the above conditions and environmental regulations, well integrity during the period of temporary suspension was a very critical element.

The well suspension program required the setting of a proven gas-tight plug in the 13-5/8" casing section and another to be set in a deep (24,793ft/7560 m) deviated (50 degrees) 9-7/8" casing section.

Solution

The LOCK series of well suspension plugs, which gives the assurance of an absolute seal, is independently certified as gas tight, and qualifies as VO under ISO 14310.

With over 2,300 deployments, mostly in the harsh North Sea environment, the LOCK plugs also come with an unrivalled 100% retrievability track record.

The 13-5/8" STORMLOCK was utilized as the upper barrier, and for the challenging 24,793 ft (7560 m) deep 9-5/8" casing, a TIMELOCK was deployed as the operator's lower barrier of choice as its installation is not hampered by high well deviation, allows for rapid deployment and can be set as deep possible because this does not require a tail pipe.

Case benefits

- Proven gas tight and VO ISO 14310
- Excellent track record in deep water environment
- Rapid and easy deployment—no weight required below plug for setting purposes, which saves costly rig time on deepwater drill ships and allows to set deeper
- 3" ID allows high circulation rate during fluid displacement and well cleaning
- Extended period of suspension does not affect retrievability efficiency—up to 365 days to date
- Sealing element fully retracts even after long suspension period and enables efficient retrieval
- Ball valve allows monitoring of well pressure without unsetting the plug and enables well control when required

Archer

Case study: Deepest TIMELOCK™ Setting Completed

Result

The installed TIMELOCK was successfully set and pressure tested from above and below. Additionally, the 9-5/8" TIMELOCK was able to be set as deep as possible because it did not require a tail pipe. The plugs are planned to be in the hole for about a 12-month period.

Key capabilities

- ISO 14310 VO rated gas-tight seal
- 100% retrievability record and mill tested
- Easy, rapid set and retrieve
- No weight needed below to set
- Unrestricted 3" ID
- Test from below and above
- Ultra-shallow, and ultra-deep set
- High differential pressure 3,625 psi ball valve equalisation

- Mechanically operated ball valve

Typical Applications

- Planned temporary well suspension that requires the highest gas tight qualification—ISO 14310 VO
- Storm and contingency suspension that requires high hang off weight capability without sacrificing gas tight assurance
- Leak detection—multi-set in one trip and not limited by depth or well deviation
- In-flow testing while maintaining full well control capability