Baker Hughes

TeleCoil intelligent coiled tubing fishing services

Increase certainty and reduce runs with visual confirmation

From drilling to plug-and-abandonment jobs, the loss of equipment downhole can have a lasting negative impact on operations. Complicated fish may require multiple runs—adding non-productive time (NPT)—and can even render an otherwise valuable well useless. For decades, fishing has been characterized as an art. This is because most fishing operations occur with a significant lack of knowledge and certainty about the position and location of the fish, and about the condition of the wellbore.

By combining downhole power and communications with advanced camera technology, TeleCoil™ intelligent coiled tubing fishing services make it possible to clearly identify fish, execute an effective removal strategy, and verify the wellbore has been effectively cleared, all without changing the reel at the surface.

Based on known well parameters, the fishing job is first modeled using CIRCA™ simulation software. As data from the job is collected, CIRCA REAL-TIME (RT) software updates the pre-job models on-the-fly, enabling coiled tubing control personnel to make

critical decisions quickly if downhole conditions change. Used in combination with CIRCA RT software, TeleCoil fishing services offer effective and efficient fishing services that can save runs, protect personnel, and reduce operational time.

Unlimited real-time video

TeleCoil fishing services offer a realtime, high-definition video solution that alleviates many of the problems found in other downhole camera systems, like limitations on battery life, memory, and downhole visibility. With intelligent fishing services, power is supplied from the surface, so the camera can stay downhole as long as necessary. And instead of saving footage to memory for later review, the TeleCoil service feeds live video directly to the surface. Because the service is deployed on coiled tubing, fluid can be pumped around the fish and across the camera lens to provide clear pictures in murky conditions. With a clear understanding of the fish and the wellbore around it, Baker Hughes experts can help you design and execute an effective fishing plan.

Applications

- · Fish and wellbore assessment
- Fishing operations in high-profile and deviated wells

Benefits

- Provides real-time imaging
- Helps identify and diagnose fishing necks and obstructions
- Improves certainty and reduces number of runs
- Enhances control of fishing tools and techniques
- Confirms jar activation and fish capture
- Adjusts to changing conditions
- Delivers situational advice and warnings based on real-time data
- Supports plug-and-play BHA changes between runs
- Saves hours of NPT on job
- Reduces footprint
- Decreases HSE risk exposure

Job-critical feedback

During fishing and milling operations, the TeleCoil system provides live depth, pressure, temperature, weight-on-bit, and torque data, which is used to enhance intervention efficiency. As downhole conditions change, CIRCA RT models are constantly updated to provide warnings when dynamics can potentially impact the operation. Camera, milling, and logging bottomhole assemblies (BHAs) can all be easily changed out during the operation using the same coiled tubing reel, saving time over competing systems and eliminating the need for a wireline logging unit.

Observe

The ability to see a fish and examine the condition and shape of the casing conveys far more information than can be obtained otherwise. And with the capability of TeleCoil fishing services to deliver clear fluid across the camera lens, you can still receive live, well-lit, high-definition images at the surface, even when conditions are murky downhole.

Fish or mill

Baker Hughes has consistently set the standard for fishing tool design

and implementation. Our field proven portfolio includes tools and systems for a multitude of fishing, cutting, milling, and impact services. Used with Xtreme Performance series (XP™) motors and METAL MUNCHER™ advanced milling technology, TeleCoil fishing services can be used to efficiently dress the fish for faster removal. Live data from the BHA helps maximize milling performance and confirms tool latching, jar activation, and successful fish capture. CIRCA RT software displays a virtual gauge clearly delineating safety and operational limits as they correspond to the actual depth and time, and continuous calculations provide live updates to the remaining fatigue life of the coiled tubing string. The combined result is a safe fishing or milling operation with fewer runs, fewer complications, and increased success.

Clean

When combined with Baker Hughes CIRCA and CIRCA RT modelling and design software, the Roto-Jet™ high-pressure rotary jet jetting tool, and Tornado™ wellbore fill removal system, the TeleCoil system can accurately locate top of sand in highly deviated wells, and helps you

optimize fill penetration rates, wiper trip speeds, and bite sizes. CIRCA RT predicts pressures for two-phase flow, gels, acid, and solids, and continuously maps rheology with temperature and pressure readings. Knowing the pressures downhole enables you to dynamically track fill removal and control well balance to prevent lost returns and formation damage.

For more information about how the TeleCoil intelligent coiled tubing fishing service can help you increase certainty and reduce runs with reliable downhole imaging, contact your Baker Hughes representative today.





