



# Real Time Production Logging with Fiber Optic CT and **WWT 350 ERG Tractor** in Mega Extended Reach

## Objective

The objective of the operation was to perform production logging across entire horizontal section of a 35,700 ft Mega ERD lateral offshore well in the Middle East.

## Problem:

Previously wireline tractors were utilized in similar wells in the field and could not reach past 30,000 ft MD. Tubing Force Analysis results predicted early lockup with Coiled Tubing alone reaching around 20,000 ft MD. Production engineers and reservoir management desired logging the entire 23,500 ft of horizontal section for optimal profiling and decision making.

## Solution:

A **WWT 350 ERG Tractor** was combined with Real-Time fiber optic Production Logging Tool and a custom designed CT string. The powerful tractor combined with the specialty tapered string was predicated to reach well TD in pre-job tubing force modeling. The BHA design allowed fiber optic cable to pass through the hydraulic tractor centerline, enabling logging tools and tractor to operate independently without interference.

Lock-up occurred at 19,348 ft MD, 13% of target section. The **WWT 350 ERG Tractor** was activated by pumping diesel. The tractor continued pulling CT in hole at 15 ft/min until reaching 35,529 ft MD. Logging data was passed to surface in real time, through the fiber optic cable.

This operation set a new world record depth for CT intervention. This reach far exceeded other previous attempts made by other methods, such as wireline tractors. By combining previous reliable tools production engineers and reservoir management team now have a simple proven method to access and obtain valuable logging data at previously unreachable depths to better manage their field production.

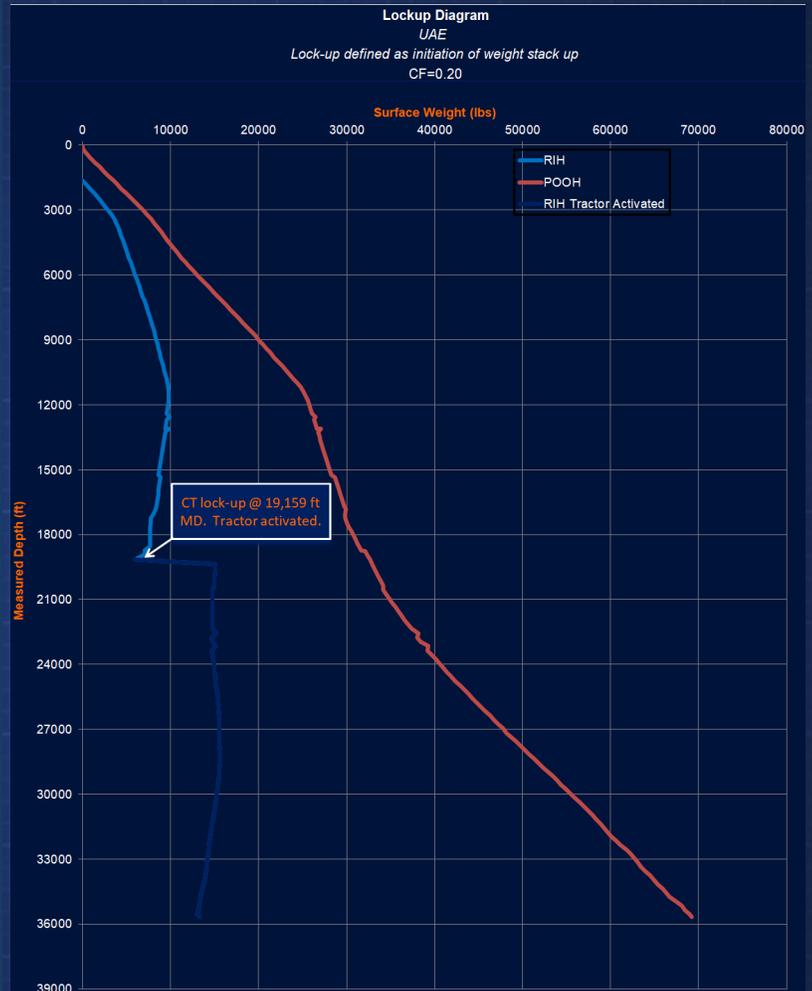
**Location:** Middle East

**Well Type:** Oil Producer

**Objective:** Deliver Fiber Optic CT to target depth to perform live logging

**Solution:** WWT 350 ERG Tractor/ Custom CT String with Fiber Optic

**Results:** Logging tools successfully conveyed to TD



**Tubing Force Analysis**



**WWT Expandable Ramp Gripper Assembly**