



Fiber Optics CT Logging with **WWT 350 ERG Tractor** in Mega Extended Reach Well

Objective

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

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 ERG 350** Tractor was combined with Real-Time fiber optic Production Logging Services PS in 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, allowing logging tools and tractor to operate completely independently without interference.

Once at Lock-up depth at 19,348 ft Md (13% of target section) the WWT 350 tractor was activated by pumping diesel at 1.4 bpm. The tractor continued pulling CT in hole at 15 ft/min until reached 35,529 ft MD. Logging data was passed to surface in real time, through the fiber optic cable.

The combination of the hydraulic tractor with specialty tapered string set a new world record depth for CT intervention. This reach far exceeded other previous attempts 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 new depths, to better manage their field production.

Location UAE.

Well Type: Oil Producer

Objective: RIH Fiber Optic CT to target depth and perform CT Logging

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

Results: CT Fiber was successfully conveyed to TD

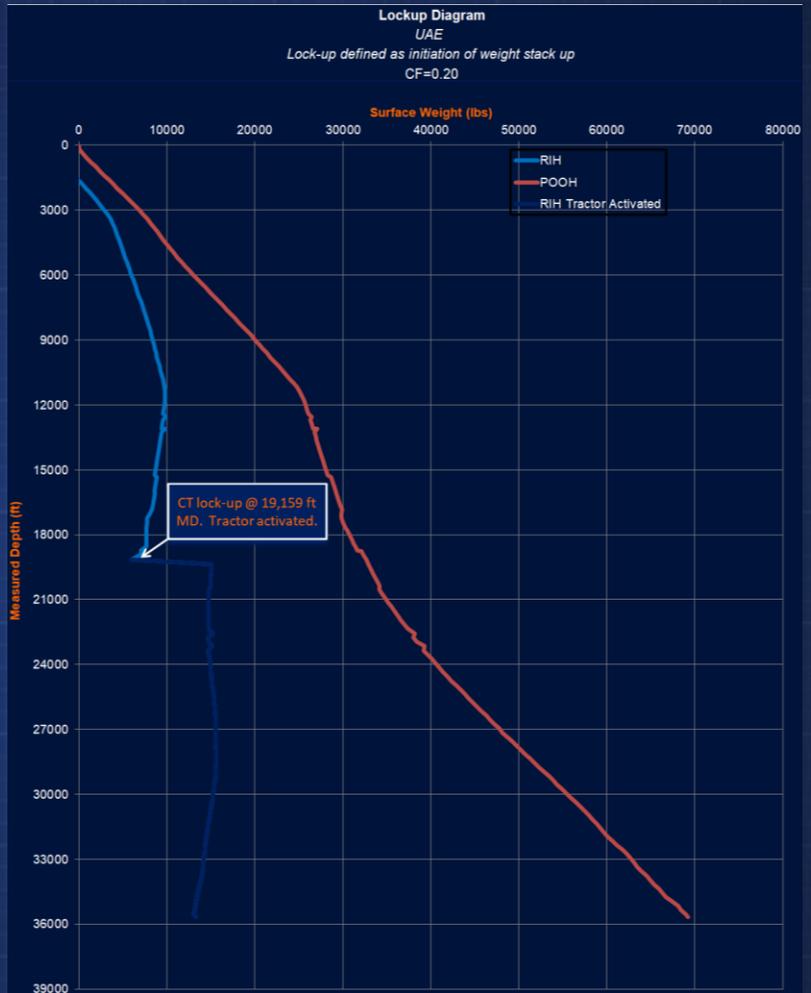


Figure 1 Tubing Force Analysis



Figure 2 WWT Expandable Ramp Gripper assembly