



Extended reach Well Cleanout with **WWT 350** Tractor and CT Services Custom String

Objective:

The objective of this operation was to safely reach TD of the of the ~30,000 ft extended reach well in offshore Abu Dhabi with CT to dissolve and cleanout organic deposits from the wellbore.

Problem:

Extended cased horizontal sections with up ~20,000 ft lateral, create a challenge to reach the deepest zones of interest. As a consequence, conventional CTS services are not effective for running by itself to the TD in this complex 3-D well trajectory to perform well interventions.

Solution:

A CT Services custom engineered string pulled by a WWT Hydraulic Tractor provided the best well intervention solution to overcome the challenge. The reliable combination allowed customers reach the deepest zones of interest with great efficiency, and effectively complete the goal for higher return on investment.

WWT International supplied a **WWT 350 ERG** Tractor with over 9,000 lbs to pull force capable of operating in Acid and H₂S environments. The WWT Tractor is completely hydraulically operated and was configured to operate at a desired pump rate for the operation. When optimal differential pressure was reached the Tractor pulled a 31,600 ft string of 2.375" OD coiled tubing past lock-up depth in the 6 5/8" OD extended lateral Liner.

The intervention was performed in a single run. Once at initial lock-up depth of 18,755 ft MD (50% of the target section without tractor) the WWT 350 tractor was activated by pumping Diesel at 1.4 bpm. The tractor continued to pull CT at a speed 15 fpm until reached the target depth of 29,000 ft TD. 100% of the target section successfully and the customer was able to perform effectively Wellbore Cleanout of the entire wellbore.

Location: UAE.

Well Type: Oil Producer

Objective: Wellbore Cleanout

Solution: WWT 350 Tractor with Custom Engineered CT

Results: Production Liner effectively Cleaned out and Production improvement.

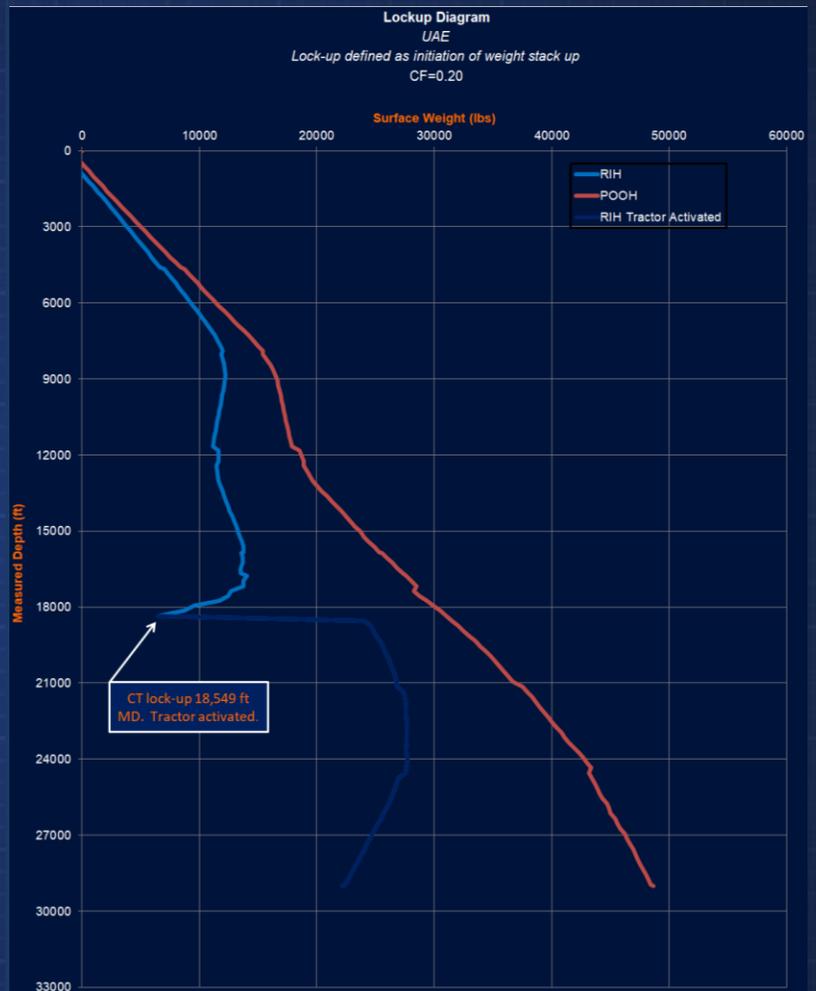


Figure 1 Tubing Force Analysis



Figure 2 WWT Expandable Ramp Gripper assembly