## Technology Brief

Location	North Dakota
Application	Coil tubing
Well depth (TVD)	11,000 ft [3,350 m]
Lateral length	8,000 ft [2,450 m]

## BACKGROUND

Horizontal wellbores around the world are getting longer. leading to more demand for coiled-tubing extendedreach (ER) tools. ER tools that create vibration and take no downhole measurements provide inconsistent, unquantified results. A more powerful mechanical agitation feature is needed to carry coiled-tubing strings to deeper TDs. Knowing exactly what size force a downhole ER tool will generate can greatly improve modeling of wells, helping to optimize time and cost.

### SOLUTION

The Teledrill NEWTON SYSTEM<sup>®</sup>, a water hammerstyle ER tool with a known and adjustable force setting, optimizes lateral reach and better matches prerun simulation models. The system's data telemetry reduces risk, and its thruster provides consistent axial pull for deeper, faster coiledtubing runs.

# NEWTON SYSTEM Provides Consistent Axial Pull for Deeper, Faster CT Runs without Helical Buckling

## Water hammer pulses generate average of 4,000 lbf at BHA

### Obtaining real-time downhole data during extended-reach operations



A 1,000-psi pulse results in 4,000 lbf of pull on the end of the coiled-tubing string. Teledrill's NEWTON SYSTEM can adjust its pulse amplitude to increase or decrease the force the tool provides.

## **TELEDRILL'S NEWTON SYSTEM**

- On/off extended-reach feature
- Logged memory data
- Real-time data
- · Adjustable force/pulse amplitude
- Proven performance

With a water hammer–style extended-reach tool, pressure pulse amplitude dictates how much force will be applied to the coiled-tubing BHA. With the Teledrill NEWTON SYSTEM, pulse amplitude can be adjusted on the fly, providing the force needed to reach TD. These pulses can also be decoded into real-time downhole measurements. This combined reach and telemetry system is unlike any other tool in the coiled-tubing industry.



With unique knowledge in downhole sensor and pressure pulse technology, Teledrill, Inc., develops and deploys innovative solutions to extend the reach and enhance the efficiency of coiled-tubing operations.