

# EX TREME

Coil Over Top Drive Rigs Carry  
Canadian Contractor To Onshore  
Drilling Records In U.S. Rockies

**Achievements:** Deepest North American well drilled with 3½-inch coiled tubing: 2 476 metres (8,125 feet); Longest S-curve well drilled in the U.S. with coiled tubing: 1 828 metres (6,000 feet)

**Locations:** Denver-Julesburg Basin, north of Denver, Colorado;  
Orchard Federal Unit, Piceance Basin, Colorado

**Operator:** EnCana Oil & Gas (USA) Inc.

# COIL





### ROCKY MOUNTAIN HIGH

In Colorado's Denver-Julesburg Basin, Xtreme Coil Drilling has set a depth record for a North American well drilled with coiled tubing.

SHORTLY AFTER ENTERING THE UNITED STATES MARKET LAST YEAR, a Canadian drilling contractor was living up to its unusual name. By December, just six months after setting foot in the U.S. Rockies region, Xtreme Coil Drilling Corp. claimed a depth record for a North American well drilled with coiled tubing.

Drilled to 2 476 metres (8,125 feet) in Colorado's Denver-Julesburg Basin, the well was one of three bored in December for EnCana Oil & Gas (USA) Inc., which was field-testing two of Xtreme's Coil Over Top Drive rigs.

Xtreme's decision to move its state-of-the-art rigs south of the border was driven not by an urge to set records but by a slowing western Canadian drilling climate, thanks to slipping natural gas prices. While the record well brought credibility to Xtreme's rig design, it's not yet clear whether or not coiled tubing will catch on in the U.S.

"The well was part of a three-well pilot test we were doing on that particular technology," says Doug Hock, EnCana USA's Denver-based director of community relations. "Going forward, we haven't yet made a final decision as to what degree we'll use it."


Despite its acceptance in Canada, coiled tubing is still gaining a foothold in the U.S., where conventional drillpipe still rules the roost. A push by the U.S. Department of Energy's National Energy Technology Laboratory to bring new technologies to the oil and gas sector, mainly through its Microhole Technology Program, is helping.

Xtreme Drilling executives say the company's Coil Over Top Drive rigs achieve greater depths and faster drill times because they allow drilling to continue without the need to make connections, something that slows conventional drilling. As well, coiled tubing means continuous circulation, something not possible where tripping is required. Finally, Coil Over Top Drive rigs can drill with coil or drillpipe, allowing them to bore the first leg of a well conventionally, then switch over quickly to coil.

"We usually set 900 to 1,000 feet of surface casing, then drill out of that with the coil," says Tom Wood, founder and chairman of Xtreme. With a nearly quarter-inch-thick wall, the coil is 89 millimetres (3.5 inches) in diameter, making for one hefty reel of tubing.

At nearly eight pounds per foot, a single, 10,000-foot reel of coil weighs close to 80,000 pounds, not counting the trailer that holds it. Together, coil, trailer and boosters can weigh 160,000 to 170,000 pounds, making rig-moves, especially on U.S. highways with their stricter load limits, a challenge. Wood says Xtreme's technology allows it to break up rig loads into modular units, sharply reducing load-weights and facilitating rig moves.

Although its U.S. experience has been brief, Xtreme has done more than set a coil-tubing depth record, according to Wood. The Calgary-based contractor also claims bragging rights for the longest S-curve well drilled with coiled tubing in the U.S. Drilled last year for EnCana in the Orchard Federal Unit of Colorado's Piceance Basin, Xtreme says the well reached a length of 1 828 metres (roughly 6,000 feet) in a 20-centimetre (7 7/8-inch) hole.

This year, Xtreme will roll out its latest Coil Over Top Drive rig, the XTC 400, capable of drilling to more than 3 000 metres (9,843 feet) with coiled tubing, and up to 4 100 metres (13,451 feet) with jointed drillpipe. 

— By Jim Mahony

### CONTACT FOR MORE INFORMATION

Tom Wood, Xtreme, Tel: (403) 262-9500, E-mail: [xtreme.info@xtremecoildrilling.com](mailto:xtreme.info@xtremecoildrilling.com)