



video transcript

congo river canyon crossing

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Voiceover

The Congo River Canyon Crossing Pipeline Project includes an 87 mile – or 140 kilometer – pipeline that is routed under the Congo River seabed canyon as well as two locally constructed platforms on either sides of the canyon.

To complete the Congo River well intersection, Chevron installed jack-up drilling rigs to offshore platforms on both sides of the Congo River submarine canyon. The rigs simultaneously drilled wells down to a vertical depth of 4,872 feet then transitioned from vertical to horizontal and intersected mid-point beneath the canyon.

An active magnet ranging technology was used to direct the drilling assembly so that the wellbores met 2 miles away in a target smaller than a basketball.

A magnetic sensor was run in the drill string on one side, while a powerful magnet, located behind the drill bit, was rotated by the other rig.

The signal from the rotating magnet was used to calculate the distance between the drill bit and the sensor, allowing updates to the well plan and corrections to the downhole steering device, until the wellbores were carefully merged.

Once the path was successfully opened, more than 23,000 feet of steel casing was run into the wellbore – in a first-of-its-kind, two-rig, push-pull operation – to create a continuous natural gas pipeline from one platform to the other.

The platforms on either sides of the canyon will remain in place to identify the pipeline's position.