

# Driving Efficiency ERD Well Development in Colombia through the Cutting-Edge Integration of Nabors MPD-Ready® Express System

Nabors Integra™, through its innovative MPD-Ready® Express system, has implemented an integrated, efficient, and cost-effective solution to overcome the challenges encountered during well drilling operations.

## Challenge

One of Colombia's largest operators faces significant challenges due to the complex geology of its fields in reaching the productive zone of interest. Pressure fluctuations affecting the geomechanical operational window lead to operational difficulties such as stuck pipes, wellbore clean-out challenges, and wellbore stability problems. These complications hinder efficient drilling operations and increase operational risks.

## Solution

The Integra MPD System maintained a more stable pressure profile, providing precise wellbore pressure control, ensuring hole stability, and successfully achieving the drilling objectives. The system demonstrated a high capacity to adapt to geological variations, while the simplicity of its equipment and operations contributed to optimizing the drilling process in the area. This resulted in reduced operational times and increased overall efficiency.

## Case Study Facts

**Rig:** X40

**LOCATION:** Colombia

**CUSTOMER:** SierraCol Energy

**TIME FRAME:** Nov 2024

**DETAILS:** Average \$200K reduction in operational costs, execution of ERD wells in 8,000 ft sections, wells drilled with enlarged sections.

## Results

With Nabors Integra MPD, efficiency gains were achieved through reduced rig-up and rig-down times, lower mud weights, faster connections, and increased tripping speeds, all contributing to enhanced wellbore stability. The system minimized mud circulation volumes and times during Mudcap and Rollover operations and maintained stable bottom hole pressure during line runs and cementing using the MPC technique. These advancements accelerated drilling operations, improved operational performance, reduced carbon emissions, and achieved a perfect safety record with zero HSE incidents in the past year across more than 20 operations with MPD-Ready® Express System.

- ✓ **40% faster** connection times using SmartDRILL®
- ✓ **85% reduction** in rig up and rig down compared to conventional MPD from **26 hrs to 3 hrs**
- ✓ Reduction of MPD crews to 3 people due to the integration of Nabors personnel
- ✓ More than **60% reduction** in heavy mud volume and circulation time
- ✓ Trip speed **improvements over one well of 25%**
- ✓ Lower base mud weights down to 9.2 ppg, ensuring wellbore stability

