

**REAL RESULT** | CANADA

# Canadian Operator Reaches TD on Four Wells, Improves Horizontal Drilling ROP by 19%

An integrated pressure-management workflow stabilized narrow drilling margins and shortened execution across the four-well campaign.

CANADIAN OPERATOR

ONSHORE

LAND RIG

**OVERVIEW**

A Canadian operator needed to deliver four horizontal development wells safely within a narrow drilling margin. An integrated workflow combined automated pressure control, continuous downhole monitoring, and real-time engineering oversight. The operator reached total depth on all four wells, improved horizontal-section drilling ROP by 19%, and shortened execution as the campaign progressed.

 **PRODUCTIVITY****19** %**Horizontal-section drilling ROP improvement**

Measured from well 1 to well 3 across the 12,000-ft horizontal sections.

 **EFFICIENCY****02** DAYS**Execution time reduction between initial and later wells**

Approximate improvement across the drilling program.

 **EFFICIENCY****03** HOURS**Drilling-window validation time reduced per well**

Reduced repeated drilling-window validation activities.

## THE CHALLENGE

The operator faced a narrow drilling window and pressure uncertainty that increased the risk of losses, ballooning, gas migration, kicks, and interruptions. Conventional execution could not provide the continuous pressure visibility and control needed to protect wellbore stability across the four-well campaign.

## THE SOLUTION

The team first combined automated pressure control with continuous downhole monitoring and real-time engineering oversight to maintain stable operating conditions. It then calibrated the drilling window, optimized dynamic formation integrity testing, and monitored equivalent circulating density to refine operating limits from well to well. During critical casing and cementing operations, managed-pressure practices maintained pressure control. When pressure-while-drilling tools failed on two wells, hydraulic modeling sustained equivalent circulating density management.

### TECHNICAL DETAILS

|                                |                       |
|--------------------------------|-----------------------|
| Wells delivered to total depth | 4                     |
| Days saved per well            | 2                     |
| PWD tool failures overcome     | 2                     |
| Formation                      | Falher                |
| Well type                      | Development, producer |

## PRODUCTS AND SERVICES

[Modus™ Managed Pressure Wells Solution](#)

[Managed Pressure Drilling Services](#)

[Real-Time Operations Center \(RTOC\) Engineering Services](#)

## THE OUTCOME

All four wells reached total depth within the narrow drilling margin. From well 1 to well 3, horizontal-section drilling ROP increased by 19%, while drilling efficiency improved by approximately two days between the initial and later wells. The workflow also helped mitigate losses, ballooning, gas migration, and pressure uncertainty while reducing repeated drilling-window validation activities by approximately three hours per well. It established a repeatable execution model for future development wells.