

Lithology	Naturally fractured shale
Well type	Horizontal
Mud density	1,550–1,750 kg/m ³

Background

The liquids-rich Duvernay Formation in the Western Canada sedimentary basin is a tight shale play with extensive networks of gas-bearing natural fractures. Due to abnormal reservoir pressures, the formation forces operators to drill within extremely narrow equivalent circulating density (ECD) margins—often leading to risk of gas influx or fluid losses. To minimize NPT and HSE risk, M-I SWACO recommended the @balance Control* MPD system, which would ensure wellbore stability, optimize mud weight, and monitor pressures throughout the drilling campaign.

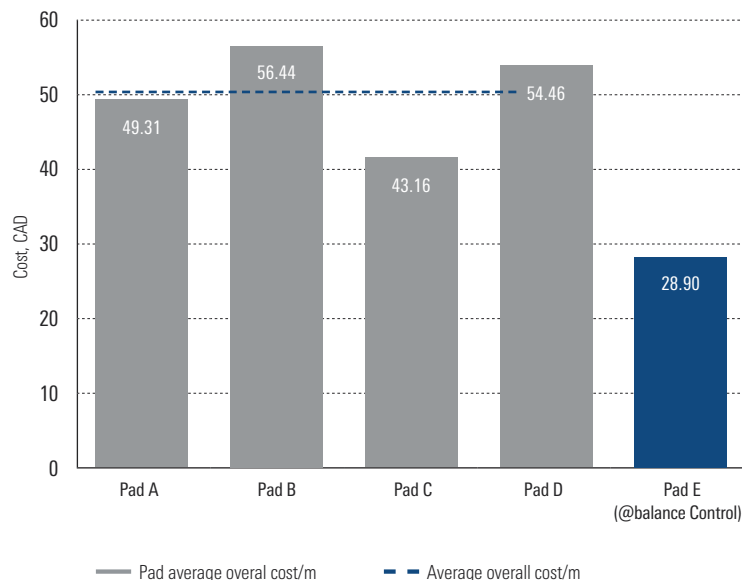
Technology

@balance Control MPD system

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@balance Control System Reduces Pad Costs by 45% in Six-Well Campaign, Western Canada

Managed pressure drilling solution navigates narrow pressure margin, improving drilling efficiency, economics, and safety in the Duvernay Formation



The @balance Control system enabled a reduction in mud density from 1,750 to 1,550 kg/m³, reducing annular friction, low gravity solids content, and mud costs. Average cost per meter dropped from an average of CAD 52.90 to just CAD 28.90—saving the operator 45% compared with offset wells.