An operator in West Texas chose the MPD-Ready® Dual Choke system to prevent possible flow from a fracture job a half mile to the east. The system delivers efficiencies on many fronts and the operator was able to mitigate various wellbore conditions which resulted in a three-day drilling time improvement over neighboring wells. Here is how the advantages stacked up.

The proprietary technology helped restrict surge and swab, allowed for lower mud weight and prevented possible influx from the Wolfcamp X or A formations. Nabors’ engineers ran hydraulics and delivered a solution featuring varying Surface Back Pressure (SBP). The SBP schedule maintained equivalent mud weight at well bottom and adjusted for influx mitigation while preserving wellbore stability. Specifically the operator stabilized equivalent mud weight at well bottom which promoted a Rate of Penetration (ROP) increase of up to 15%. Stripping operations were also performed successfully with variable SBP.

After implementing the system, the operator drilled the 7-7/8” curve & lateral section with 20% reduced drilling time and ROP increased 13% and sliding ROP increased 15%.

Figure 1. Target days vs. Depth curves in order (3 wells) drilled with MPD-Ready