**BJ**

# ThinFrac™ MP Improves Pressure Response for Maximum Proppant Transport in Haynesville Shale

**Technology:** ThinFrac MP | **Basin:** Haynesville | **Application:** Shale

## OVERVIEW & CHALLENGE

An operator was completing a single well in the Haynesville Shale and began experiencing screenouts during the first 12 stages using a conventional friction reducer and guar hybrid system. This condition was also causing the operator to continue decreasing the design rate and increasing the amount of friction reducer used during the latter half of the stages. As a result, the proppant was not properly placed on all stages. It was recommended to use a high viscosity friction reducer to achieve the desired rate and pressure during the 65-stage completion.

## SOLUTION

BJ Services ran ThinFrac MP on stage 13 at a loading of 1.25 gpt (1.25 L/m³) to treat the remainder of the stage at the desired rate. This technology provides instantaneous viscosity, efficient hydration and enhanced proppant transport. The true vertical depth of the well was 11,759 ft ( 3,584 m) with a BHT of 335°F (168°C). The casing was measured at 5.0 in (12.7 cm). The maximum pressure on the stages that used the conventional friction reducer was 12,657 psi (87.27 MPa). However, the stage where ThinFrac MP was used reached a maximum of only 10,945 psi (75.46 MPa) during higher proppant concentrations.

**EFFICIENT HYDRATION**

**SUPERIOR PROPPANT TRANSPORT**
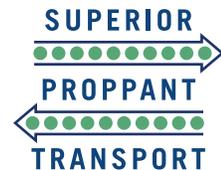
# ThinFrac™ MP Improves Pressure Response for Maximum Proppant Transport
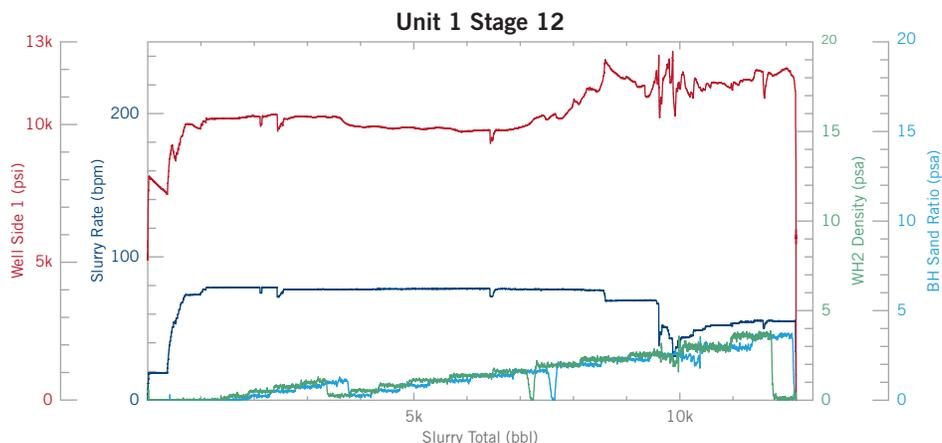


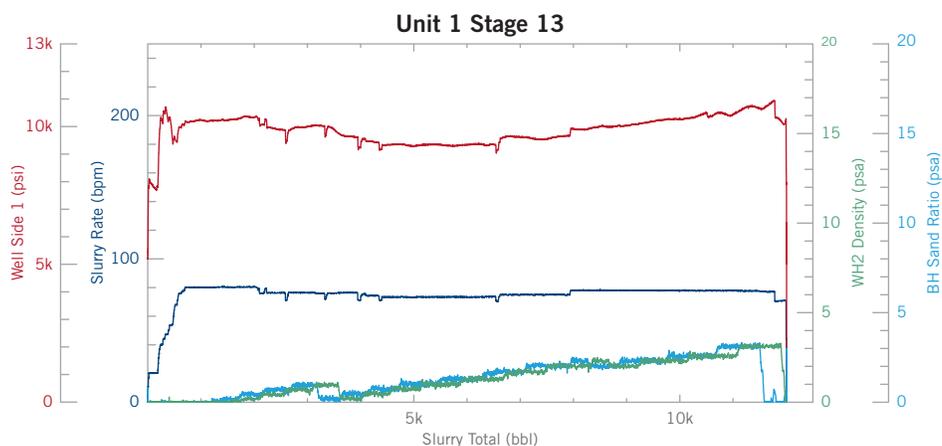Figure 1: Stage treated with conventional friction reducer



Figure 2: Stage treated with ThinFrac MP

## RESULTS

The use of ThinFrac MP resulted in decreased fluid friction pressure by an average of 1,100 psi (7.58 MPa) when compared to the hybrid system. Screenouts were eliminated, allowing the proppant to be properly placed in the fracture network. In addition, the average surface treating pressure during stage 13 was approximately 600 psi (4.14 MPa) less than the stages it was absent. Lastly, the average treating rate was approximately 2.5 bpm (0.40 m³/min) more with ThinFrac MP.