



# High-Viscosity Friction Reducer Lowers Operation Costs by Requiring Less Fluid Consumption

**Technology:** ThinFrac™ HV FRHV-766 | **Basin:** Haynesville | **Application:** Shale

## OVERVIEW & CHALLENGE

An operator had experienced difficulty when pumping a conventional hybrid system on a pad in DeSoto Parish, Louisiana. The system could not mitigate extremely high pressures, resulting in a lower pumping rate and longer pumping time. In addition, multiple screenouts occurred throughout the well. On the next two-well zipper pad, the operator anticipated the same issues since the wells were within the same zone at similar depths.

## SOLUTION

BJ Services recommended using ThinFrac HV FRHV-766 on the new pad. This anionic friction reducer has effective viscosity and proppant transport properties, and used in high-rate applications. The two wells had an average total vertical depth (TVD) of 11,706 ft (3,568 m), an average measured depth (MD) of 19,791 ft (6,032 m) and bottomhole temperature (BHT) of 335°F (168°C). The amount required for this high-viscosity technology was significantly less than the hybrid system. In addition, the surface treating pressure was on average approximately 427 psi (2,944 kPa) and 1,031 psi (7,108 kPa) less, respectively, than the previous pad.

## RESULTS

After switching to FRHV-766, the operator saved approximately 16% in friction reducer consumption on both wells and an average of 114 gal (432 L) less per stage when compared to the previous operation. This equates to over \$38,000 in savings, or approximately a 35% reduction in costs per gallon. Additionally, the single-fluid system simplified logistics and reduced the pad's footprint. Lastly, FRHV-766 enhanced the proppant transport because of its high-viscosity yielding capabilities.

