

## First Order Child Well Pair Outperform Unbounded Second Order Child Well Pair by 18% in 180-Day Cumulative Gas Production

## Challenge

- The execution of in-fill child well completions necessitates strategic planning to address the prevalent challenge of preexisting depletion and fracture connectivity
- + In the Haynesville Basin, a ShearFRAC® partner faced the critical task of enhancing fracture effectiveness in newly drilled child wells positioned eastward of an established producing pad with over 15 months of production depletion

## Solution

- Non-invasive pressure diagnostics were used on the first order child wells to monitor fracture event activity in real-time
- Tailored pump schedules and proppant loading in conjunction with real-time adjustments were applied to create complex secondary fracture networks within the reservoir near the child wells
- Each stage was optimized to avoid detrimental fracture driven interactions with the parent wells, pre-existing hydraulic fractures and reservoir depletion

## Results

- In a depleted area where reduced performance was anticipated,
   the first order child wells exceeded the production of the
   second order child wells by 18% over a period of 180 days
- The impact of the enhanced secondary fracture network is evident on the cumulative production chart, where a clear divergence is observed following the decline of initial production after approximately 90 days

Basin - Haynesville

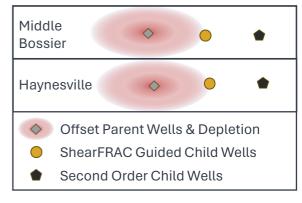
Formations – Middle Bossier

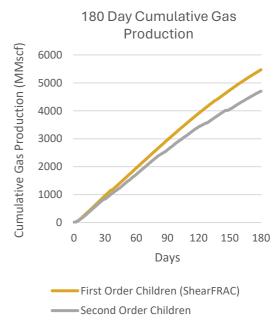
Havnesville

Location – Red River Parish, LA

Producing Well Type – Gas

Project Gun Barrel View





**Balancing Operational Efficiency with Fracture Effectiveness**