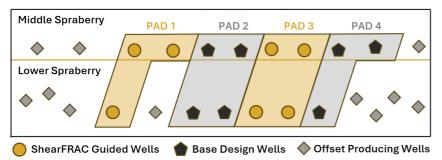


# **Completion Optimization Technology Results in 17% Uplift in Cumulative Production for In-Fill Child wells in the Midland Basin**

## Challenge

- In-fill child wells often result in reduced production due to depletion within the reservoir from offset producing parent wells
- A ShearFRAC partner in the midland basin was looking for ways to increase productivity from in-fill wells across a 14 well, 4 pad completion project



#### Solution

- In a controlled trial, real-time completion optimization software FracBRAIN® was used to actively guide rate and proppant application in Pads 1 & 3 with the base design used on Pads 2 & 4
- The software's machine learning algorithm provides intra-stage adjustment recommendations to create higher complexity fracture geometry around the child wells, protecting parent well integrity in areas of depletion

### Results

- Due to depletion, bounded Pads 1 & 4 and unbounded Pads 2 & 3 were used to compare cumulative production after 7 months
- Guided Pad 1 shows 8.8% higher production compared to Pad 4
- Guided Pad 3 shows 23.6% higher production compared to Pad 2
- Average 17% increase when combined

Web

Basin - Midland

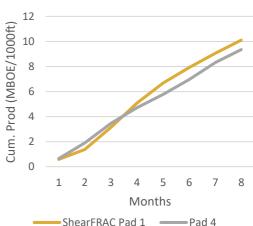
Formations - Middle Spraberry

**Lower Spraberry** 

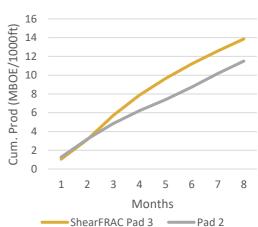
Location – Midland County, TX

Producing Well Type - Oil





#### **Unbounded Comparison** Cumulative Production - Pads 2 & 3



**Balancing Operational Efficiency with Fracture Effectiveness**