

Real-Time FDI Mitigation Workflow Enables Operator to Increase Stage Placement by 63% Resulting in a 25% Uplift in Production

Challenge

- Fracture Driven Interactions (FDIs) can be detrimental to both
 parent and child well production, as well as parent well integrity
- Often, FDIs result in completion stages being cut short on child wells once a maximum threshold pressure has been observed on the parent
- Strategies to mitigate these interaction require substantial oversight from operator personnel both on site and remotely

Solution

- Pro-active mitigation strategies utilizing real-time pressure monitoring of offset wells increases Volume to First Response (VFR) and decreases FDI magnitude (ΔP)
- Automated workflows using pre-set guidance parameters reduce the need for manual oversight and standardizes decision-making across operations
- The FracBRAIN® real-time monitoring platform facilitates these workflows through a user-friendly web app optimizing the balance between operational efficiency and fracture effectiveness

Results

- This workflow has enabled a ShearFRAC partner to increase the number of stages with greater than 80% of planned fluid volume placement from 24% to 87%
- Child wells also show an increase in fracturing effectiveness
 with a resulting 25% increase in cumulative gas production after
 18 months

Basin – Western Gulf

Formation - Eagle Ford

Location – Webb County, TX

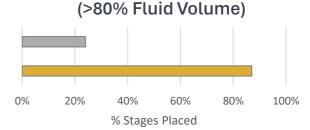
La Salle County, TX

Producing Well Type - Dry Gas

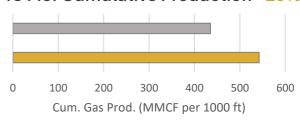




Stages Placed +63%



18 Mo. Cumulative Production +25%



Pre ShearFRAC®

With ShearFRAC® FDI Workflow

Balancing Operational Efficiency with Fracture Effectiveness