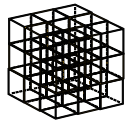
ShearFRAC®

Balancing Capital Efficiency with Fracturing Effectiveness

ShearFRAC® provides the *missing link* between completions, geology and reservoir engineering through a unique fracture diagnostic technology. Our live streaming technology platform, FracBRAIN® displays *second-by-second* fracture measurements and active fracture guidance to visualize rock response and optimize fracture surface area during *each completion stage*. The technology improves stage productivity, resulting in *higher well IP and EUR*, which we analyze using ResBRAIN®, a ShearFRAC® reservoir engineering tool.

ShearFRAC®



Increase Fracture Surface Area

By measuring the subsurface interaction between hydraulically applied energy and the reservoir, adjustments can be made to fluid & proppant vectors to better influence the creation of the fracture network exposing greater productive reservoir surface area.

Type Curve & Production Improvements

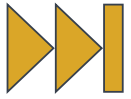
Wells completed using ShearFRAC®, compared with non-ShearFRAC® wells on the same or an adjacent pad, show improved well productivity because of this real-time rock-water-proppant interaction. Our objective is to maximize the productivity of every stage.

Fracture Driven Interaction (FDI) Mitigation

Fracture Driven Interactions with offset wells during a completion can be mitigated through adjustments to rate, proppant and chemical concentrations. ShearFRAC® enables operators to make these changes proactively, reducing the impact of ongoing completions to offset producing wells.

Pump Schedule Optimization

Through the use of FracBRAIN® measurement technology, ShearFRAC® provides insights into the effectiveness of your completion design providing recommendations of minor adjustments to the pump schedule, ultimately reducing fluid & chemical usage, time on location and overall completion cost.



Fast Iteration

FracBRAIN®'s real-time fracture measurement provides data that allows operators to make informed decisions on the impacts of completion design from one stage to the next.

FracBRAIN®

- Supervised Frac Automation to Maximize ROI (Active Guidance)
- Stage Level Fracture Intensity and Effectiveness Metrics
- Live Web App and Cloud Based Software
- Project Management Dashboard for Stage, Well and Pad Statistics
- Non-invasive, Hydraulic Pressure Signal Measurement
- Hydraulically Coupled to Fracture Tip
- Derivative Pressure Measurement Combined with Spectral Frequency Analysis

ShearFRAC®

Stage-Level Pressure Transient Analysis (PTA)

Reservoir Engineering Methods to Determine the Productivity of each Hydraulically Fractured Stage

Fracture Half Lengths, Effective ISIP, Frac Fluid Efficiency, Reservoir Perm, Producing Surface Area

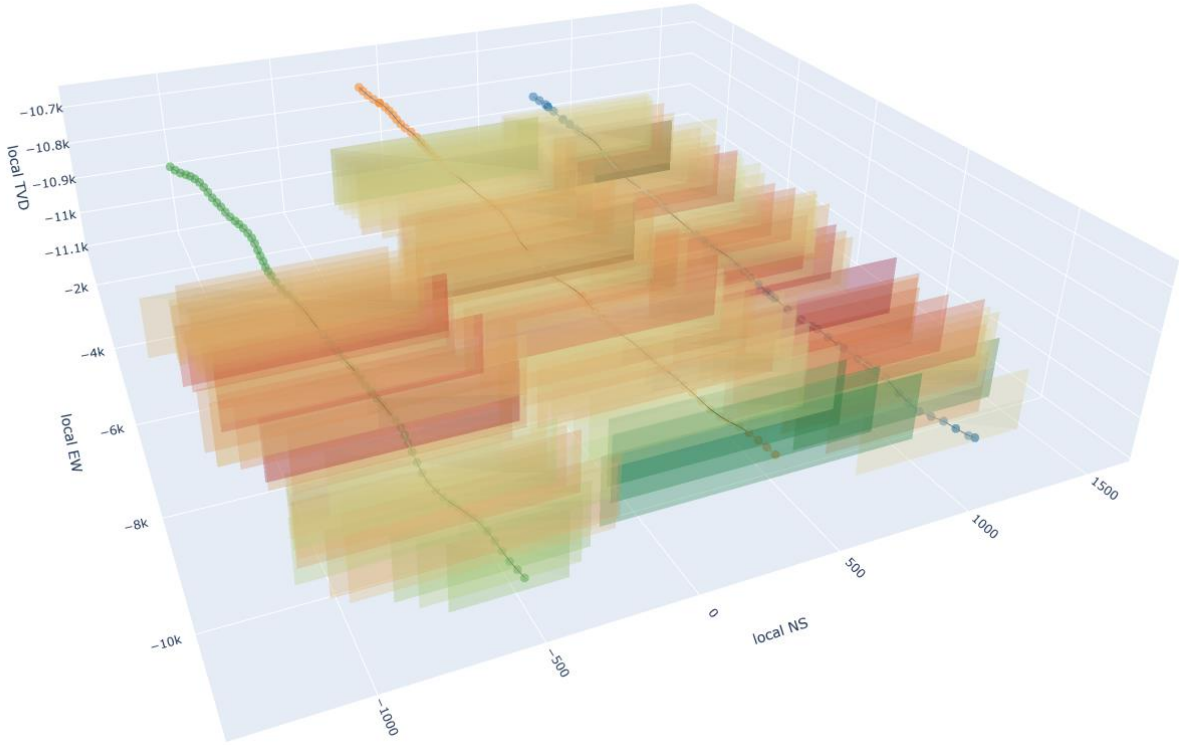
Interactive 3D Viewing Platform

Understand Variances in Wellbore Productivity Along the Entire Length of the Lateral

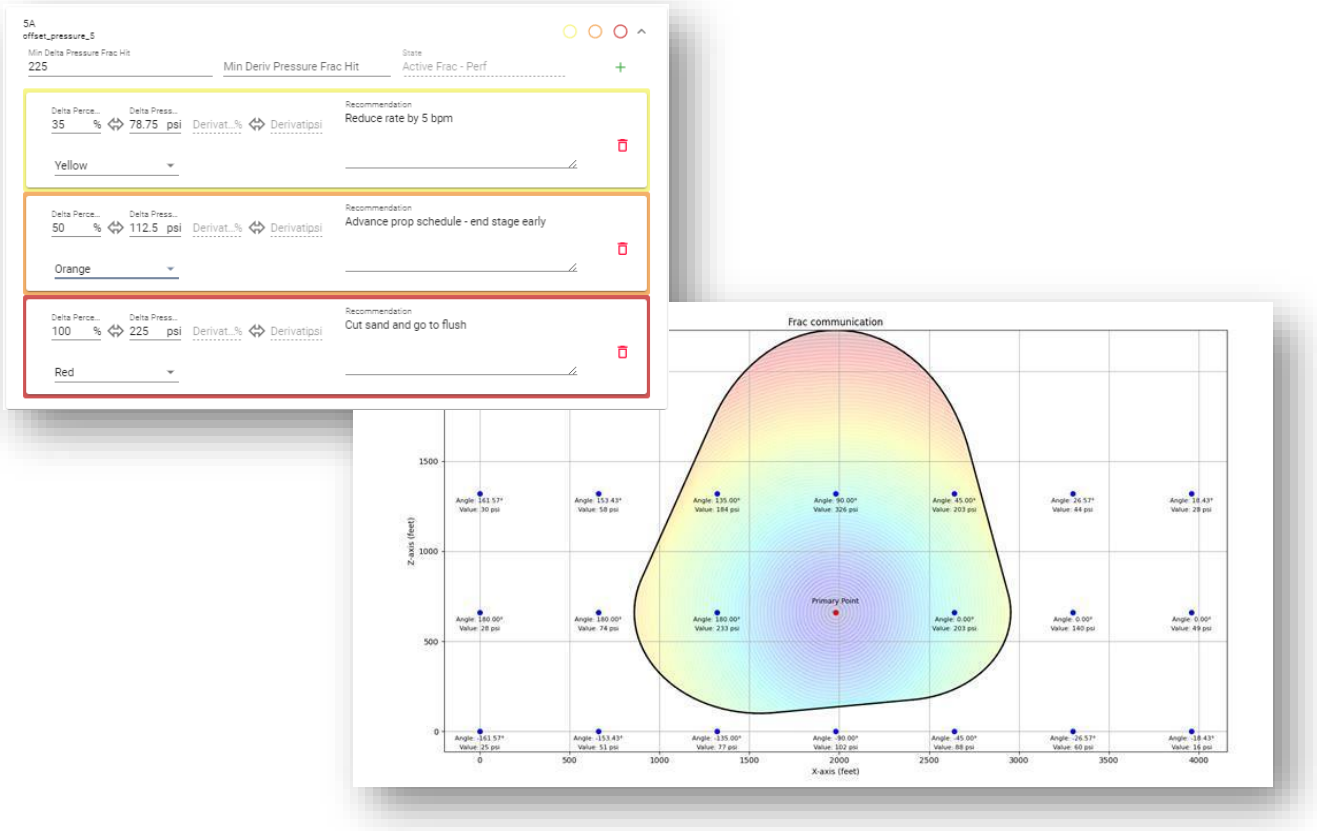
Determine the impact of offset depletion, pre-existing natural fractures, stress shadowing and the other factors on a stage, well & pad level

ShearFRAC®

ResBRAIN®



FDI PLAYBOOK



- Fracture Driven Interaction (FDI) Manager
- Reduce Impact to Parent Well Integrity and Production
- Increase VFR and Stage Placement Consistency to Maintain Frac Energy around Child Wells
- Real-time Interaction Viewing Platform
- Customizable Recommendation Inputs for Semi-Autonomous Mitigation Strategies
- Standardize Decision Making Across Operations to Mitigate Frac Interactions

ShearFRAC®

Induced Seismicity Analysis Platform

Designed for Hydraulic Stimulation & Injection Operations

Early Detection Alerts of Fault Activation

Seismicity Risk Assessment

Induced Seismicity and Casing Deformation Mitigation

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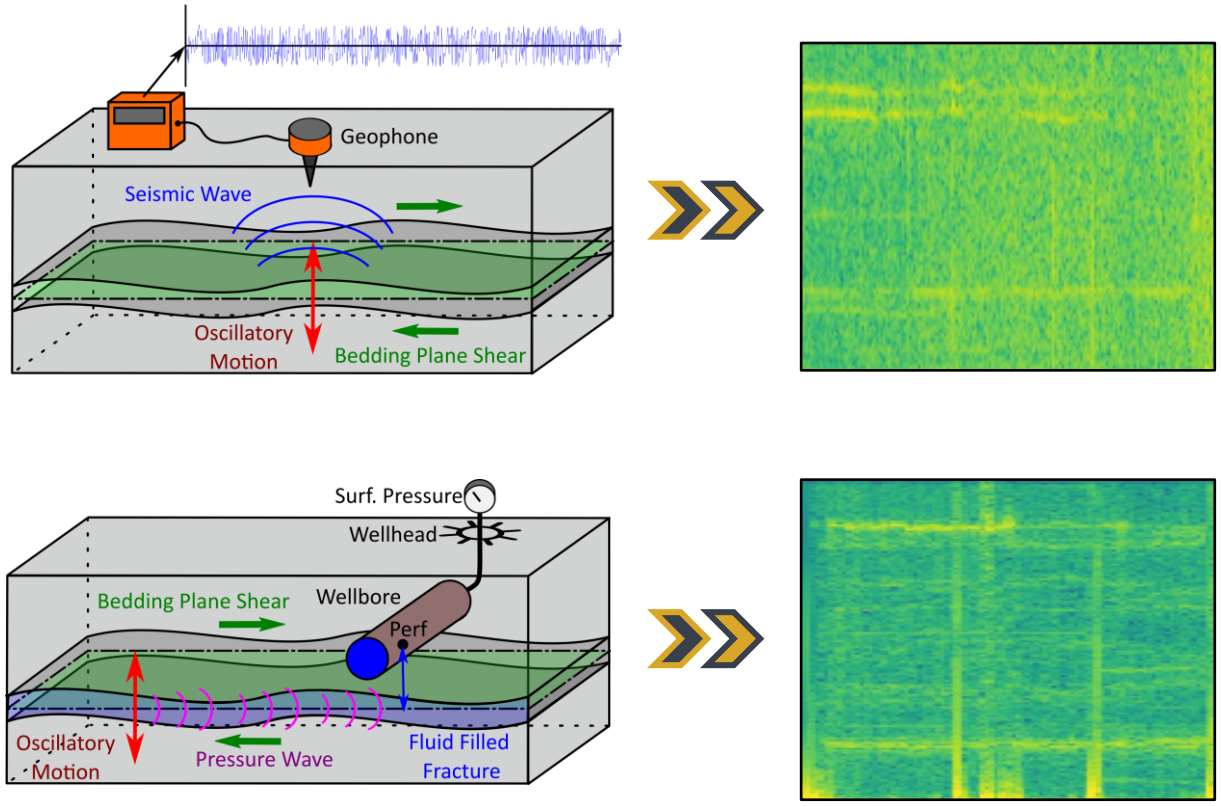
Richter PREDICTOR



Valuable insights from stage level measurements to well and field development characterizations

Stage Level

- Fracture Intensity and Effectiveness
- Producing Surface Area
- Fracture Half Lengths
- Fast Iteration with Stage Level insights
- Customizable Fracture Driven Interaction Manager

Well Level

- Identify Geological Heterogeneity along the Lateral
- Pump Schedule Optimization
- Geohazards Identification – Lineaments, Natural Fractures and Faults
- Landing Depth Recommendations
- Production Analysis (RTA / Decline Curve Analysis)

Field Level

- Frac Energy Containment
- Well Spacing & Field Development Analysis
- Frac to Frac Interference and Offset Depletion

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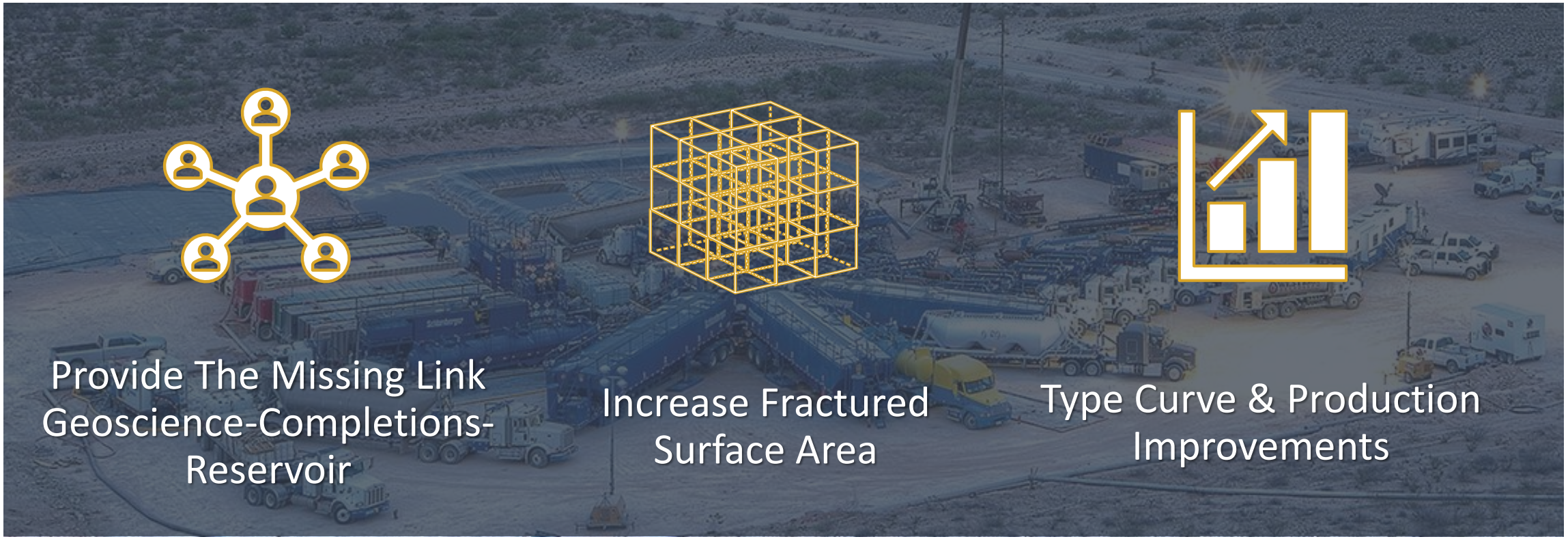

Thank you!