FracMan®

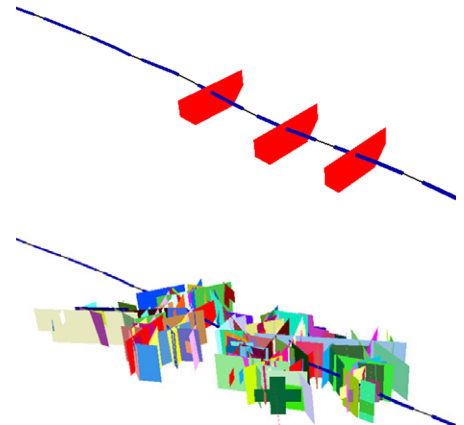# Reservoir Edition Software

Optimizing Well Performance with FracMan

FracMan® is the only Discrete Fracture Network (DFN) model that fully captures the anisotropy and connectivity of the fracture system, providing a clear advantage over conventional modeling approaches. FracMan is a fully three-dimensional, asset development tool, scalable to full field applications. Its robust visual capabilities for reservoir analysis have set the standard in the market for 30 years and have helped our clients cost effectively enhance production in both new and mature assets.Whether you are involved in exploration, prospect appraisal, refracturing, full field model development, or addressing specific local issues, FracMan helps you integrate all of your geological, geophysical, and reservoir data to make the best development decisions.

FracMan software allows you to visualize your fracture system, optimize well spacing and frac spacing, test your conceptual understanding, compare completion technologies, and quantify risks and uncertainties. FracMan helps you understand complex reservoirs and develop a smarter drilling and completion program.

How can FracMan help you?

Your reservoir's fracture network makes a significant impact upon performance and success. FracMan makes it easy to test the relationship of fractures to structure, reservoir properties, seismicity, and flow and to quickly determine the effect on estimated ultimate recovery (EUR) and production rates. FracMan helps you to accomplish the following:

- Predict Well Performance
- Optimize Well and Frac Spacing

Hydraulic fracture simulation includes induced hydraulic fracture, stimulation, and leak-off to natural fractures and hydro-shearing of natural fractures

- Determine Well Sequencing
- Minimize Water Cut
- Predict Proppant Placement
- Optimize Completions
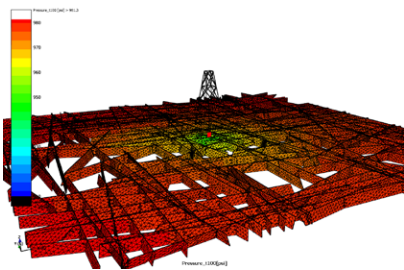- Improve Wellbore Stabilization

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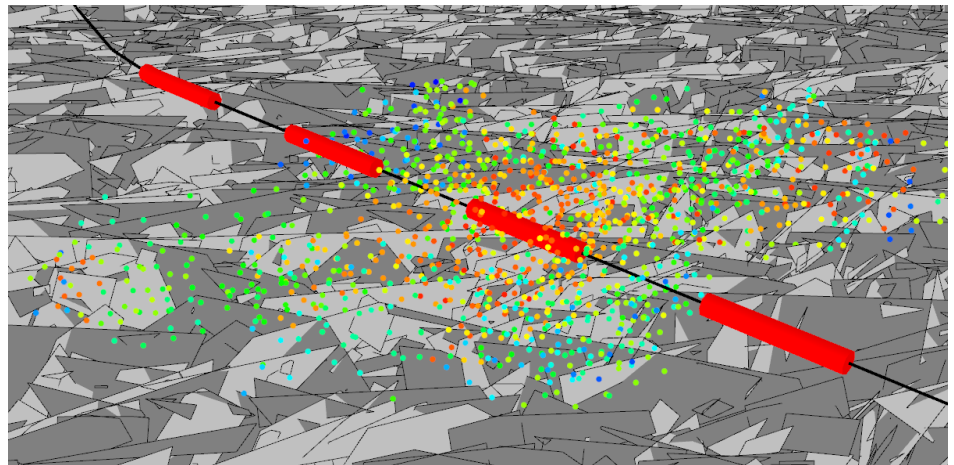## FracMan Technology Solutions

The FracMan Technology Group includes experienced reservoir geologists, geophysicists, and engineers with over three decades of global experience. In addition, FracMan software development leaders are available to support a range of needs, including software selection, integration, application and training, full asset planning, and engineering support.

FracMan Reservoir Edition software solutions integrates multiple data types into a comprehensive model that includes:

- Advanced Data Analysis
- Realistic Fracture Modeling
- Connectivity and Compartmentalization Assessment
- Exploration and Development Well Planning
- Integrated Flow Simulation
- Upscaled Flow and Geomechanics Simulation
- Monte Carlo Simulation and Risk/ Uncertainty Assessment
- Evaluation of Well Stimulation Techniques
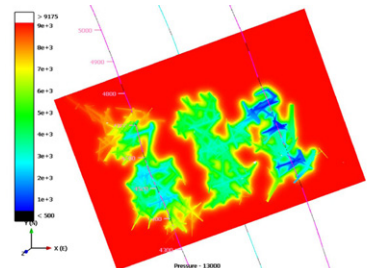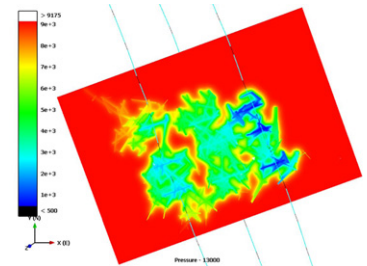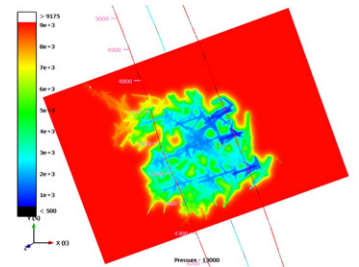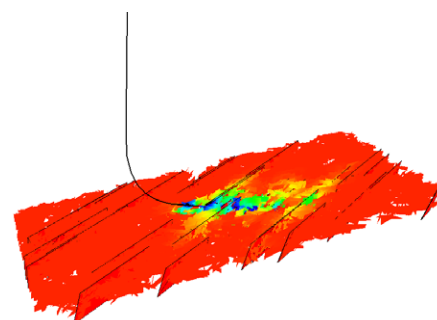- Evaluation of Secondary Recovery Performance

FracMan helps you integrate all of your geological, geophysical, petrophysical, geomechanical, well test, and production data to:

- Quantify the properties of your reservoir's fracture network through a suite of advanced analysis tools
- Generate geologically realistic DFN models based upon a range of properties including well logs, seismic attributes, structural modeling, curvature analysis, or outcrop data
- Validate your models by simulating pressure transient and well interference testsIntro (delete if not required)

Optimize Well Spacing

Upscaling of DFN model to simulation-ready properties

Well test simulation through DFN model

Contact us at: fracman@golder.com

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