

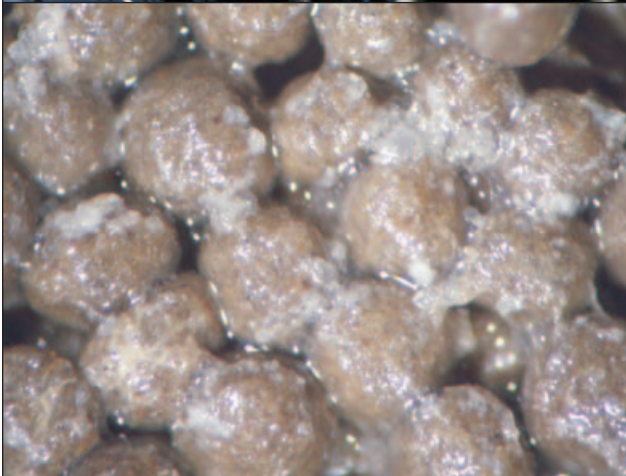
The Stim-Lab Division



Stim-Lab, a Core Laboratories Production Enhancement Division, is the oil and gas industry's foremost provider of laboratory testing services, research, and consulting in the areas of well stimulation and completion.

Laboratory Testing

Stim-Lab prides itself on providing answers, not just data. Our experts have extensive experience in all areas of completion and stimulation, giving us the ability to evaluate your problem from every angle and propose a customized testing regime. In cases where the testing does not meet our standard offerings, we have the ability to design and manufacture testing equipment to give our customers exact answers to the questions they are pursuing, rather than interpret routine testing data, which may or may not be applicable.



Stim-Lab test regimes include:

- American Petroleum Institute (API) recommended practices for:
 - Testing sand used in hydraulic fracturing operations (API RP 56)
 - Testing sand used in gravel packing operations (API RP 58)
 - Testing high-strength proppants used in hydraulic fracturing operations (API RP 60)
- Standard and non-Darcy fracture conductivity flow analysis
- Formation damage assessment
- Fluid compatibility and critical velocity flood
- Drilling mud and fracturing fluid damage assessment and removal
- Additive evaluation
- Matrix and fracture acidizing
- Fracturing fluid evaluations
- Laboratory and large-scale rheological studies
- Proppant transport properties
- Dynamic leakoff
- Breaker evaluation
- Friction pressure

Research Consortia

Stim-Lab's research consortia offer opportunities for companies to participate in multi-client studies that investigate subjects of broad industry interest. Producers, service companies, and suppliers in these consortia study a variety of issues.

Proppant Conductivity and Fracture Cleanup – This consortium develops new methods to scientifically predict the cleanup of proppant packs within hydraulic fractures. These data allow you to confidently select fluids, proppants, and production methods to optimize production. Findings from nearly two decades of study have been incorporated into the Predict-K™ realistic production prediction simulator. This program is continuously enhanced as new information becomes available. Given a set of fracture and reservoir characteristics, the effects of proppant type and concentration, proppant embedment, non-Darcy flow, multiphase flow, and gel cleanup are systematically evaluated to make realistic

post-frac production predictions. Also contained in the Predict-K program is the most comprehensive database of the physical and performance characteristics of common proppants.

Matrix and Fracture Acidizing – This consortium investigates parameters associated with fracture acidizing, matrix acidizing, and foam diversion in vertical and horizontal wells. The data obtained will allow you to confidently select additives and treatment conditions to optimize stimulation results.

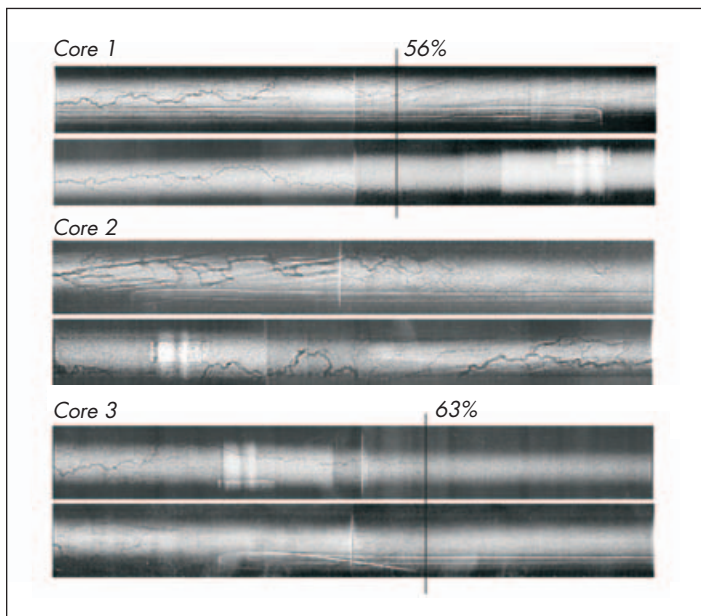
Consulting and Treatment Simulation

Our consultants have thousands of hours of experience in designing stimulation treatments, and they handle difficult stimulation cases on a daily basis. If you encounter a problem that is difficult to explain, odds are our experts have seen something similar and can assist you in resolving the problem; or they can help you assemble the data necessary to do so.

We are ready to help you with:

- Stimulation consulting
- Treatment design
- Post-treatment analysis
- Field and regional studies
- Training courses
- Proppant conductivity

- Formation damage
- Treatment design and post-treatment analysis
- Fracturing quality control
- Fracture simulation



Fracture Simulation

Stim-Lab's GOHFER™ Hydraulic and Acid Fracturing Simulator is the industry's only fully 3D simulator with a fully coupled fluid/solids transport. And it is the only simulator that can accurately model proppant transport, handle horizontal and asymmetric well models, model multiple perforated intervals with diversion between perforations for limited entry design, allow for vertical and lateral variation of leakoff and rheology across the fracture, and accurately model frac-pac designs by using pressure distribution screen-out criteria.

Designed for use in the field as well as the laboratory, the GOHFER simulator has been used extensively in many regions throughout the world without requiring special tuning.

For More Information

For a complete overview of our products and services, visit our website at www.corelab.com

