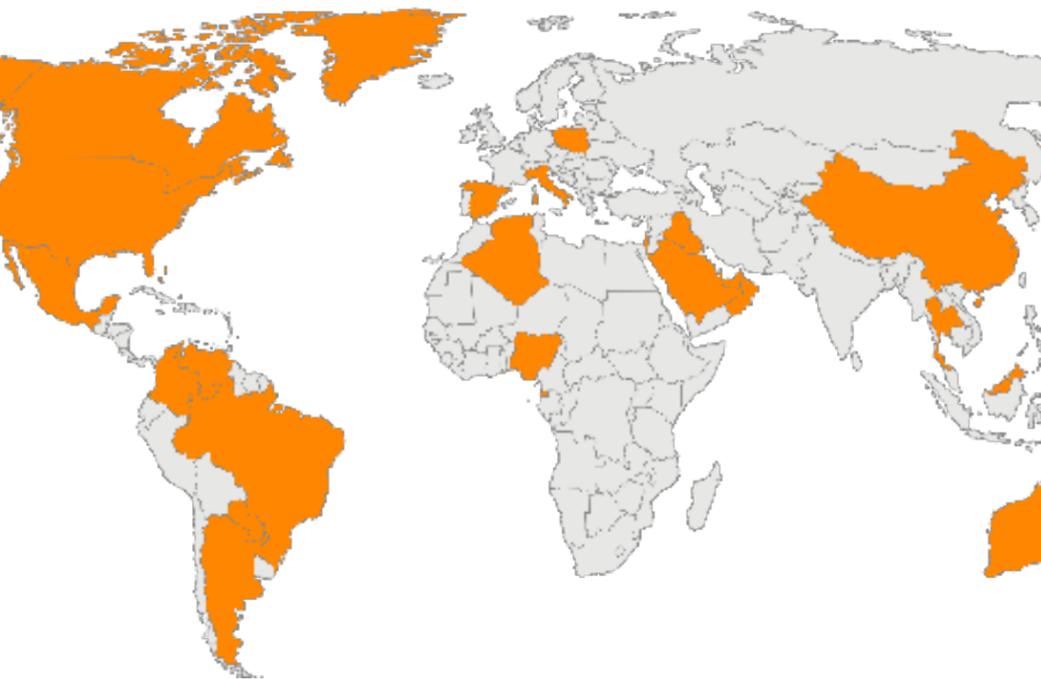


global
reach

Ingrain has provided rock characterization technology services for over 130 companies including supermajors, national oil companies, independents, government agencies and service companies worldwide.

Headquartered in Houston, TX, Ingrain has operations in Colombia, Brazil and the Middle East.



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*One or more of the products and/or services of Ingrain, Inc. are covered by at least United States Patent No. 6,516,080 and/or other patents/applications in the United States and/or in other countries. 05.15.13



FIND & DEVELOP YOUR MOST PRODUCTIVE ROCK



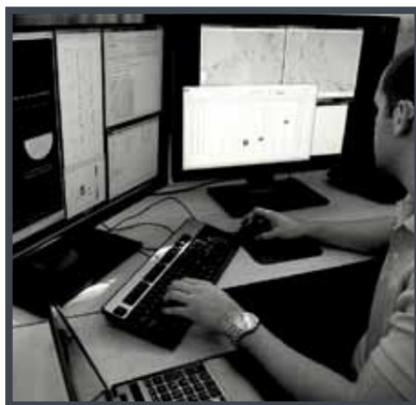
INGRAIN
Digital Rock Physics Lab



an essential perspective

A significant portion of the world's current and future production is stored in shale and complex conventionals reservoirs. These rock types present considerable challenges for characterization - including ever smaller pores and pore throats and complex heterogeneities at multiple scales. Traditional laboratory methods can be ineffective for characterizing these challenging rock types.

To address these new challenges, Ingrain offers innovative and sophisticated tools to help geoscientists and reservoir engineers find and develop their most productive rocks.



the multi-scale approach

- | Helps clients considerably reduce economic risk
- | Determines reservoir quality for better productivity and net pay identification
- | Provides accurate rock characterization in a significantly reduced time-frame
- | Allows sensitivity analysis for more effective completions and recovery
- | Gives better insights into pore-scale rock properties
- | Provides critical zone comparisons for lateral placement decisions
- | Can provide valuable reservoir quality information from drill cuttings when core samples are unavailable

CoreHD® Suite: Petrophysical Insight

CoreHD® surpasses traditional CT scanning capabilities by not only delivering quality, high-resolution 3D images of your core, but more importantly petrophysical insight, facies analysis and sweet spot identification.

Optimized Shale Characterization

We've developed a workflow that begins with the whole core (CoreHD®) and systematically classifies the rock to ensure our work at each sampling scale is representative of the prior volume as we progress through our analysis - from the meter to the centimeter to the nanometer scale and back.

Powerful Applications for Complex Conventionals

The heterogeneities of reservoir rocks make it difficult to quantify the hierarchy and connectivity of the pore space and to integrate and interpret core analysis data with well logs. Ingrain has developed fast, cost-effective workflows designed to improve characterization in complex conventional reservoirs.

