Calculate lithology, mineralogy, porosity and fluids

In complex environments, deterministic methods are insufficient. StatMin™, a stochastic analysis tool for determining volumes of fluids and minerals, uses statistical methods for petrophysical analysis of difficult formations. Porosity, water saturation and quartz content are among the valuable outputs often obtained from StatMin. These are the common petrophysical parameters needed to make critical completion decisions.

Proven technology


The PowerLog advantage

StatMin is an add-on module to PowerLog®, the industry-standard petrophysical interpretation package known for its functionality and ease of use.

StatMin solves balanced, over-determined and under-determined models. Under-determined models are more common where insufficient log data is available to compute all the needed minerals in one pass. StatMin provides multiple methods to deal with this important issue.

Key features

- Linear response equations for fast results
- Sequential models
- User defined minerals
- Alternate matrix for complex solutions
- Solve for up to 25 minerals and fluids
- Access to common data model for curves and zones
- Handles multiple wells simultaneously
- Water saturation computations also determined
- Multiple iterations for convergent solutions

Main Matrix Tab for determining lithologies and fluids.

Water Saturation Tab.
StatMin results in Spraberry Wolfcamp.

Operating system requirements
64-bit versions of the following are supported: Windows® XP or Windows® 7.

Recommended minimum hardware
8 Gbytes of RAM.

Interoperability
Integrated on the CGG GeoSoftware Common Data Model with all PowerLog views and functionality.