N649: Introduction to Log Analysis

Tutor(s): Larry Maple

3 Days	Competence Level: Awareness
Classroom Course	

Summary

This three-day course covers the fundamentals of log analysis for understanding openhole logs and teaches immediate practical skills in formation evaluation. Hydrocarbon evaluation, porosity and permeability estimation are covered, together with rock typing and pay assessment. Methods to integrate core data, drill cuttings reports, DST results, and production information with logs are described. Log quality control and normalization issues are also discussed. Participants are required to bring calculator or a laptop computer for all 3 course days - please be sure to fully charge laptop batteries prior to each day. Excel freeware log analysis software is provided.

Duration and Training Method

Three classroom days providing 2.4 CEU (Continuing Education Credits) or 24 PDH (Professional Development Hours)

Who Should Attend

The course best suits those beginning to acquaint themselves with logs or those who do not use logs all the time and need a refresher.

Course Content

Day One

- Basics of Well Logging
- Fundamental Physics and Equations
- Logs: Bluelinesand digits
- The SP log
- Basic log analysis techniques

Day Two

- BVWi and fluid production
- Permeability estimation from logs
- Resistivity logging
- Porosity logs
- Combination porosity logs

Day Three

- Gamma-ray log analysis
- Shaly sandstone analysis
- Gas shale log analysis
- Saturation –height profiles