E-170

ADVANCED WELL LOG INTERPRETATION

▲ Who should attend?

Geoscientists and technicians having an experience in qualitative log interpretation and willing to perform quantitative reservoir evaluation. Basic tool principles and applications are supposed to be known.

▲ Duration

5 days

▲ Sessions in English

June 14-18, 2010
Rueil-Malmaison (Paris)

French sessions: F-170

▲ Registration

Fees: **€ 2,000**

Contact:
gre.rueil@ifptraining.com
Fax: (+33) 1 47 52 74 27

▲ Course Coordinator

Jacques DELALEX

Ref. **LOG / LOGADV**

COURSE OBJECTIVES

To acquire the methodology of quantitative well log interpretation and to be able to perform an interpretation in shaly formations with a deterministic approach.

Upon completion of the course, participants will be able to:

- identify shales, reservoirs and special lithologies,
- perform a sound quality control of logs and apply log borehole corrections,
- determine log interpretation parameters, evaluate the shale content of reservoirs, apply shale and hydrocarbon corrections,
- interpret a standard set of logs using a deterministic approach with Geolog6™ petrophysical interpretation software (Basic information on the multimineral approach will be also given).

COURSE CONTENT

PREPARATION FOR QUANTITATIVE INTERPRETATION — 1.5 days

Petrophysical concepts and relationships
Quality control of the data
Determination of geological formations and reservoirs (case study n°1)
Environmental corrections of logs
Determination of Rt, Rxo, Di

INTERPRETATION OF CLEAN FORMATIONS — 1 day

Determination of fluid contacts (WOC, GOC)
Determination of matrix and fluid parameters, Rw (SP, Ratio, Rwa)
Determination of lithology, porosity, fluid type, water and hydrocarbon saturations
Cross plots techniques: N-D-S, Pe-RHOB, K-Th, etc.

INTERPRETATION OF SHALY FORMATIONS (DETERMINISTIC APPROACH) — 2 days

Influence of shale on logging tool response
Determination of shale parameters, shale content Vsh and effective porosity (case study n°2)
Hydrocarbon effects on logs and hydrocarbon correction
Determination of water and hydrocarbon saturations (various equations)

OTHER INTERPRETATION METHODS — 0.5 day

Introduction to the multi-mineral model and general optimization method (case study n°3)

All along the course, interpretation parameters will be optimized and results visualized by the lecturer with the help of an interpretation software.