

BASIC OPEN HOLE LOG INTERPRETATION

EXP006

COURSE DESCRIPTION

This course covers the fundamentals of logging tools & techniques. It also discusses using log data to quantitatively evaluate prospective formations of how to use reconnaissance and cross platting techniques.

COURSE GOAL

To enhance participants' knowledge, skills, and abilities necessary to use well log fundamentals, tools and techniques in evaluation of prospective formations.

COURSE OBJECTIVES

By the end of this course, participant will be able to:

- Understand and do a basic interpretation of standard open-hole logs.
- Analyze log data to obtain critical reservoir properties.
- Use petro-physics to optimize the effort of integrated, multi-disciplining team.

WHO SHOULD ATTEND

All geologists, geoscientists and petroleum engineers.

COURSE DURATION

5 Working Days

COURSE OUTLINES

- 1. Mechanical properties of rocks
 - Understanding the behavior of rocks under different conditions
 - Identifying rock types and their characteristics

2. Introduction to log evaluation

- Overview of the purpose and importance of log evaluation
- Introduction to log interpretation techniques

3. Well logging tools and techniques

- Familiarization with various logging tools and their functions
- · Understanding the principles behind different logging techniques



4. Physical parameters measured by well logging tools

- Exploration of the parameters measured by logging tools, such as gamma ray, resistivity, and sonic logs
- Understanding the significance of these parameters in formation evaluation

5. Porosity, permeability, and fluid saturation evaluation

- Techniques for determining porosity and understanding its impact on fluid storage
- Evaluating permeability and its influence on fluid flow
- Assessing fluid saturation and its implications for reservoir characterization

6. Fundamentals of quantitative log interpretation

- Introduction to the quantitative analysis of log data
- Applying mathematical and statistical methods to derive reservoir properties

7. Interpretation methods

- Overview of different log interpretation methods, including visual analysis and computerassisted techniques
- Integrating multiple log measurements for comprehensive formation evaluation

8. Fracture detection with logs

- Recognizing and interpreting fractures using well logs
- Understanding the role of fractures in reservoir performance and fluid flow

