Best Technology Solutions **BTS**

Open Hole Logging Operations

Training Program

Introduction:

Important for drillers and operators, well logs are measurements acquired at specific depths of the well that identify subsurface formations. Based on a log, the well log started as a journal of depth versus the type of formation, effective drilling muds and different drill bits required to move through the formation. Open hole logging refers to logging operations that are performed on a well before the wellbore has been cased and cemented. In other words, the logging is done through the bare rock sides of the formation. This is the most common type of logging method because the measurements are not obstructed and it's done during or after the well has been drilled. Although some experience with reading logs is an advantage, this course is ideal for anyone who has no prior knowledge or experience, especially newcomers to the oil industry. You will gain all the confidence you need to understand and interpret all the basic open-hole logs.

Who Should Attend?

Geologists, Geophysicists, Geomechanics Engineers, Drilling Engineers, Production Engineers, Completion Engineers, Reservoir Engineers, Petrophysicists, Petroleum Engineers, Exploration Supervisors and managers concerned with the Geomechanics challenges of field development and exploration, Supervisors and managers concerned with wellbore stability, Technicians and Managers who are exposed to open-hole logs in their daily work

Course Objectives:

- Understand and recognize all the basic logs
- Know what they are measuring
- Learn how to read them, recognize all the common rock types
- Identify hydrocarbon zones, calculate porosity and water saturations
- Have confidence in your choice of interpretation parameters

Course Outline:

- How to identify reservoir rocks
- Invasion profile
- Why the SP is important
- How to use SP
- Identifying hydrocarbon zones from resistivity logs
- How the basic logging tools work
- Whatthe basic logging tools measure
- The common rock types
- How to identify the common rock
- How to use gamma rays, spectral gamma-rays
- The Photoelectric effect
- What porosity is
- How the different kinds of porosity are measured
- Archie's equation - where it comes from, what it means
- How to use it to calculate water saturation
- How to handle shale zones
- Quick-look and reconnaissance interpretation methods
- Cross-plot techniques, and some useful short-cuts