

DRILLING FLUIDS, MUD TECHNOLOGY AND HYDRAULICS

DRL029

COURSE DESCRIPTION

This course is intended for individuals with prior experience in drilling fluids and extends their knowledge to drilling hydraulics and mud technology. It aims to provide basic understanding of drilling hydraulics, the methods and techniques used for pressure drop estimation, overview of drilling fluid rheology and how it affects drilling hydraulics.

COURSE GOAL

To enhance the participants' knowledge, skills, and ability necessary for basic understanding of drilling fluids, mud technology and hydraulics.

COURSE OBJECTIVES

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

- State the principles for controlling drilling fluids and solids control.
- Provide emphasis on the application of current and developing technologies.
- Understand how technologies effect the drilling operations.
- Provide insight into the day-to-day operations, popular drilling fluid types and recurring solids control problem.
- Acquire remedial action quickly, inexpensively and with maximum hole making results.

WHO SHOULD ATTEND

- Drilling engineers
- Drilling representatives
- Drilling fluid engineers and contractor personnel
- Drilling supervisors
- Mud engineers
- Cementing engineers
- Tool pushers
- Managers

COURSE DURATION

5 Working Days

COURSE OUTLINES

1. Drilling Fluids

- History
- Purpose
- Types
- Properties
- Testing

2. Mud Engineers and Mud Service Companies

- People involved
- Purpose
- Training

3. Drilling Fluids Chemistry

- Suspensions
- Reactions
- Polymers
- Corrosion
- Lubricity
- Foaming

4. Drilling Fluids Engineers

- Hydraulics
- Hole Stability

5. Solids Control

- How Solids Build Up
- Detrimental Effects of Solids
- Mechanical Control
- How to Measure Solids Control Effectiveness.

6. Mud Products and Mud Formations

- Detrimental Effects of Solids
- Mechanical Control
- How to Measure Solids Control Effectiveness.

7. Hole Problem

- Stuck Pipe
- Lost Circulation
- Contamination of water -Base Drilling Fluids.
- Controlled Activity Oil Mud

8. Problem Solving Techniques

- Drilling Indicators
- Property Monitoring

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