

SPE-Iran Section Technical Workshop

Cementing Operations - DR-TC2-NXT05410

Course Description

The course covers aspects of primary, squeeze and plug cementing, and primary cementing calculations. Cement chemistry is introduced to understand the process involved in achieving a satisfactory cement job. Additives used to affect various properties of the slurry and set cement are addressed. Rheological models used during cement job design and requirements for

effective mud removal will be covered. Cementing aids and job quality evaluation methods are discussed.

Classroom exercises as well as an introduction to cementing design and evaluation software are included.

Audience

Drilling professionals with some understanding of the drilling process.

Prerequisites

Basic knowledge of the oil & gas industry. Some understanding of cement use is strongly recommended. Participants will need to provide a hand calculator and be prepared to perform exercises in class.

Course Schedule

1

- Primary Cementing Overview & Calculation
- Cement Chemistry

2

- Cement Laboratory Equipment
- Rheology
- Cement Additives

3

- Mud Removal
- Gas Migration Control
- Cementing Temperature

4

- Squeeze Cementing
- Cementing Plugs

5

- Introduction and review of cementing design and evaluation software
- Special purpose cements
- Course review