

Primary and Remedial Cementing

MODULE

About the Skill Module

This skill module presents an overview of the planning and execution required to achieve the quality primary cementing of well casing strings to successfully isolate a wellbore's geological column, including the well's productive zone(s). Equipment and cement displacement practices are illustrated and described as well as methods to assess the resultant cement sheath surrounding casing following a cementing job. Preliminary lab work to formulate primary cement blends is described. And, various methods are presented in the remedial repair of poorly cemented zones which can lead to life of the well production problems. Several different cement squeeze techniques are explained, and recommended practices are described.

Target Audience

Petroleum engineers, production operations staff, reservoir engineers, facilities staff, drilling and completion engineers, geologists, field supervisors and managers, field technicians, service company engineers and managers, and especially engineers starting a work assignment in production engineering and operations or other engineers seeking a well-rounded foundation in production engineering.

You Will Learn

- The manufacturing processes to blend composite materials that make up oilfield cement
- · The various uses of additives to modify cement properties
- The cementing tools at the surface and downhole and the related cement displacement process to achieve a quality primary cement job to isolate a casing string
- The casing cement evaluation tools and methods to assess cement job quality
- The various practices that comprise options to attempt repair of primary cementing jobs that are referred to as cement squeeze operations
- How to calculate typical casing string cement volume requirements
- · How to evaluate a cement bond log and make recommendations
- How to conduct plug and abandonment operations, what they are, basic equipment used and expected results to securely isolate the wellbore from the environment and human interaction for the future

Product Details

Categories: <u>Upstream</u>

Disciplines: Production and Completions Engineering Well Construction/Drilling

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 5 hours (approx.)

\$395.00