



## Sand Control

### MODULE

#### About the Skill Module

This skill module illustrates various causes of sand production and its related effect upon producing systems. Alternatives that range from simply tolerating minimal sand production volumes to complex downhole and surface equipment and practices to mitigate the negative effects of sand production are presented. Basic gravel pack design is discussed, and a design problem is presented. Expandable sand screens are illustrated.

#### 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

Participants will learn how to:

- Identify the need for sand control
- Recognize the causes of sand movement
- Define what consolidated sand is, and what it is not
- Identify both non-mechanical and mechanical methods of sand control
- Recognize that rate restriction is a valid practice to manage sand production
- Recognize that minor sand volume produced may be tolerated
- Identify various screen types for sand control
- Outline aspects of pre-packed screens for sand control
- Describe the principles of sand control screen and gravel completions
- Identify the three steps comprising a gravel pack completion design
- Describe various fluid options for pumping gravel slurry into a gravel pack completion
- Outline the function of a gravel pack "crossover tool"
- Outline the function of a gravel pack "shunt tube"
- Describe the function of a frac pack completion
- Outline the frac pack completion well performance results
- Outline the function of an expandable sand screen completion

- Identify the components of an expandable screen and possible benefits resulting from the use of expandables

#### Skill Module Content:

- Sand Control Completion Options and Design
- Non-Gravel Pack Completions, Options, and Design Alternatives
- Gravel Pack Completions, Options, and Design Alternatives
- Frac Pack for Sand Control
- Expandable Sand Screens

#### Product Details

Categories: Upstream

Disciplines: Production and Completions Engineering

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 2.5 hours (approx.)

**\$250.00**