PetroSkills

Well Test Design and Analysis - WTA

COURSE

About the Course

This course stresses practical application of well test theory to design and interpret pressure transient tests. An integrated approach to well test interpretation is emphasized throughout the course. Class exercises involving hand calculations and simple spreadsheet applications will reinforce the concepts illustrated by both synthetic data sets and real field examples. Participants will be able to apply the knowledge and skills they gain in this course to their job assignments upon course completion. One personal computer is provided, at additional cost, for each two participants.

This course covers material for both conventional and unconventional reservoirs.

"It's an amazing course. The concepts, practicality, and field implementation are a perfect blend of WTA." - Senior Reservoir Engineer, Malaysia

"The number of exercises between lessons strengthened my understanding on the subject." - Operation Petrophysicist, Malaysia

Target Audience

Engineers and geoscientists who want to understand well testing principles and interpretation techniques to design, analyze, report, evaluate results or intelligently participate in the well testing process. Previous experience in production and/or reservoir engineering is recommended. Previous experience in well testing is helpful but is not required.

You Will Learn

Participants will learn how to:

- Analyze drawdown and buildup tests in oil and gas wells
- Identify flow regimes using the log-log diagnostic plot
- Describe characteristic pressure behavior for common bounded reservoir geometries
- Identify well test data affected by various wellbore and near-wellbore phenomena
- Design a well test to meet desired objectives
- Estimate average drainage area pressure
- Analyze well tests in hydraulically fractured wells, horizontal wells, and naturally fractured reservoirs

Course Content

- Introduction to well testing
- Radial flow
- Log-log type curve analysis
- Pressure transient testing for gas wells
- Flow regimes and the log-log diagnostic plot
- Bounded reservoir behavior
- Wellbore and near-wellbore phenomena
- Well test interpretation
- Well test design
- Estimation of average drainage area pressure
- Hydraulically fractured wells
- Horizontal wells
- Naturally fractured reservoirs

Product Details

Categories: Upstream

Disciplines: Reservoir Engineering Unconventional Resources

Levels: Foundation

Product Type: Course

Formats Available: In-Classroom

Instructors: John Spivey Iskander Diyashev PetroSkills Specialist

In-Classroom Format

12 Aug '24 16 Aug '24 -	Course	In-Classroom (in Houston)	$4,710.00