PetroSkills

Reservoir Management for Unconventional Reservoirs - RMUR

COURSE

About the Course

This course in unconventional reservoir management is aimed at all petro-technical professionals who have little experience with these resource types but who wish to quickly learn some key elements and issues associated with the exploitation of unconventional reservoirs (tight gas, tight oil, and shales). The course is built around the role of the reservoir engineer and, hence, concerns itself with the integration and use of information to make well rate and recoverable volumes estimates, making decisions on desirable data collection, and planning answers to common questions such as choice of initial development spacing and the value of subsequent infill drilling. Attendees should leave this course with an improved understanding of unconventional reservoir exploitation.

"Instruction on multi-frac horizontals is directly applicable to my current work." - Reservoir Engineer, Houston, United States

"I loved the derivations and background information for the reservoir programs we use. Instructor was very knowledgeable of tight gas and shale gas and the development of these assets in basins all around the world." - Reservoir Engineer, Oklahoma City, United States

Target Audience

All petro-technical professionals who have little experience with unconventional reservoirs but who need or desire to start developing some understanding of important basic concepts and methods associated with these resource types. The course is focused on reservoir management issues for tight gas, tight oil and shale reservoirs. CBM reservoirs are not addressed.

You Will Learn

Participants will learn how to:

- Plan solutions to common reservoir management problems for unconventional reservoirs
- Apply approaches to estimate rate and recoverable volumes for wells prior to development in an unconventional reservoir
- Use classical and current non-simulation methods for estimating wells rates and recoverable volumes using production data from unconventional reservoirs
- Better understand the limitations of these rate and recoverable volume prediction methods
- Address the development of a life-of-field surveillance plan for an unconventional reservoir

- Better understand the use, design and analysis of pressure transient tests appropriate for the characterization of unconventional well/reservoir systems (DFITs & PBUs)

Course Content

- Reservoir Management and the role of the reservoir engineer
- Unconventional reservoirs: quality recognition and development life-stages
- A review of the fundamentals of volumetric in unconventional reservoirs
- Rate & recoverable volumes prediction: before development
- Rate & recoverable volumes prediction: after development
- Pressure transient testing: appropriate methods; design and analysis
- Life-of-field surveillance planning
- Solving common unconventional reservoir management problems: setting initial spacing
- Solving common unconventional reservoir management problems: valuing & planning infill drilling
- Solving common unconventional reservoir management problems: development drilling sequence
- Reservoir simulation versus non-simulation tools
- Uncertainty issues

Product Details

Categories: Upstream

Disciplines: Reservoir Engineering Unconventional Resources

Levels: Intermediate

Product Type: Course

Formats Available: In-Classroom

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