

Producing vs. Injecting Wells - Fundamentals

MODULE

About the Skill Module

In this skill module, we construct single-well models of both injectors and producers, describe their applications to waterflooding, and discuss their limitations.



See demo online learning module

Target Audience

Reservoir, production, facilities, and operations engineers who are involved with some aspects of a new or existing waterflood project; geoscientists and professionals who want to get a better feel for the entire process of planning, development, management, and recovery optimization of a waterflood project.

You Will Learn

You will learn how to:

- Estimate the performance of an injection well using analytical methods
- Estimate the performance of an injection well using numerical methods
- Explain the advantages of modeling producing wells together with injection wells
- Compare injection above and below the oil-water contact
- · Compare injection above and below bubble point
- Compare injection through vertical and horizontal wells
- Compare injection through hydraulically fractured wells
- Discuss the merits of partial perforation vs. full perforation
- Explore perforation strategy differences between injection and producing wells
- Compare and contrast multiple methods of water shut-off in both injection and producing wells
- Compare and contrast multiple artificial lift methods for producing high water-cut wells
- Discuss the advantages and disadvantages of hydraulically fracturing injection and/or producing wells
- Discuss the advantages and disadvantages of gravel-packing injection and/or producing wells
- Calculate the optimal ratio of producing to injecting wells for a waterflood
- Discuss the merits of dry tree vs. subsea wells for a waterflood

Product Details

Categories: <u>Upstream</u>

Disciplines: Reservoir Engineering

Levels: Foundation

Product Type: Individual Skill Module

Format: On-Demand

Duration: 8 hours (approx.)

\$795.00