



Artificial Lift for Unconventional Wells - ALUW

COURSE

About the Course

This course addresses artificial lift methods and practices for unconventional wells for oil and gas producers, as well as associated industry service providers and contractors. The focus of the course is optimizing value from upfront well planning through the end of life of unconventional wells by selecting, installing and operating artificial lift effectively. Upon completion of this course, the participant will understand how to choose and implement artificial lift and be able to utilize best practices to resolve and reduce issues and challenges that frequently occur during the life cycle of unconventional wells. The course focuses on optimizing production and recovery by ensuring the proper artificial lift technology is used in conjunction with optimum surface pressure and related facilities in a holistic approach. Participants will understand the steps necessary to develop an effective artificial lift strategy for wells specific to areas/plays.

This course incorporates a combination of about 50% instruction and 50% facilitated problem-solving utilizing real or realistic well/field data to select and stage the appropriate lift methods. The problem-solving sessions include both individual and group activities that will provide each participant with a hands-on application of the methods, principles and practices discussed throughout the course. Also, all participants will be asked to bring a challenge they are currently facing in artificial lift for unconventional wells and will present the challenge (Day 2) and their path forward based on what they have learned (Day 5).

Target Audience

This course is intended for production and artificial lift engineers. It will be valuable for engineers (working for operators, service companies or as consultants) who may have artificial lift knowledge on conventional wells or individual lift methods that want to expand their ability to deliver more optimal holistic artificial lift solutions specific to unconventional wells and the latest practices.

You Will Learn

Participants will learn how to:

- Understand the importance of identifying and agreeing on the objectives of production optimization and artificial lift early in the well planning cycle
- Identify the critical differences and requirements for applying artificial lift to unconventional vs. conventional wells
- Evaluate the effect of changing Inflow Performance Relationship (IPR) over time, how to construct and profitably use relevant PR curves

- Recognize the benefits and challenges of applying Systems Nodal Analysis in artificial lift for unconventional wells
- Identify the strengths and weaknesses of each major artificial lift method used
- Manage challenges and issues in operating artificial lift and how to troubleshoot/mitigate them
- Select an effective artificial lift method for individual unconventional resources wells
- Analyze staging of artificial lift methods over time to enhance value
- Understand the importance of surface pressure and facilities
- Develop a comprehensive lift strategy for an area/field/play

Course Content

- Artificial lift objectives, value, rate and recovery, cost
- Differences between conventional and unconventional wells
- Applying Nodal Analysis and using IPR curves for artificial lift selection in unconventional wells
- Selecting the optimum artificial lift method, rod pumps, plunger lift, ESP or other
- Developing a comprehensive artificial lift strategy

Application Problems

The course will include practical application problems using unconventional well/field data to:

- Analyze options and select an optimal artificial lift method
- Size/optimize each major artificial lift method
- Solve or determine a path forward toward solution on one real world problem from each participant
- Using given data, determine a holistic strategy to optimize the value of applying artificial lift over the life of wells in an area/field/play

Product Details

Categories: [Upstream](#)

Disciplines: [Production and Completions Engineering](#) [Unconventional Resources](#)

Levels: [Intermediate](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [Larry Harms](#)