PetroSkills

Artificial Lift Systems - ALS

COURSE

About the Course

This course blends lecture, hands-on exercises, and seminar teaching styles to enhance learning. Participants work with software that allows them to design and analyze artificial lift designs, which points the way to improved efficiency, higher production and less downtime due to failures. Participants learn how to design and troubleshoot rod pumping, continuous gas lift, and electric submersible pump systems. Other methods such as PCP, plunger lift, jet pump, hydraulic pump, and intermittent gas lift are presented as viable AL techniques.

Participants gain experience in solving problems by hand and also by using industry computer software. Troubleshooting is an important part of artificial lift operations and several typical surveillance problems are solved. The class includes pictures and videos of the most important equipment components being applied. The course emphasizes techniques to maximize production. New developments at various stages of application are also covered. A discussion of modifications necessary for horizontal or unconventional wells is included for all methods of lift discussed. Examples of how these techniques are being applied in producing unconventional wells are presented. Distinct features of all lift methods are presented allowing the attendee to know how to select the best lift for well or field conditions.

"I've taken six PetroSkills seminars. This course and instructor are the best I've ever had!" - Participant, Canada

"I was happy with how everything was split up. Good job. Happy with what we covered in the time we had." - Participant, United States

Target Audience

Engineers, technicians, field supervisors, and others who select, design, install, evaluate, or operate artificial lift systems.

You Will Learn

Participants will learn how to:

- Apply techniques to maximize oil production economically with artificial lift systems
- Make basic PVT properties and inflow performance calculations related to artificial lift
- Understand and apply multiphase tubing and pipe flow principles

- Select the appropriate artificial lift system by examining the drawdown potential of each method, the initial and operating expense and the range of production and depth possible with each method; special problems such as sand/scale/deviation etc. are discussed with each method
- Specify components and auxiliary equipment needed for each system
- Know what best practices are available to extend the life of equipment and installed lift systems
- Apply basic design and analysis concepts
- Design and operate system features for each method under harsh conditions

Course Content

- Overview of artificial lift technology
- Selection criteria
- Reservoir performance
- Artificial lift screening
- Economic analysis
- Rod pump, gas lift, and ESP equipment selection and design
- Best practices for each system

Product Details

Categories: Upstream

Disciplines: Production and Completions Engineering

Levels: Foundation

Product Type: Course

Formats Available: In-Classroom

Instructors: PetroSkills Specialist   Shari Dunn-Norman   John Martinez   Manickavasakan Nadar   Larry Harms

In-Classroom Format

5 Aug '24 9 Aug '24 - | Course | In-Classroom (in Houston)			$4,735.00