



## Well Stimulation: Practical and Applied - WS

### COURSE

#### About the Course

Too often in today's dynamic oil and gas industry, not enough attention is paid to the details of well stimulation treatments. This can result in poor and/or less than optimum results. Those involved in the planning, execution, and evaluation of stimulation treatments need to have the background and training in the basics so better decisions can be made resulting in more gas down the line or oil in the tank!

This practical course is designed for those involved in all aspects of well stimulation. To be better able to make decisions it is important to have a basic understanding of the types of formations and basic reservoir properties with which we deal. For this reason, time is spent in the early portion of the course setting the geological and reservoir property stage for vertical, horizontal, and multilateral wells prior to developing the basic formation damage, acidizing, and hydraulic fracturing concepts. The course includes acidizing and fracturing quality control, conducting the treatment, monitoring pressures, and other critical parameters during and after the treatment. An important part of the course is class teamwork whereby the attendees divide into teams to evaluate and select optimum stimulation treatments. These exercises bring out many important parameters discussed during the course. This subject is briefly covered in the PetroSkills Production Operations 1 course (Foundation Level) as well as in the Formation Damage: Causes, Prevention, and Remediation (Intermediate Level) course. However, this course focuses in more detail on the basics of stimulation than either of the two previously mentioned courses.

*"Clear presentation of the subject - build-up from basic to concept."* - Subsurface Engineer, Malaysia

#### Target Audience

Those involved in the planning, execution and evaluation of well stimulation treatments in conventional as well as unconventional plays, including the shales. This includes completion, production, reservoir, and drilling engineers; field supervisors; production foremen; engineering technicians; and geologists.

#### You Will Learn

- How to select stimulation techniques best suited for various formation types and situations
- To apply basic non-acid and acidizing concepts
- To apply basic hydraulic fracturing concepts

#### Course Content

- Geological/basic reservoir properties
- Formation damage - how and why it happens
- Non-acid damage removal techniques
- Acidizing - objectives, types, additives
- Acidizing placement techniques and the pressure chart
- Quality control and safety
- Hydraulic fracturing materials and their importance to success, including gel and slick water treatments
- The frac chart
- Hydraulic fracturing quality control and safety
- Energized fluids - application and safety

## Product Details

Categories: Upstream

Disciplines: Production and Completions Engineering

Levels: Basic

Product Type: Course

Formats Available: In-Classroom

Instructors: PetroSkills Specialist Ali Ghalambor