

# Applied Water Technology in Oil and Gas Production - PF-21

COURSE

#### About the Course

This course provides an overview of the main water handling systems typically encountered in upstream (E&P) production operations, both onshore and offshore. The chemistry of the main water-related problems of mineral scales, corrosion, bacteria, and oily water will be reviewed both from the theoretical and practical aspects. Produced water treatment equipment and typical water quality specifications as well as water injection and disposal systems will be reviewed. An exercise will be given to identify typical system problems and to apply the knowledge gained to propose solutions. Emphasis will be placed on understanding and resolving operational problems in process equipment.

"Presented a general overview of many topics. Good course. I'm glad I attended." - Operations Engineering Advisor, United States

#### **Target Audience**

Managers, engineers, chemists, and operators needing to understand water-related problems in oil and gas production and their solutions.

#### You Will Learn

- The basics of oilfield water chemistry
- How to monitor and control corrosion, scale, and bacterial growth in produced water and water injection/disposal systems
- How to implement system surveillance programs to detect potential problems before system damage occurs
- · Produced (oily) water treatment options and related treatment equipment
- · How to use the knowledge gained to identify typical system problems and be able to propose solutions

## **Course Content**

- Water chemistry fundamentals
- Water sampling and analysis
- Water formed scales
- Corrosion control
- Water treatment microbiology

- Produced water discharge/disposal and treatment principles
- Produced water treating equipment theory of operation, advantages and disadvantages, and the importance of oil droplet size
- Water injection and disposal systems theory of operation, corrosion, scale, and biological control
- Case study

#### **Product Details**

Categories: <u>Midstream</u> Disciplines: <u>Process Facilities</u> <u>Production and Completions Engineering</u> Levels: <u>Foundation</u> Product Type: <u>Course</u> Formats Available: <u>In-Classroom</u> <u>Virtual</u> Instructors: Carlos Palacios

### **In-Classroom Format**

9 Dec '24 13 Dec '24 - | Course | In-Classroom (in Houston) \$4,710.00