



Troubleshooting Oil Processing Facilities - PF-490

COURSE

About the Course

This course will cover how to establish and apply a general troubleshooting methodology as well as how to conduct process/equipment specific troubleshooting related to oil production and processing facilities. Definitions of good/normal performance will be discussed for each process/ equipment type covered. Data gathering, validation and utilization procedures will be discussed. Criteria to use when evaluating possible problem solutions will also be covered. Real-world exercises will be utilized throughout the class to reinforce the learning objectives. Both onshore and offshore facilities will be discussed.

It is assumed that course participants have a solid understanding of how typical oil production and processing facilities work, including the commonly used processes and equipment involved. This course will not provide in-depth coverage of fundamentals.

Target Audience

Process/Facilities engineers with 5-10 years of experience, facilities engineering team leaders/ supervisors, and senior facilities operational personnel.

You Will Learn

- The difference between troubleshooting, optimization, and debottlenecking
- How to recognize trouble when it is occurring
- How to develop a methodical approach to troubleshooting
- To recognize how different components of a facility interact with each other, and the significance of these interactions
- How to gather, validate, and utilize the data needed for troubleshooting
- The criteria to be considered for identifying the best solution when several feasible solutions are available
- Typical causes of problems, and their solutions, for the main types of processes and equipment used in upstream/midstream oil production and processing operations

Course Content

- Understanding the similarities and differences between troubleshooting vs optimization vs debottlenecking
- Types of oil production and processing facilities

- System trouble vs component/equipment-specific trouble
- Defining good/normal operation
- Quantifying the cost of the trouble
- Gathering, validating, and utilization of data (types of data, sources of data, data quality and validation, using the data)
- Fundamentals of root cause analysis and methodology
- Developing a step-by-step troubleshooting methodology/flowchart
- Identifying the best solution (criteria for defining best)
- Processing and major equipment modules covered include separation equipment, oil treating and desalting, oil stabilization and sweetening, oil storage and vapor recovery, produced water treating, centrifugal pumps, and water injection

Product Details

Categories: Midstream

Disciplines: Process Facilities

Levels: Intermediate

Product Type: Course

Formats Available: In-Classroom

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