



## Choosing the Right Facilities Equipment for the Reservoir - PF-3

### COURSE

#### About the Course

This course is similar to Introduction to Oil and Gas Production Facilities (PF-2), but is presented in the context of concept selection and front-end field development planning.

*"Liked real world examples."* - Facilities Engineer, United States

*"Liked discussing real life experiences of the instructors."* - Engineer, United States

#### Target Audience

This course is intended for those working on field development teams, as well as those who need to better understand how surface facilities are selected and how subsurface characteristics affect facility design and specification.

#### You Will Learn

- How to develop the project framework and decision making strategy
- How the specification of production/processing facilities is influenced by reservoir type, drive mechanism, fluid properties, location, and contractual obligations
- Operating conditions that affect the specification of the production facilities from the wellhead through initial separation
- Parameters that affect the design and specification of oil stabilization and dehydration equipment
- The design and specification of produced water systems appropriate for the rate and composition of the produced water to meet the required environmental regulations and/or injection well capacity
- The design and specification of gas handling facilities, including compression dehydration and sweetening
- The impact of artificial lift systems and secondary/tertiary production projects on facilities selection and design
- The principles of asset integrity and inherently safe design given the rate, composition, temperature, and pressure of the production stream
- About midstream facilities required downstream of the primary production facility to deliver saleable products to the market, and how these facilities are affected by production rates, composition, and production facility performance

## Course Content

- Reservoir types, fluid properties, and typical product specifications
- Flowlines, gathering systems, flow assurance, and production separation
- Oil dehydration and stabilization
- Produced water treating and water injection systems
- Gas handling, including compression, dehydration, and sweetening
- The effect of artificial lift systems, and secondary and tertiary recovery projects
- Midstream facilities - gas processing, pipelines, product storage, and LNG
- Other facility considerations - utility systems, process safety and asset integrity, and environmental regulations

## Product Details

Categories: Midstream

Disciplines: Process Facilities

Levels: Basic

Product Type: Course

Formats Available: In-Classroom

Instructors: James Langer