

PRODUCTION OPERATIONS, CONTROL & WELL COMMISSIONING

PRD037

COURSE DESCRIPTION

This course covers production operations, control & well commissioning techniques. Topics will be presented according to international oil companies standards and procedures to achieve and control a production target as well as carrying out commissioning and de-commissioning of normal deep artificial oil producer wells, disposal injection water wells. It thereby enables one to timely select the most beneficial technique and set realistic expectations on production and operating behavior changes and recovery improvement. The impacts of the selected method on personnel training, technology transfer, and facility modification are also covered. Many illustrative problems, worked in the class by teams, are helpful in gaining a better grasp of the subject matter.

COURSE GOAL

To enhance the participants' knowledge, skills, and attitudes necessary to understand and apply techniques of production operations, control & well commissioning.

COURSE OBJECTIVES

By the end of this course, participant will be able to:

- Understand well operations and its management.
- Understand process control.
- Understand in plant operating procedures.
- Understand Production Operations.
- Demonstrate awareness in conventional drilling and well completions.
- Understand commissioning phases.
- Differentiate between commissioning and normal operations.

WHO SHOULD ATTEND

- Operations staff,
- Operators II Production
- Experienced process engineers and facilities engineers who want to learn more about how processes are started and operated.

COURSE DURATION

5 Working Days

COURSE OUTLINES

1. Well Fundamentals

- Well Performance
- Sand Control
- Injection wells
- FBUS / Well testing
- Flow through reservoir / water coning

2. Process Design & Control

- Test Well Operations
- Process Design & Change of State / Process Safety
- Safety Critical Elements / Equipment
- Process / Utilities Isolations
- ESD and F&G systems / DCS
- Test Process Control & evaluation

3. Plant Operating Procedures

- Operations Management – procedures
- Parameters & Performance
- Design & Operations envelopes
- Commissioning & Start-up
- Production Operations – IPS
- Management of Pipe Networks
- Test Plant Operating Procedures & evaluation

4. Production Operations

- Chemical Treatments
- Sand, Scale, NORM
- Pigging Ops / Laboratories
- Test Production Operations

5. Well Operation and Activation

- Conventional Drilling / Well Architecture & Integrity
- Sensitive wells / Start-up & shut down
- Well Service
- Well Fundamentals & Operations Test
- Well Fundamentals & Operations Test

6. Commissioning

- The two phases of commissioning. Planning and execution
- Managing safety during the commissioning phase?
- Commissioning team organization
- Commissioning management systems/databases
- Handover and acceptance of systems—the process
- Pre-commissioning and commissioning
- Oil/Gas/Water process systems
- Common problems during commissioning/start-up
- Subsea commissioning
- Spare parts and consumables
- Measuring progress and schedule
- Differences between commissioning and normal operations

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