

PRODUCTION OPTIMIZATION FOR MATURE FIELDS

PRD002

COURSE DESCRIPTION

Production optimization is a systematic approach to assess processes at new and existing facilities with an emphasis on energy efficiency, natural resource conservation and waste minimization. This course presents an introduction and overview of production optimization from mature fields. It covers the related topics including different stages of reservoir maturity, review of well system behaviour, production / reservoir monitoring and control, NODAL analysis, potential problem areas dealing with reservoir deliverability, production and transient well testing, workover planning, well deliverability and gas injection liquid ratio, artificial lift, sucker rod pumping problems, ESP pumping problems, hydraulic pumping problems, gas lift problems, predicting deliverability from the well, and production optimization summary.

COURSE GOAL

To enhance the participants' knowledge, skills, and attitudes necessary to increase improve understanding and awareness of prediction deliverability from the well.

COURSE OBJECTIVES

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

- Be familiar with different stages of reservoir maturity.
- Understand well system behavior.
- Understand production and reservoir monitoring and controls.
- Understand NODAL Analysis.
- Deal with potential problem of reservoir deliverability.
- Test well Productivity and transient.
- Predict and evaluate well deliverability and gas injection liquid ratio.

WHO SHOULD ATTEND

- Supervisors.
- · Petroleum engineers.
- · S. Operators.

COURSE DURATION

5 Working Days



COURSE OUTLINES

- Different stages of reservoir maturity.
- Review of well system behavior (inflow / outflow performance).
- Production / reservoir monitoring & control.
- NODAL Analysis.
- Potential problem areas dealing with reservoir deliverability.
- Production and transient well testing.
- Effective workover planning.
- Well deliverability & gas injection liquid ratio.
- Artificial lift.
 - Sucker rod pumping problems.
 - ESP pumping problems.
 - Hydraulic pumping problems.
 - Gas lift problems.
- Predicting deliverability from the well.
- Production optimization summary.

