

Production Technology- Advanced (5 days)

By: Bert Dijkhuis

Business context:

An essential part of any field development or well test is the design and installation of a well completion. A good design allows efficient and safe production from reservoir to surface during a long time. In that sense potential well problems should be catered for, e.g. vertical lift at increasing watercuts or decreasing reservoir pressures, sand production and corrosion by reservoir fluids. A large variety of operational well interventions should be allowed for: BHP surveys, stimulation, removal of deposits, well control by safety valve or killing and wireline/coiled tubing operations in general. The analysis of well and reservoir performances needs to be integrated to arrive at the best drilling, recompletion and repair decisions.

Who should attend:

Petroleum engineers with moderate field experience specifically production technologists, reservoir engineers and senior production supervisors.

Content of the program:

- Production processes in well.
- Production process in reservoir.
- Production processes at surface.
- Well design philosophy.
- Well completion operations.
- Physics of natural production.
- Physics of artificial lifting.
- Well pressure analysis.
- Well production performance analysis.
- Integrated well / reservoir performance analysis.
- Field management.
- Selection of work-over candidates.

Learning, methods and tools:

At the end of the course the participants should be able to propose a well design, define the selection parameters for completion components and prepare well completion or production operations programs. During the course data gathering, data interpretation and production planning are highlighted. Special attention is given to integrated field operations in order to achieve a balanced reservoir - wells - surface facilities interplay aiming to assure an efficient reservoir drainage, optimum well performance and efficient separation of gas, oil and water.