Training - Artificial Lift: Gas Lift

GLIFT-EN-P | Face-to-face only | 5 days

This course provides a comprehensive, practical knowledge of gas lift concepts, operations, equipment and potential problems

Level
Skilled

Public
Engineers and supervisory personnel from well completion or well production operations departments

Objectives
Attendees will be able to implement the following skills:

- explain eruptive and assisted well dynamics
- describe downhole and surface equipment of gas lift wells
- implement and monitor gas lift wells start-up sequence
- identify and troubleshoot gas lift wells instabilities

Pedagogical & technical resources

- Practical exercises to grasp physical phenomena
- Numerous animations and videos

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites
No prerequisites are necessary to follow this course

Responsable
IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

THE WELL SYSTEM AND FLOWING PRESSURE GRADIENTS — 1 day

Well representation and nodal analysis.
Reservoir inflow performance (IP and IPR; inflow).
Two-phase vertical pressure drop and tubing resistance (TPC or outflow).

GAS LIFT OPERATION — 1 day

Principles and active parameters.

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Gas-lift characteristics and advantages.
Determination of operating parameters: depth, pressures, and gas injection rate.
Determination of the maximum capacity as a function of GLR.
Optimization over time.

REVIEW OF VALVES & DOWNHOLE EQUIPMENT — 0.5 day

Function of valves and operating range.
IPO-type gas-lift valves (casing operated) and PPO-type valves (tubing operated).
Conventional mandrels and side-pocket mandrels (SPM).
Specific valves and equipment.

DESIGN OF CONTINUOUS GAS-LIFT DOWNHOLE EQUIPMENT — 1 day

Mandrel positioning and valve selection.
Manual calculations / graphical determination.
Standard well architecture and special cases (dual completion, concentric macaroni/coiled tubing completion).

CONTINUOUS GAS-LIFT OPERATIONS: ADJUSTMENTS, MEASUREMENTS AND TROUBLESHOOTING — 1 day

Mandrel positioning and valve selection.
Manual calculations / graphical determination.
Standard well architecture and special cases (dual completion, concentric macaroni/coiled tubing completion).

INTRODUCTION TO PROSPER — 0.25 day

General overview of the software and its methodology.
Methodology for gas lift design and troubleshooting, with manual application.

KNOWLEDGE ASSESSMENT — 0.25 day

Sessions

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

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