

Formation - PVT Modeling



PVTMOD-EN-P



Présentiel



5 jours

This course provides an extensive and practical understanding for analyzing PVT reports, handling data and defining PVT models for use in compositional and black oil simulations

Niveau

Fondamentaux

Public

Reservoir engineers and petroleum engineers willing to acquire advanced knowledge about PVT modeling

Objectifs

Attendees will be able to implement the following skills:

- Analyze PVT reports and discuss and handle PVT data
- Build a PVT model in order to represent fluid behavior with respect to available and validated PVT data
- Match a PVT model

Pédagogie & ressources techniques

- Interactive courses and exercises
- Hands-on practices using dedicated modeling software BEST™ or PVTi™ or PVTFlow™
- Mini-project
- Software used during workshops: with courtesy of Beicip-Franlab and Schlumberger

Évaluation des acquis

- 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

Prérequis

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

Programme

FLUID PROPERTIES & THERMODYNAMIC MODELING

2 days

Fluid properties:

- PVT properties of pure components and mixtures.
- Functions and variables.
- Properties of reservoir fluids.

Introduction to PVT modeling software.

Thermodynamic models and equilibrium:

- Functions and variables.
- EOS and algorithms.
- Component properties and lumping.
- Liquid-vapor thermodynamic equilibrium.

RESERVOIR, FIELD CASES & PROJECT

3 days

Measurements:

- Sampling.
- Analysis.
- Standardization of data.
- PVT experiments.
- Gas injection specific data.

Fluid modeling:

- PVT compositional modeling.
- Matching of experimental data.
- Physical consistency.
- Gravitational segregation.
- Miscibility.

Field cases:

- Compartmentalization.
- Non-classical GOR profile.
- Reservoir stripping.

Data for reservoir simulation:

- Compositional.
- Black oil (standard, extended).

Project and exercises:

- From the PVT Report do the PVT model.
- Quality check of the data.
- Oil fitting.
- Gas fitting.
- Discussions and conclusions.

IFP Training est référencé au DataDock. Rapprochez-vous de votre OPCO pour connaître les possibilités de financement de cette formation.
Pour vérifier l'accessibilité de cette formation à une personne en situation de handicap, contactez notre référent à l'adresse suivante :
referent.handicap@ifptraining.com