Training - Naturally-Fractured Reservoirs: Static and Dynamic Modeling

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

This course provides a clear and relevant workflow integrating geophysical, geological and engineering data to develop reservoir models for Naturally-Fractured Reservoirs (NFR). The course covers the geological aspects of natural fractures and their impact on the reservoir performance

Level

Skilled

Public

Geophysicists, geologists and reservoir engineers involved in integrated reservoir studies, geomodelers involved in fractured reservoirs looking for a full integration of all available data. Clastics, carbonates or shale play, the natural fractures will play a major role

Objectives

Attendees will be able to implement the following skills:

- Build a predictive 3D fracture model, constraining the model with the dynamic data
- Use neural network in order to recognize what controls the fractures density
- Identify sweet spots
- Generate porosity and permeability models for dynamic reservoir simulation
- Practice reservoir simulation and apply history matching techniques

Pedagogical & technical resources

- Short lectures alternating with hands-on practice on a real case study dataset, using a dedicated software tool for fractured reservoir modeling: FRACPREDICTOR™
- Software used during workshops: with courtesy of GoGeo Engineering

Assessment of achievements

- Les stagiaires sont évalués au long de la formation au travers de phases applicatives et d'échanges avec le formateur
- Une évaluation à chaud peut également être effectuée en fin de formation et/ou en fin de module par des tests visant à vérifier la compréhension et l'intégration par les apprenants des connaissances correspondant aux objectifs de la formation

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

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INTRODUCTION TO FRACTURED RESERVOIR — 0.5 day

Introduction.
Types of fracture and their effects.
Fractured anticlines and fractures on cores.
Fractures effect on reservoir quality.

MODELING FRACTURED RESERVOIRS TECHNIQUES — 1 day

Discrete Fracture Network (DFN).
Continuous Fracture Model (CFM).
Fracture model calibration.

INTEGRATED WORKFLOW FOR MODELING NFR — 1.5 days

Seismic attributes for fracture modeling.
3D application on the Tensleep data.

NATURALLY FRACTURED RESERVOIR ENGINEERING — 2 days

Production problems.
Well testing in fractured reservoirs.
Reservoir simulation in fractured reservoirs.

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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