



DE108: Gas Condensate Reservoir Engineering

Training Description:

This training course enables participants to develop skills to analyse and manage gas condensate reservoirs. The training course will discuss the phase behaviour; relative permeability varying with velocity and interfacial tension; material balance equations; well productivity and pseudo-pressure calculation for different completion strategies, condensate banking and gravity drainage; practical fluid and flow simulation models. Participants are encouraged to bring issues associated with their own reservoirs for discussion.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Assemble an in-depth understanding of fluid and flow behaviour of gas condensate systems.
- ✓ Evaluate, select and apply the appropriate methods for analysing gas condensate reservoirs.
- ✓ Apply the appropriate well and reservoir models for analysis.
- ✓ Assemble the well and reservoir data needed for analysis.
- ✓ Perform realistic well performance predictions for different completion strategies.
- ✓ Formulate and recommend well and reservoir management actions.

Training Designed for:

This course is intended for mid to senior level Reservoir and Production Engineers involved in the evaluation, planning and development of gas condensate reservoirs.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ Introduction
- ❖ Relative Permeability
- ❖ Phase Behavior
- ❖ Equations of state
- ❖ Fluid sampling
- ❖ Laboratory PVT tests
- ❖ Equation of State modelling

DAY TWO:

- ❖ Condensate formation and issues
- ❖ Formation and growth
- ❖ Critical condensate saturation

- ❖ Gravity drainage
- ❖ Residual trapped gas and condensate
- ❖ Condensate banking
- ❖ Empirical relative permeability correlations

DAY THREE:

- ❖ Reservoir Flow
- ❖ Estimation methods
- ❖ Single phase
- ❖ Two phase
- ❖ Relative Permeability
- ❖ Coupling
- ❖ Reservoir Simulations
- ❖ Material balance
- ❖ Depletion
- ❖ High pressure and high temperature reservoirs

DAY FOUR:

- ❖ Well issues
- ❖ Flow equations
- ❖ Fracture Characteristics
- ❖ Deviated and highly deviated horizontal wells

DAY FIVE:

- ❖ Phase Behavior Models in reservoir simulations
- ❖ Field Examples
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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