

RE7 QUALITY CHECKS & QUALITY CONTROL OF INPUT DATA FOR RESERVOIR SIMULATION

(A three Day Interactive Seminar)

Dr. Omar B. Abu-elbashar

Fees: 1950 €.

DUBAI: 10 - 13 Dec. 2018

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8 – 11 April 2019

COURSE OVERVIEW

To obtain reliable results from reservoir simulation studies is very important to ascertain that correct input data (rock properties, fluid properties, reservoir geometry, and production data) is fed to the model. To achieve this, it is important to run recommended quality checks on the different input data in the static and dynamic modeling stages. This seminar is designed to illustrate the different quality methods and techniques. It combines the industry practices with experiences from numerous studies performed in the past.

WHO SHOULD ATTEND

Reservoir Simulation Engineers, Production Engineers, Development Geologists, Petrophysicists, and mathematicians who are involved in reservoir simulation studies.

TOPICS TO BE DISCUSSED

QC of the PVT data:

- Black Oil.
- Condensate.
- Comparison with Standing or Local correlations.

QC of the Pc data:

- Averaging.
- Grouping.
- Comparison with Saturation Height Function.
- Hysteresis.

QC of the Kr data:

- Averaging.
- Generation using other functions.
- Hysteresis.

QC of the Static Model:

- Geometry.
- OWC.
- GOC.
- Comparison Property distribution and control points.

QC at the Initialisation stage:

- Comparison of the **STOIP** and **GIIP** between Static & Simulation models
- Pressure Distribution.
- Saturation Distribution.
- OWC & GOC.

QC of the Production data.

Other Tips from Experience.

THE LECTURERS



Dr. O. B. Abu-elbasha

BRIEF CV OF DR. ABU-ELBASHAR

Dr. Omar Badawi Abu-elbasha has 34 years of Petroleum Industry experience, and is the Managing Director of PETRO-TEC. He is specialist in Compositional and Black-oil reservoir simulation; field development planning, and Reservoir Management.

He obtained his Ph.D. in Res. Eng. from the Petroleum Eng. Dept. Of the Imperial College, London University, in 1990, and conducted a post-doctoral research in reservoir modelling in 1991.

As a Free-lance Consultant he is now working in **Res. Management of Burgan field, Kuwait**. Prior to KOC he worked in Res. Management of **Fahood field Shell/PDO Oman**, Team leader of Simulation Studies in PETRO-ENERGY (CNPC), **President of PetroSA Local co. In Sudan** (Salima Oil), Consultant reservoir simulation Eng, GNPOC, 2004-2007, Simulation Consultant PDO Oman 2001-2003, Simulation **Consultant Soekor of South Africa**.

In 1996-1998 he joined **Shell Nigeria** as a reservoir simulation consultant working on water injection and gas injection studies. He also worked on PVT modelling, Quality Control of Simulation Input data, and trained the staff in guided FDP's.

He authored many papers in Reservoir Simulation, Modelling, & quantification of the effect of different heterogeneities on hydrocarbon recovery.