RE 9 PILOT PROJECTS
DESIGN, IMPLEMENTATION, AND MONITORING

Dr. Ali Al-Gheithy **Fees: 1950 €**

DUBAI: 22-24 April & 23-25 Sep. 2019

Lecturer's CV: Page 37

This a 3 day **IN-DEPTH** workshop on **Pilot Projects** designated for scientists involved in field development studies and production planning. It is a very useful program for planning FDPs, Water injection, EOR studies, and other schemes helping to maximise hydrocarbon production and ultimate recovery. Special emphasis will be put on Pilot Projects for EOR Studies.

The programme will be conducted in a workshop style giving ample of time for technical discussions and review of typical case studies

What is the Pilot Project?

Examples from life

Why Pilot studies are important.

Where do pilots fit in the FDP's.

Preparation for the Pilot study.

Pilot Projects in the Oil Industry:

- EOR processes.
- Water Injection.
- Gas Injection.
- Others.

Screening for EOR:

- Preliminary screen: Considers SCAL & PVT, Identifies the potential EOR Processes.
- Further Screening: Field Specific:
  - Depositional Environment.
  - Shale Vol. Barriers, Heterogeneity
  - Location of high Sor.

Pilot studies for EOR Projects.

- Preliminary Data Gathering.
- Screening
- Detailed data gathering
- Lab. Investigation.
- Pilot testing.
- Project Implementation

DATA Gathering:

- Gathering field related data:
  - Geology.
  - Prod. History.
  - PVT & Sor.
- Production data:
  - Status of sweep (Vert. & Hor.)

Detailed Screening

Target oil & estimated recovery:
(Depends on EOR Process)

- Remaining oil in Target region
- In thermal = Remaining STOIIP
- In Polymer= Oil in the target region which is not swept.
- In Surfactant = Sor

Experimental work Before Pilots

Pilot Design:

- Criteria to be satisfied by Pilots.
- Pilot Area And Target Areas
- What to Tested In The Pilot Area.
- Eliminating External Field Effects.

Pilot Design and Operations:

- Experimental Work
- Operation Parameters.
- Operation Parameters for Successful Steam Flooding.
- Pilots & Field Development Plans.
- Operation, Performance Monitoring.

Pilot Interpretation:

- Obtaining Data.
- Dedicated Wells &Logging Wells.
- Sampling wells & Cores.

Reservoir Simulation Model

Full field Simulation Model

Capital and Operational costs

Project Cost & Final Remarks

THE LECTURERS

Dr. Ali Al-Gheithy

Dr. Ali Al-Gheithy has over 21 years of Petroleum Industry experience, spanning well engineering, operations and field development planning. Dr. Al-Gheithy is currently The Director of Petroleum Engineering (Chief PE) of PDO LLC (JV with Shell) Petroleum Development Oman, a major E&P company in Oman. Previously he worked on several positions including; Study Centre manager, Asset Manager, and reservoir engineering project manager, and Well & Reservoir Management Team Leader.

He has a strong educational background with a BSC degree in petroleum engineering from the University of Tulsa, OK, USA in 1988 and an MSc and PhD degrees from Imperial College, the University of London in 1993. He is the previous chairman of the SPE in Oman.

As Manager of PDO Petroleum study center he was in charge of hydrocarbon maturation and field development of the entire company portfolio including water flood, EOR projects using polymer and thermal processes and related pilot projects.

He also worked as asset manager for a large mature field responsible for the Development planning, reserve booking, and new wells delivery and WRM; as Team Leader of WRM for Fahud and Lekhwair assets; as Cluster Leader for the Lekhwair Asset; and as reservoir Engineer for Nimr asset team responsible for several fields for the taking care of field management, development and reserves bookings.

During his carrier he was cross-posted to Shell Nigeria (4.5 Yrs.) where he worked in the integrated study team on the Diebu Creek and Soku Fields Studies; and led the sub-surface team for the Forcados-Yokri re-development project.