



Congreso Mexicano del Petróleo

26 - 29 septiembre. Acapulco, 2018



7. FIELD DEVELOPMENTS AND TECHNICAL SOLUTIONS – MARGINAL FIELDS

INSTRUCTOR: AHMED ALY

COLORADO SCHOOL OF MINES

CHAIRMAN OF TPS (TECHNICAL PETROLEUM SERVICES – INTERNATIONAL CONSULTING COMPANY) (SPE)

“Compartir ideas para afrontar nuevos retos”

Who Should Attend

Reservoir and production engineers, development geoscientists, asset team leaders, acquisition and divestiture managers and other technical personnel involved in evaluation and exploitation of reserves.

CEUs

0.8 CEUs (Continuing Education Units) will be awarded for this 1-day course.

Description

The various cycles which affect our oil industry have emphasised the need for detailed control of expenditure for development and production of small discoveries.

Marginal fields refer to discoveries which have not been exploited for long, due to one or more of the following factors:

- Very small sizes of reserves/pool to the extent of not being economically viable
- Lack of infrastructure in the vicinity and profitable consumers
- Prohibitive development costs, fiscal levies and technological constraints

However, should technical or economic conditions change, such fields may become commercial fields.

Marginal fields have several parameters that affect them. This includes environmental concerns, political stability, access, remoteness and, of course, the price and price stability of the produced gas/liquids.

This course will describe parts of unconventional methods to develop the marginal fields and mainly focus on innovative methods and new technology in developing those marginal fields.

Course Length

2 Days

Objectives

Recognise production and reservoir characteristics of marginal fields

Understand the appropriate use of improved recovery methods (IOR)

Identify under-performing wells or field areas and recommend appropriate intervention

Determine the "upside potential" of a field, distinguishing between incremental reserves and reserve acceleration

Describe the unconventional methods of developing marginal fields

Describe all new technologies applied on the marginal fields

Content

- Marginal fields definition
- Why opportunities emerge; nature of reserves growth; operating practices and their effect on new opportunities; the contribution of evolving technology
- Recognising opportunities, reservoir characteristics and production performance indicative of new opportunities, unravelling limited data and linking operator practices to new opportunities
- Novel wells for increased production rates, improved recovery and reduced cost
- Innovative facilities solutions to reduce capital and operating costs for marginal fields
- New technology/the future of marginal fields
- Production optimization techniques that involve types of wells, well completions, artificial lift, stimulation methods, matrix stimulation and hydraulic fracturing methods
- Improved oil recovery methods (IOR) and new technology; water injection/flooding; polymer flooding/bright water and gas injection
- Case studies and new technology applications:
 - Ras El-Hekma and Zarif Marginal Fields Development
 - Younis Field (GS-347), GOS, Egypt
 - Kutai Basin Case Study (Asia)
 - Gulf of Suez-Offshore Field Polymer Flooding
 - Tight Gas Field Developments (USA, Egypt and Gulf Area)
- Conclusions and final review

Biography



Ahmed Aly is the chairman of TPS (Technical Petroleum Services–International Consulting Company with offices in Cairo, Denver and Muscat). He is a well-recognised professional in the E&P industry and has over twenty-five years of experience in marginal field development and operations. Aly worked on marginal fields in North America (US), Egypt and Oman.

He gained international experience during his successful career with Schlumberger and his last role before joining TPS was the marketing and technical director for Schlumberger Data & Consulting Services for Europe, Caspian and Africa at the HQ in Paris, France.

Aly, holds a BSc in geophysics from Cairo University, BS, MSc and a PhD in petroleum engineering from Texas A&M University and a Diploma of Strategic Marketing from Harvard Business School. He was an associate professor at the American University in Cairo.