



FUNDAMENTALS OF COAL BED METHANE AND FIELD DEVELOPMENT PLANNING

2 Day Training Course

Course Target Audience

For technical and non-technical staff including managers, petroleum engineers, geoscientists, commercial and accounting staff involved in CBM lifecycle activities from exploration, appraisal through to development and exploitation stages.

Abstract

Resource plays such as Coal Bed Methane (also called Coal Seam Gas) fields typically exhibit a number of unique characteristics that set them apart from other hydrocarbon accumulations. We address the fundamentals of CBM, the steps associated with appraisal and development of CBM assets as well as the markedly different approaches required for CBM development when compared with conventional oil and gas fields.

Traditional offshore plays are replete with a rich literature of best practices and adequate tools. In contrast, CBM field appraisal, development and exploitation typically involves very large areas and very large number of wells, hence a correlative abundance of static and dynamic data, but also displays an often surprising variability between neighbouring wells. This variability is the consequence of a high degree of reservoir heterogeneity, notably for permeability, but also isothermal properties, gas content, and even net coal distribution and seam geometry for some plays.

This course offers insights on reservoir characterisation approaches, integrated static and dynamic modeling, well concepts and types, surface facilities, uncertainty management techniques, and reserves and resource estimation. Expected relationships and possible cross-parameter models for the key reservoir properties are discussed.. Practical methodologies for Concept Selection will also be reviewed, including approaches to model the performance of different well and completion configurations and implementing these into a full field modelling strategy.

Additionally, some time will be allocated to cover modelling of value of information for appraisal activities, as well as identifying priorities in data acquisition.

FUNDAMENTALS OF COAL BED METHANE AND FIELD DEVELOPMENT PLANNING

Programme Outline

DAY 1

- Introduction
- Fundamentals of CBM
- Geological Aspects and Play Definition
- Appraisal and Critical Data Gathering
- Reservoir Characterisation
- Uncertainty Management
- Modelling CBM - Static and Volume in Place
- Modelling CBM – Dynamic and Production Forecasting

DAY 2

- Drilling and Completions
- Facilities Water Management
- Economics and Commercial Aspects
- Field Development Planning and Concept Selection
- Reserves Estimation and Methodology
- Enhanced CBM Recovery

LEAP Energy Overview

LEAP Energy is an independent Subsurface Consulting and Technology services group headquartered in Kuala Lumpur, Malaysia with operations throughout Asia-Pacific and Europe. The company has a regional office in Brisbane, Australia

Course instructors have wide industry experience in conventional and unconventional hydrocarbon recovery, with significant experience in CBM developments.

Over a number of years, LEAP Energy has accumulated a wealth of experience in field development planning studies with resource plays such as coal bed methane and has committed significant resources to develop innovative, practical and efficient solutions to conduct field development studies.

Need more information about this course contact us:

www.leap-energy.com

