

FROM PROSPECT TO DEVELOPMENT: AN INTEGRATED APPROACH

COURSE OBJECTIVES

The aim is to train the participants to synthesize all the available data and to define the current problematics of a field at each step of the appraisal phase and development studies in order to progress toward an optimal development scenario.

COURSE CONTENT

WEEK 1: BASIN ANALYSIS TO PROSPECT EVALUATION

From play to prospect

INTRODUCTION TO PETROLEUM SYSTEM & BASIN ANALYSIS

The participants are going to complete a mini-project on a real case study. From a seismic line, the participants carry out a short basin analysis using log data. They will have to elaborate the "plays" existing in this basin and then proceed to the prospect analysis.

Basin potential assessment
Regional context - Petroleum trilogy
Play definition

BASIN ASSESSMENT TO PROSPECT EVALUATION

Assess the potential of the basin
Petroleum trilogy
Trapping
Timing of Migration versus Trapping
Seismic interpretation
Well data interpretation
Cross correlation & integration with seismic data
Prospect definition
OOIP calculation
Uncertainties

RISK ANALYSIS

Geological risk (reservoir, trap, HC conservation) Fluid content risk (Source rock, maturation, migration, timings)
Probability of success – Consequences for economics

WEEK 2: OIL FIELD DEVELOPMENT From discovery to start up of production

MODULE 1: INTRODUCTION TO WORKFLOW

General presentation of the different steps of an oil field development project
Recall of concepts, tools, methods, necessary data at work to deal with and to reduce inherent subsurface uncertainties
Illustration of the methodology through an history case (on shore field, light oil)

MODULE 2: DISCOVERY

Geological and tectonic context of the field
Problems of seismic interpretation
Evaluation of the discovery well. Uncertainties
Proposals for location and programs of the first appraisal well

MODULE 3: APPRAISAL PHASE

Evolution of the subsurface uncertainties (structural maps, oil in place estimations, etc.) with the new data obtained in the appraisal wells
Up dating of the problematic after each appraisal well.
Definition of data acquisition programs for each appraisal well
Synthesis of data at the end of the appraisal phase and oil in place estimations

MODULE 4: ENGINEERING STUDIES

Estimations of reserves, production profiles through simplified methods and a full field simulation
Estimations of CAPEX, OPEX, technical costs of different development scenarios
Comparison of production forecasts with the production history of the field

E-217

▲ Who should attend?

Geologists, geophysicists or reservoir engineering wishing to understand and integrate the link between the exploration phase leading to the discovery well and the field development phase that leads to the production scenario.

▲ Duration

10 days

▲ Sessions in English

November 15-26, 2010
Rueil-Malmaison (Paris)

▲ Registration

Fees: € 3,950

Contact:

gre.rueil@ifptraining.com
Fax: (+33) 1 47 52 74 27

▲ Course Coordinator

Laurence BOVE

Ref. **BAS / PROSPECT**