

## A LDI Training Course

# **OIL and GAS RESERVES EVALUATION AND REPORTING**

*by*  
**Sjafri Joenoes**

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### COURSE OVERVIEW

Key objectives of this course are to learn various compliant methods of preparing reserves estimates, learn to estimate and understand the impact of economics on those estimates, and properly classify those reserves using the current reserves definitions. Recent case studies, SEC audit questions, and class problems are used extensively to develop an understanding of those skills and include ethical issues that arise when calculating and reporting reserves.

In addition, participant will understand various aspects of evaluation of hydrocarbon reserves, reserves measurement methodology, reserves and resource definitions and guidelines for classification, relation between technical and commercial aspects of resources, and process performed by independent evaluator in performing reserves certification.

### WHAT YOU WILL LEARN

- Correctly interpret and apply the SPE-PRMS (Petroleum Resources Management System) reserves and resources definitions, principles and guidelines for classification
- Interpret and apply the SEC modernization of oil and gas reporting definitions and guidelines
- Generate compliant reserves estimates and reports using either set of definitions
- Understand and use various traditional engineering and geoscience techniques to satisfy reserves reporting requirements
- Incorporate modern, “reliable technology” into your reserves estimates
- Document your reserves estimations
- Reserves reporting requirement: Security Exchange Commission (SEC), due diligence and audit process, PSC economic model, valuation of reserves
  - Prepare for an SEC, third party, or bank audit of your work
  - Successfully defend your estimates during an audit
  - Conduct a thorough audit of another party’s reserves report

## COURSE CONTENT

- Purpose and uses of reserves estimates
- Types of reserves studies
- How to read and understand a reserves report
- SPE-PRMS reserves definitions
- SEC reserves definitions
- Compliant reserves estimation methods using: analogies, volumetric analysis, performance analysis, and material balance
- Supplemental compliant estimation techniques incorporating: probabilistic analysis and simulation
- Economics and reserves
- Special reserves estimation topics: reserves reporting in low permeability reservoirs, shale gas reservoirs, CBM, and EOR projects

## COURSE AGENDA

### DAY 1 :

- Purpose and uses of reserves estimates
- Due Diligent and Audit Process
- The technical and commercial model of reserves
- Technical Reservoir Model (Analogy, Volumetric, Material Balance/Reservoir Simulation, Decline Analysis, Deterministic and Probabilistic)
- Risk and Uncertainties
- Economic Reserves Model

### DAY 2 :

- Reserves Report review
- Reserves Reporting System
- PRMS Definitions and Guidelines
- Security Exchange Commission (SEC)
- SEC vs PRMS
- Economic Model for Reserves Audit
- Economic Indicators
- Sensitivity Analysis

## DAY 3 :

- Production Sharing Contract (PSC)
- Upstream Oil and Gas Activities
- Develop PSC Model
- Unconventional Reserves (Bitumen, CBM, Shale Gas)
- Enhance Oil Recovery (EOR)

## WHO SHOULD ATTEND

Geologists, geophysicists, reservoir engineers, reserves coordinators, investment managers, upstream business development and new ventures professionals, bankers, and government officials dealing with reserves report, audit and estimations.

## Your Course Instructor

### **Sjafri Joenoes:**

He received Bachelor degree from Mechanical Engineering Department, Industrial Engineering Faculty, Bandung Institute of Technology (ITB) in 1980 and Master of Management degree from Prasetya Mulya Business School in 2006. He has professional and practical experiences in various disciplines such as: Drilling, Reservoir Management, Planning & Budgeting more than 35 years in Multinational & National Company especially in Oil & Gas Industry. He retires from PT. Medco E&P Indonesia in year 2015 and focused in Strategic Planning & Budgeting and Reserves Management & Reporting.