

# INTRODUCTION TO PETROLEUM OPERATIONS

**A 2-day course on the A to Z of petroleum exploration,  
drilling and production**

## **Introduction**

This 2-day course is designed for non-technical personnel who work in the oil and gas industry. The main objective of the course is to give them understanding on how petroleum is explored, drilled and produced. By attending this course, the participants will know and appreciate the company activities, policies and priorities.

## **5 Crucial Benefits of Attending**

Understand how the oil and gas are explored, drilled and produced  
Gain insight on the structure and needs of oil and gas companies  
Perform your job better and contribute more to your company  
Anticipate and respond faster to the needs of the O & G industry  
Communicate and presenting your ideas more easily to the various departments in the O & G companies

## **Course Content**

### **ROCKS AND GEOLOGY**

Nature of the earth's crust  
Sedimentation process  
Types of rocks and their characteristics  
The origin of oil and gas  
Types of petroleum deposits  
Permeability and porosity

## **EXPLORATION METHODS**

Geological survey  
Seismic survey  
Gravity survey  
Magnetic survey

## **DRILLING OPERATIONS**

Exploration vs. development drilling  
Drilling rigs and equipment  
Casing and cementing  
Drill pipes and drill collars  
Bottom hole assembly and bits  
Blowout prevention system  
Drilling problems and solutions  
Mud logging operation  
Electric logging methods  
Directional and horizontal wells  
Drilling fluids: types and uses  
Floating drilling  
Drill stem testing (DST)  
Coring and core analysis  
PVT analysis

## **WELL COMPLETION AND PRODUCTION**

Well completion equipment and types  
Acidizing and fracturing  
Sand control methods  
Tubing and packers  
Flow control equipment  
Wireline operations  
Artificial lifts: Gas lifts and ESP  
Gas oil ratios and water production  
Production problems and solutions  
Christmas trees and well heads

## **WORKOVER OPERATIONS AND PROCEDURES**

The reason for workover  
Types of workover  
Equipment used in workover  
Workovers techniques and procedures  
Snubbing and hydraulics workover  
Coiled tubing units and operations

## **OIL AND GAS HANDLING FACILITIES**

Oil and gas processing  
Types and uses of separators  
Emulsion treatment  
Gas dehydration  
Storage tanks  
Pipeline pigging operations  
Corrosion control systems

### **OIL & GAS RESERVOIRS**

Types of reservoirs  
Estimating petroleum reserves  
Reservoir drive mechanisms  
Production forecasting  
Well testing  
Enhanced oil recovery  
Waterflood and steamflood

### **Most Suitable For**

Lawyers  
Contracts Personnel  
Secretaries and administration assistants  
Accountants and finance staff  
HR staff  
Purchasing agents  
Logistics and warehouse personnel  
Bankers  
Anyone new to the O&G industry

### **Comment from Previous Participants**

This course is very important to employees who work for oil companies

It really improved my knowledge about oil and gas operations

Competent instructor - clear explanation

It gives me new motivation to develop my career within the company

**For more information about the course, please visit [lditraining.com](http://lditraining.com) or contact LDI Training at [HYPERLINK "mailto:lditrain@indo.net.id" lditrain@indo.net.id](mailto:lditrain@indo.net.id)**

LDI's Outline - Introduction to Petroleum Operations