Training Title

OIL EXPLORATION, DRILLING, WELL COMPLETION & PRODUCTION

Training Duration

5 days

Training Venue and Dates

Oil Exploration, Drilling, Well	5	08 – 12 August, 2025	\$ 6,750	PARIS, FRANCE
Completion & Production				

Trainings will be conducted in any of the 4 or 5-star hotels.

Training Fees

• \$ 6,750 per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Lunch.

Training Certificate

Prolific Consultants FZE Certificate of Course Completion will be issued to all attendees.

Introduction

- Exploration: Identifying potential oil reserves using geological surveys and seismic data.
- Drilling: Creating a borehole to reach the oil reservoir using specialized rigs and techniques.
- Well Completion: Preparing the well for production by casing, cementing, and installing equipment like pumps and valves.
- Production: Extracting the oil and gas and transporting them to refineries for further processing.

Objective

- Identifying Oil Reserves: Locate potential reserves to ensure a reliable energy supply.
- Efficient Extraction: Use advanced technology to drill and complete wells safely while maximizing resource recovery.
- Safety and Environmental Protection: Minimize risks to workers, local communities, and the environment during extraction and production processes.
- Maximizing Production: Optimize production techniques to ensure sustainable, costeffective, and long-term output of oil and gas.
- Meeting Market Demand: Provide a continuous supply of oil and gas to refineries for processing into usable products.

SUITABLE FOR:

This course is designed for Oil filed Technologists, project managers, plant managers, plant supervisors, Production Supervisors, technical staff, Operators and Technicians and contractor personnel involved in the production of oil and natural gas. The greatest benefit arises from

discussing the underlying principles of the various processes and the cause of the common operating problems. You will also be able to see which processes are available to you to debottleneck or modify existing processes. The practical techniques and examples provide useful insights that are valuable in daily operations. Participants are encouraged to introduce any operating problems they have encountered for group discussion.

TRAINING METHODOLOGY:

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions, and motivate everybody find the right answers. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course. Very useful Course Materials will be given.

COURSE OUTLINE

Day 1

1) Exploration

- a) Search for oil & gas
 - Terms and nomenclature of geology used in oil industry
 - Petroleum: How it is formed and trapped, geology of the suitable rocks for favorable deposition of hydro-carbons

2) Introduction to Drilling Technology

b) Drilling methods

- Technical Definitions and
- practical Units
- Rotary Drilling practices
- Well Construction and Design of Casing String
- Drilling fluids
- Well control Equipment
- Fishing and fishing Tools
- Offshore drilling Practices
- Safety on the rig

Day 2

Well Completion and Testing

- Reservoir engineering aspects for well completion
- Phase behavior
- Performance Evaluation

- Production inflow performance
- Types of well completion: Corrosive high pressure completion: tubing less well completion: horizontal and multilayered completion, open hole completion, slotted liner completion, Special completion.
- Packer completion
- Perforation Techniques: over balanced and under balanced
- Well head equipments
- Down hole tools
- Classification of well production tests: transient pressure testing: well testing strategy: production testing tools: Drill stem Test: High pressure and high temperature testing: Testing of sour wells
- Well activation and flow measurements

Day 3

1) Artificial Lift

a) Artificial lift

- Need for artificial lift
- Various modes of lifts
- Selection criterion and design of suitable lift
- Trouble shooting
- Optimization

b) Reservoir pressure maintenance thro' water / gas injection

b) Reservoir pressure maintenance

- Need for reservoir health management
- Types of water injection methods, peripheral and spot injection
- Frontier areas of EOR
- Compatibility of injection fluids
- Monitoring

<u>Day 4</u>

Work-over operations and Well Stimulation, sand control

- a) Work over rig components
 - Introduction
 - Rig components
 - Draw works
 - Hoisting System
 - Rotary equipment
 - Mud Pumps

- Prime over
- b) Work over Jobs
 - Major Repair Jobs
 - Casing Damage repair
 - Fishing
- c) Well Stimulation
 - formation Damage
 - various stimulation techniques
 - gravel packing
 - activation

<u>Day 5</u>

- 1) Production, Storage, processing and Transportation
- a) Production
 - Design of GGS/GCS/ EPS
 - Design of CTF
 - Sour component handling
 - Demulsification and desalting
 - ETP- design
 - Transportation
- b)Introduction to Offshore Technology especially Deep water
- b) Offshore Practices
 - Introduction to offshore technology
 - Deep water: frontier area of technology

Case Studies, Last Day Review, Discussions & Pre & Post Assessments will be carried out.