

GLOBAL EXPERTS INSTITUTE FOR TRAINING.
ISO 9001-2008 TRAINING PROVISION CERTIFIED

Acidizing and Fracturing Training

Schedule Dates:

Start Date	End Date	Place
19 Feb 2024	23 Feb 2024	Dubai - Residence Inn by Marriott Sheikh Zayed Road,

Program Introduction:

This training course explains flow and transient pressure measurements and responses in oil wells. Fundamentals of oil wells Acidization and fracturing are reviewed. The applicability and limitations of those processes and their various testing techniques are critically discussed through actual field examples. This would enable participants to determine well behavior, pressure build-up, and flow testing

Program Objective:

- ✓ Characteristics of oil wells such as structure, pressure and flow measurements
- ✓ Methods for improving performance of oil well and fundamentals of acidization
- ✓ Principles of fracturing process and data required for better outcomes
- ✓ Strategies for improving the performance of oil well and damage prevention
- ✓ Risks and hazardous related to acidization and fracturing process

Who should attend?

- Production and Reservoir Engineers and Geoscientists needing to deal with the Candidate Selection and Design of Acidizing and Fracturing Operations.

Program Outlines

Day One

Petroleum Production Engineering

- Fundamentals of Petroleum Production Process
- Methods for Improving Productivity of Oil Wells
- Role of Oil Well Tests and Information in Petroleum Industry
- Oil Well Test Data Acquisition, Analysis, and Management

- Selecting Oil Wells for Optimum Stimulation Treatment
- Reservoir System Characterization Process
- Basic Fluid Flow Equations in Oil Reservoir

Day Two

Hydraulic Fracturing Methods

- What is Hydraulic Fracturing?
- Why is Hydraulic Fracturing Used?
- Hydraulic Fracturing of Shale
- Water-based Hydraulic Fracturing
- Cavitation Hydrovibration Fracturing
- Hydra-jet Fracturing and Exothermic Hydraulic Fracturing
- Hydraulic Fracturing Enhanced by Water Pressure Blasting
- Foam-based and Oil-based Fluids
- Acid-based and Alcohol-based Fluids
- Emulsion-based and Cryogenic Fluid

Day Three

Other Fracturing Methods

- Explosive Fracturing and Electric Fracturing
- Pulsed Arc Electrohydraulic Discharges (PAED)
- Plasma Stimulation & Fracturing Technology (PSF)
- Thermal (cryogenic) Fracturing
- Mechanical Cutting of the Shale Formation
- Heating of the Rock Mass
- Fracturing Costs and New Developments

Day Four

Matrix Acidizing Methods

- Matrix Acidizing Fundamentals
- Design of a Matrix Acidizing Setup
- Systems Requirements and Systems Components:
 - Pumps and Accumulators
 - Heaters and Temperature Controllers
 - Pressure Regulators and Data Acquisition
 - Piping networks, Valves and Fittings
- General Matrix Acidizing Procedure
- Acid Preparation and Injection Procedures

Day Five

Safety Aspects and Testing Methods





- Characteristics of Naturally Fractured Reservoir
- Well Test Interpretation Methods, Uses, and Limitation
- Interpretation of Interference Tests in Fractured Reservoirs
- Safety Issues and Precautions
- Program Summary and Course Closure

Training Methodology:

- Slide presentations
- Interactive discussion
- Simulations and Gamification
- Online Video material

Cost Quotation in Kuwaiti Dinars

The total cost includes:

-  Instructor(s) expenses
-  Training materials
-  Certification
-  Lunch Buffett

Total Cost: 1250 KD per Participant
(One Thousand Two Hundred Fifty Kuwaiti Dinar)