Skills International for Training & Consulting

Training Course

Well Intervention and Artificial Lift

Skills International for Training & Consulting

سكلز الدولية للتدريب والإستشارات

Course Plan

Introduction

A well intervention is any operation carried out on oil or gas well during its productive life that alters the state of the well, provides well diagnostics, or manages .the production of the well

Primarily in this training course, we are concerned with problems associated with the completion string. Problems associated with the reservoir can be investigated ,and evaluated using production logging and well test techniques. In general problems associated with the completion string can be classified into problems which arise in the tubing bore and which can be corrected through tubing operations and problems which necessitate the retrieval of the completion string from the well

Course Objectives:

- ✓ Introduction to the variable nature of well interventions.
- ✓ Introduction to artificial lift methods
- ✓ Different types of artificial lift systems
- ✓ Describe the inherent risks and need for careful diagnostics, planning and supervision.

- ✓ Describe the economic implications of a workover in terms of the need to protect the well production or injection capacity.
- ✓ List and describe the equipment and operational concepts involved in coiled tubing and hydraulic workover units.
- ✓ Identify, evaluate and recommend functional capability of completion strings for a variety of situations.
- ✓ know the well control barrier principles
- ✓ Identify three barriers methodology during well intervention
- ✓ Know well control barrier classification for different type of well intervention method.

Who Should Attend?

- ❖ Security Supervisors and Managers.
- ❖ HSSE and Fire Personnel.
- ❖ Facility or Building Managers.

Training Methods:

- ✓ Online Video material.
- ✓ Presentation.
- ✓ Live Interactive sessions.
- ✓ Course presenter will make extensive use of all tools that will be needed for the virtual environment.
- ✓ Questions & Answers

Course Outline:

Day One

Basic Well Completion Design, Practices and Strategies

- Well Integrity
- Well Completion Design Considerations
- Reservoir Considerations
- Mechanical Considerations
- Classification of Completions
- Lower and upper completion string components and selection consideration
- Cement Slurry calculations
- Cement Squeezing.

Barriers and Containment Devices

- Cement Bond Logs
- Determination of Frac Gradient
- Perforating
- Acidizing
- Barrier terminology
- Barriers and containment devices
- Barrier envelope
- Barrier integrity testing
- Flow control devices (mechanical barriers)
- Well kill principles and procedures

Day Two

Wire Line Types, Tools, and Applications

- Introduction to wireline
- Types of wireline
- Basic tool strings
- Introduction to wireline fishing
- Stuffing box
- Wireline valve (bop)

Wire Line Types, Tools, and Applications (Cont.)

- Standard braided line rig up
- Wireline applications and operational consideration
- Matrix or Perforating?
- Fracturing Overview
- Sand Control Management
- Sand Cleanout

Day Three

Coiled Tubing Equipment and Applications

- Coiled Tubing surface and subsurface components
- Coiled Tubing applications
- Cleaning operations with CT
- Nitrogen calculations
- Alternatives to Workovers
- Well back flow (nitrogen lift)

Day Four

Introduction and Overview to Artificial Lift

- Introduction to Artificial Lift Techniques
- Overview of artificial lift methods
- Factors influencing artificial lift selection
- Importance of artificial lift optimization

Rod Pumping Systems

- Principles of rod pumping
- Design considerations and components
- Troubleshooting common issues

Day Five

Gas Lift Systems

- Gas lift principles and applications
- Gas lift valve types and operation
- Gas lift optimization strategies

Electrical Submersible Pumping (ESP)

- ESP system components and configurations
- ESP installation and operation
- ESP troubleshooting and maintenance

Training Details

Course Duration	5 Days
Pre-Schedule	4 – 8 November 2024
Venue	Sina De La Ville Hotel - Milano
Training Fees Per Person	KWD 1900 (One Thousand Nine Hundred Only)
Course Fees Include	✓ Tuition documentation ✓ Curriculum and Training Handout ✓ Five Star Lunch ✓ Completion Certificates