



Well Intervention (Slickline, Wireline and CT Operations)

Course Duration : 5 Days

Date : 18-Aug-2024 to 22-Aug-2024

Location : Dubai, UAE

Type of Participant : This course is designed for Well Operations Engineer, Production Engineers, Production Technologists and Operations staff to provide them with the basic knowledge related to wireline operations and relevant applications in the oil field in addition to Coiled tubing operations and its different applications. An overview about completion equipment & operations is also considered in the course as it is a must to consider the completion issues in both wireline and CT operations.

Summary:

This course is designed to help participants to build the necessary experience of the ESP as a well intervention operation covering both wireline and coiled tubing operations. It highlights the importance of the completion equipment, completion design, and operations then gives a basic overview

of both WL & CT equipment, pressure control equipment and operations. Safety considerations and how to deal in emergencies are also covered through some actual field examples.

Objective:

Upon Completion of the course, participants will:

- Have quick review about basic concepts of well intervention.
- Be familiar with wireline types and applications.



- Be familiar with the limitations of slickline different types.
- Know the basic WL surface equipment and relevant lay-out concerns.
- Get basic knowledge about Pressure-Control Equipment (PCE) of WL.
- Be familiar with the downhole tool string and basic wireline tools.
- Have good knowledge about coiled tubing main surface equipment.
- Get basic knowledge about CT pressure-control equipment and their acceptance criteria.
- Know the basic applications of coiled-tubing in the oil field industry.
- Get an overview about well control philosophy and barrier concepts related to completion, WL and CT operations.

Contents:

1 – Well intervention Definition & Different Technique.

- Well Intervention Conveyance Methods.
- The Impact of Well Completion on Well Intervention Operations.
- What Is the process for Successful Well Intervention.
- Well Completion Equipment (Tubing, PKRs, Circulating Devices, Nipples...etc)
- Main Completion Types
- Completion Operations
- Main Considerations for Completion Design
- Inflow & Outflow Concepts
- Wellhead & X-trees
- Overview of Well Integrity and Barrier Envelope
- Overview of Completion Equipment & Operations

2 - Wireline Equipment and Operations:

- Introduction to Wireline
- Wireline different terminologies and types.
- Slickline & braided Lines Specs & Limitations.
- Basic WL Surface equipment.
- Wireline Pressure-Control Equipment (PCE).
- Function Tests & Acceptance Criteria done for PCE.



- Slickline Tool String Components and Jar Types.
- Basic Service Tools
 - Gauge Cujers/ LIBs/ Wire Brushes/ Shiking Tools/ End Locator...etc.
 - Lock Mandrels and relation to Landing Nipples.
 - Pulling and Running Tools
- Checklist & Preparation for a slickline Job
- Tests performed for the slickline before the Job
- Rig-up Angle Correlation Factors

3 - Coiled Tubing (CT) Equipment & Applications:

- CT Main Surface Equipment.
- CT Pressure-Control Equipment and Related Function Tests
 - Stripper and how to test
 - BOP different Configuration (Quad, Combi...etc.)
 - Acceptance Criteria
- CT Connector (Types & Applications)
- Bottom-hole Assembly Components (BHA)
- CT String
- Factors affecting CT String Life Time (Bending Cycles/ Fatigue...etc.)
- Checklist & Preparation for a CT Job
- String Management & Lifetime.
- CT Conventional Applications
 - N2 Liking
 - Acid Simulation
 - Milling, Fishing & Clean-out Operations
 - Scale Removal
 - Special Applications (E-Coil, Logging, Setting PKRs, Perforations...etc.)
- Emergency responses and Contingencies related to CT



4 - Introduction to Well Control & Barrier Philosophy:

- Definition and Types of Well Barriers
- Types of Mechanical Barriers
- Barrier Envelope Concept
- Barrier Envelopes considered during Completion, WL & CT Operations