



DE163

Wireline Operations & Techniques

Course Introduction:

This course aims to provide an overview of wireline equipment and its operation. This is designed for the participants to have a deep understanding of wireline operations. Wireline is particularly important during completion and production. Field operators can run anything from a basic downhole directional survey to the most delicate gamma ray formation log on wireline. They can fire perforating charges at precisely determined downhole locations, back off a string of stuck pipe, retrieve a wrench, or manipulate complex subsurface well pressure and flow controls.

Wireline operations can be done inside the tubing without killing the well, by means of a lubricator connected to the wellhead. Operations can be carried out under pressure and even without stopping production. Further, wireline operations are performed quickly due to the use of lightweight, highly mobile equipment and run by two or three specialized operators. As a result, wireline operations can be readily implemented at relatively low cost.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- ✓ To improve safety and productivity in wireline operations
- ✓ Apply an up-to-date knowledge on wireline equipment, techniques and operations during well completion, servicing, work over and production
- ✓ Explain coil tubing including coil tubing history, application, limitation, equipment, tool, barriers, parameters and emergency procedures

Who Should Attend?

This course is intended for those personnel involved in wireline operations, subsurface engineers, production technology engineers, reservoir engineers and managers involved in the field development and production of oil and gas.

Course Outline:

Day 1:

Well Servicing Reasons

- Workover operations
- Wireline operations
- Well development process

Definitions & Calculations

- Pressure fundamentals
- Live & kicking wells
- Force

Day 2:

Kick Fundamentals

- Causes
- Detection
- Indicator response

Gas Characteristics

- Pressure/volume relationship
- Gas expansion & migration
- Fluids
- Characteristics
- Types

Day 3:

Surface Equipment

- Wireline types
- Wireline unit components
- Std. tools
- Wellhead
- BOPs
- Auxiliary well control equipment
- Pressure control equipment
- Lubricators
- Stuffingbox
- Gas detectors
- ESD system

Subsurface Equipment

- Tubing/drillstring components
- Completion equipment

Procedures

- Well info

- Rigging up/down
- Shifting & pulling tools
- Well shut in
- Stripping & shearing wireline
- Fishing operations
- Gas lift operations
- Swabbing
- Surveys
- Perforating

Day 4:

Complications & Solutions

- Trapped pressure (plugs, SCSSV, SSCSSV, bridge plugs, sand bailing, paraffin removal, hydrates)
- Casing pressure
- Lost circulation
- Underground flow
- Collapsed tubing
- Junk in hole
- Communication problems
- Stuck tool string
- Deviated holes

Organizing Operations

- Personnel assignments
- Planned responses to well control scenarios

Day 5:

Testing

- Pressure control equipment testing
- Installation of rings
- Flanges
- Tree connections

Government Regulations

- Review of applicable 30 CFR Part 250 regs concerning General Safety
- Pollution & Wireline Operations

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Fees:

To be advised as per the course location. This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session