



# **DE149** Wireline Servicing, Fishing **Job for Completion and** Workover















## **Course Introduction:**

This five-day course is designed to discuss the theory, calculations, and procedures associated with the well control aspects of wireline operations. The course consists of lecture, group work and exercises which will aid the participants in understanding the pressure control considerations related to wireline activities. In addition, emphasis is placed on safety aspects, job assignment coordination, and equipment limitations.

# **Course Objectives:**

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

- Perform hydrostatic, formation and force/pressure calculations
- Identify the safety hazards and equipment requirement/limitations for a snubbing, coiled tubing and wireline operations
- Identify various tools / equipment and their function/application
- Competently supervise the well control related aspects of these operations

# **Who Should Attend?**

This course is intended for any personnel that has the responsibility of supervising wireline operations utilizing a lubricator.

## **Course Outline:**

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#### *Day 1:*

#### **INTRODUCTION & DEFINITIONS**

- Well servicing operations
- Coiled tubing operations
- Snubbing operations
- Kick and blowout

#### **REASON FOR WELL SERVICING OPERATIONS**

- Completing a new or multiple reservoirs
- Stimulating a completed producing reservoir
- Controlling water/gas production
- Eliminate or reduce water coning
- Repairing mechanical failures
- Cement repairs

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#### Day 2:

#### PRESSURE/KICK FUNDAMENTALS AND CALCULATIONS

- Fluid weight and gradients
- Hydrostatic pressure and force
- Formation pressure
- Kill fluid weight
- Overbalance
- Causes of kicks
- Kick detection
  - o Open hole
  - Cased hole
  - Tubing

#### IMPORTANCE OF EARLY KICK DETECTION

#### GAS CHARACTERISTICS AND BEHAVIOR

- PRESSURE AND VOLUME RELATIONSHIP
- Expansion and migration relationships
- Solubility of gas in fluids

#### *Day 3:*

#### **WORKOVER AND COMPLETION FLUIDS**

- Functions/characteristics of fluids
- Types of fluidsernational Centre For Training & Development
- Pressure losses and causes
- Density concerns/measuring techniques

#### SURFACE WELL CONTROL EQUIPMENT

- Production christmas trees
- Rig, coiled tubing, snuffing unit and wireline bops
- Accumulators
- Lubricator/stripper assemblies
- Chokes/manifolds
- Auxiliary equipment
  - Safety valves
  - o Trip tanks
  - o Gas detection/handling systems
  - Surface safety systems and ESDs

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#### **TESTING PRESSURE CONTROL EQUIPMENT**

- Installation of rings, flanges and connections
- Frequency and test pressure
- Bop pressure and function testing
- Well control drills

#### Day 4:

#### SUBSURFACE EQUIPMENT

- Workstring, tubing, and drillstring components
- Tubular Capacities/Displacement/Grades/Strengths
- Completion equipment
  - o SCSSVs
  - Flow couplings/landing nipples
  - Gas lift equipment
  - Packers

#### WIRELINE EQUIPMENT

- Types of wireline
- Wireline unit components
- Common tools and uses
  - Running tools
  - Pulling tools
  - o Shifting tools المركــز العالمـــى للتحريـــي والتط
  - Impression blocks nal Centre For Training & Development
  - Gauge rings
  - Swages

#### *Day 5:*

#### **COMPLICATIONS AND POSSIBLE SOLUTIONS**

- Trapped pressure on tubing/casing
- Lost circulation/underground flow
- Collapsed tubing
- Junk in hole
- Holes in tubing/plugged tubing
- Stuck tool string
- Fishing under pressure
- Hole angle
- Flow after cementing



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Gas hydrates

#### ORGANIZING OPERATIONS/KILL PROCEDURES

- Personnel assignments/communications
- Shut-in, verification and monitoring
- Pre-recorded information
- Rigging up and deployment into well
- Tripping and stripping operations
- Shearing and fishing wireline

## **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
- Case Studies and Self Questionaires 
  Case Studies and Self Questionaires
- 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.



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# **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



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