



## Advanced Slickline Operations



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## Introduction

For a complete knowledge of the wellbore and completion components, a detailed explanation of down-hole components as they relate to wireline is required.

## Targeted Groups

- Those who will do slickline operations.
- Service agents who want to learn more about wireline operations
- People in design and engineering

## Course Objectives

- Give a thorough explanation of slickline operations.
- Emphasize the pressure management and slickline's crucial components.
- Learn how a variety of wireline tools work and how to utilize them.
- Use a "hands-on" method of instruction when learning at a workshop.
- To ensure a thorough grasp of downhole operation, use cutaway tools.
- Learn how to use the wired device well.
- Discover how to successfully design a wireline operation.
- Establish a forum for inquiries and dialogue.

## Unit 1: Xmas Trees

- Types of trees
- Single
- Dual
- Composite
- Solid block
- Wireline
- History and development

## Unit 2: Use and limitations of wireline

- Wire types and strengths.
- Wireline Units, Design, function and operating procedures

## Unit 3: Surface equipment: Pressure control equipment.

- Stuffing boxes, lubricators, BOP's

## Unit 4: Braided line equipment

- Grease Injection systems for braided line operations
- Pressure Testing

- Test Procedures and safety precautions
- Toolstring Components

## **Unit 5: Rope, Stem and Jar**

- Rope Knot
- No knot and braided
- Stem: sizes, selecting correct amount.
- Jars: mechanical, hydraulic, spring, accelerators

## **Unit 6: Knuckle joints**

- Swivels
- Rig-up Procedures

## **Unit 7: Lifting options**

- Ginpole
- Crane
- Onshore/offshore

## **Unit 8: Use of masts**

- Basic Service
- Tools: Gauge cutters, Blind boxes, Lead Impression
- Blocks, Running / Pulling tools, Otis HES type R, S, G series, Camco JD, JU series, Lock mandrels/plugs, Slip and collar locks, Selective systems, No go locks, Plugs and Flow controls, Running and pulling procedures

## **Unit 9: Sliding Side Doors, Description and use in the well.**

- Types eg: XO, XD, XA, Baker CMD, CMU
- Shifting tools and procedures, Additional Equipment, Packoffs,

## **Unit 10: Calliper surveys**

- Brief overview
- TCP guns - wireline release options
- Safety Valves, SSV - Surface tree actuators and lock out
- SCSSV - wireline and tubing retrievable
- TRSSV - Tubing Retrievable, DCSSV - back up downhole valves, Gaslift, Theory of gaslift operations

## **Unit 11: Side Pocket mandrels**

- Gaslift valves - design and function.
- Running and pulling procedures.
- Additional uses of SPM's, Well kill, water flood, chemical injection. Extreme Deviation, Use of rolling systems for deviated wells. Wireline Fishing, Avoidance by due care and good job planning. Fishing Job Planning, Line/ force/pressure considerations, Lubricator length

calculations

## **Unit 12: Use of appropriate equipment and constraints**

- Rig up height considerations
- Site constraints, Fishing tools
- Presentation of tools available, their design, function and operation.HD Jarring activity
- Use of braided lines 3/16, 7/32 and grease injection systems, Spring jars - setting, calibration and redressing,
- Accelerators - use and matching to jar operations
- Use of HD fishing tools, Fishing scenarios and calculations
- Various part fishing situations, requiring
- Calculation of wire end depth etc.