# Well Servicing & Workover

## Overview

### AUDIENCE
Completion, well servicing or workover engineers and supervisors, with client or service companies, familiar with well control operations.

### PURPOSE
This course provides the required comprehensive knowledge and skills for well servicing and workover.

### LEARNING OBJECTIVES
Upon completion of the course, participants will be able to:
- select the right means for well intervention,
- design well servicing or workover programs,
- supervise well servicing or workover operations.

### PREREQUISITE
No prerequisites for this course.

### WAYS AND MEANS
Two case studies are worked out: one for well servicing, the other for workover.

### OBSERVATION
This course can be delivered in French, with documentation in English.

## Agenda

### REASONS & WELL INTERVENTION MEANS ON PRODUCTION WELL
Intervention means classification.
Well intervention main reasons:
- Measurement.
- Maintenance.
- Well remedial and workover.
Main intervention means: wireline, coiled tubing, snubbing, workover rig.

### REVIEW OF COMPLETION, WELLHEAD & BOP STACK SET UP
Review of completion installation and equipment technology:
- Standard completion.
- Intelligent completion.
- Multi-zone gravel pack completion.
- Deepwater completion fitted with sand control equipment.
- Review of wellhead set up.
- Review of BOP stack set up versus company rules.

### WELL SERVICING
Safety issue during well servicing operations.
Intervention equipment set up.
Study of different well servicing cases:
Standard completion.
Tubing less completion.
Intelligent completion.
Multi zone gravel pack completion.
Deepwater completion fitted with sand control equipment.
Light intervention case study.

WORKOVER
Safety issue during workover operations.
Main operations:
Well neutralization and means.
Xmas-tree removal.
Workover rig and BOP stack installation.
Workover operation.
Fishing operation.
Operation risk evaluation versus well operation cost and budget.
Depleted reservoirs:
Losses and potential reservoir damage.
Well kick-off after well intervention.
Study of different well workover cases:
Standard completion.
Tubing less completion.
Smart completion.
Multi zone gravel pack completion.
Deepwater completion fitted with sand control equipment.
Workover case study.

KNOWLEDGE ASSESSMENT