

This course can be adapted to virtual classroom mode

IWCF Well Intervention & Pressure Control - Level 2

IWCF Certification: "Well Intervention & Pressure Control" - Certified IWCF training center

5 days

CP2-EN-P

Overview

LEVEL

Knowledge

PURPOSE

The aim of this training is to raise the awareness of the negative impact and effect of a well control incident and to provide the required comprehensive knowledge and skills to carry out well intervention operations.

LEARNING OBJECTIVES

At the end of this training, participants will be able to:
understand the impact and consequences of a blowout,
know the safety barrier principles,
understand the behavior of a producing well,
learn the various tools used during well interventions and workovers,
be aware of the methods used to control well pressure,
learn procedures and equipment used in wireline, coiled tubing, snubbing, workover,
to be certified IWCF Level 2.

WAYS AND MEANS

Course material (PPT, PDF).
Exercise book.
Certified IWCF instructor.

LEARNING ASSESSMENT

IWCF Level 2 examination tests.

PREREQUISITES

Basic technical knowledge of the petroleum industry.
A minimum period of 10 days is prescribed by IWCF before any registration.

MORE INFO

The level 2 course is recommended for a first IWCF certification.
The validity of Level 2 certificate is 5 years.

Agenda

BASIC PRINCIPLES & WELL FUNDAMENTALS

0.5 d

Type of well effluents (heavy oil, oil, gas).
Hydrostatic and hydrodynamic pressures.
Specific gravities, densities, pressure gradient.
Over-balance/under-balance.

Pore pressure, frac pressure.

PRESSURE CONTROL APPLIED TO COMPLETION & WELL INTERVENTION

1.5 d

Safety barriers, pressure tests.

Well calculation (pressure, volume, pumping time, pressure to balance at the circulating device.

Shut in procedures.

Kill methods: direct or reverse circulation, bull heading, lubricate and bleed.

Specific problems linked to producing wells: losses, plugging, migration, hydrates, H₂S and CO₂.

COMPLETION EQUIPMENT

0.5 d

Different types of completion.

Downhole equipment (packers, safety valves), nipples, side pocket mandrels, tubing (sizes, grades and connections), Xmas tree, etc.

DIFFERENT TYPES OF INTERVENTION WITH THEIR RESPECTIVE EQUIPMENT

2 d

Wire line intervention (optional)

Safety barriers and specific equipment.

Rigging up and pressure tests surface pressure control equipment.

Slick line: specific equipment (BOP, lubricator, stuffing box, cable cutter valve...).

Braided line, e-line: specific equipment (twin BOP, grease injection system, pack-off system, tool-trap, tool-catcher...).

Coiled tubing (optional)

Barriers and specific equipment (strippers, BOP...).

Rigging up and pressure tests surface pressure control equipment.

Snubbing (optional)

Barriers and specific equipment (strippers, annular BOP, stripping rams, safety rams...).

Rigging up and pressure tests surface pressure control equipment.

IWCF CERTIFICATION

0.5 d

Test on completion equipment (compulsory) .

Test on completion operations (compulsory) .

Test on Wire Line operations (optional) .

Test on Coiled Tubing operations (optional) .

Test on Snubbing operations (optional) .

Note: 1 , 2 or 3 options has to be selected in addition to the compulsory tests.