

Well Productivity Awareness School (WASP)

Designed for:

The course is designed for asset teams and individuals who want to develop an understanding of the factors that can reduce well productivity during the drilling, completion and production phases.

Duration (days)

1 2 3

Learning Level:

Skills ■ ■ ■
Knowledge ■ ■ ■
Awareness ■ ■ ■

Drilling and other rig-based operations always carry the potential for large negative impact on production, if they are poorly designed or implemented.

This course is designed to make those that attend aware of how their job can directly impact productivity. Best practice in well interventions will be disseminated.

At the end of the course, the attendees should be aware of how sensitive the reservoir is to damage, what can go wrong, how to avoid things going wrong and what the future of operations hold. Course duration is three days and is designed for people with familiarity of drilling, completion and workover operations.

Well productivity is influenced by your actions throughout the life of the well

WASP

First we explain skin damage and its potential for reducing productivity. Then we look at the phases of a well's life.

OVERVIEW OF WELL PRODUCTION

DRILLING

COMPLETIONS

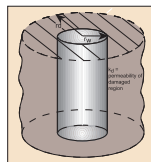
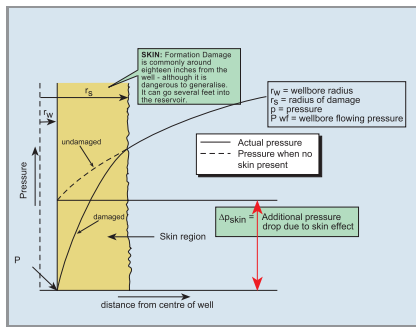
WELL DESIGN
PERFORATING

STIMULATION

FRACTURING
ACIDISING

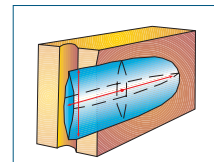
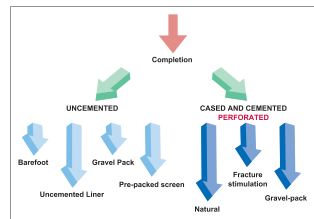
PRODUCTION RELATED DAMAGE

WORKOVERS



Far too often **producing wells** fail to reach their **full potential**, because somewhere during the drilling and completion process, the reservoir rock has been **damaged**. Whenever production fails to reach target the life and profitability of the project are put at risk.

Many factors can contribute to the **damaging process** therefore it is important that everyone who plays a part in the development of oil and gas, has an understanding of the subject. The **Well Productivity Awareness School** has been designed to take the technical concepts and language and convert them into common sense terms that all members of the process can understand.



Well Productivity Awareness School (WASP) continued

Course Content:

The course is a mixture of informal teaching, demonstrations, individual and group exercises, videos, posters and a number of exhibits. Informal discussions of local issues will be covered.

The course covers all aspects of well operations including:

- Well Productivity, formation damage and how wells flow.
- Drilling the reservoir.
- Completion practices and perforating
- Production chemistry - prevention or removal of scales, asphaltenes, waxes and hydrates.
- Stimulation - acid or propped fractures, acid washing.
- Workovers - Reasons for and damage caused by workover

Course Duration:

Duration is 3 days.

Courses available from this series:

Drilling Awareness
Introduction to Drilling
Well Productivity Awareness School (WASP)
Completion Design
Completion Practices
Well Management
Tubing Stress Analysis
Artificial Lift
HPHT Drilling
Integrated Well Planning & Drilling Operations
Operations Geology
Maximising Well Productivity in a Low Oil Price World
Stuck Pipe Prevention
Well Integrity Management

Course Tutors



Roger McIlroy BSc, MEng, CEng, MEI
Main Series tutoring: Wells and Reservoir
Industry experience: over 40 years, subsurface leadership production technology and reservoir engineering
Career background: Maersk, BP, Shell, AGR and TRACS
Personal: Chartered Petroleum Engineer, Member of Energy Institute, Member SPE



Mark Graham BSc, CEng, MEI
Main Series tutoring: Master Class
Industry experience: over 30 years, petroleum engineering and economics
Career background: Schlumberger, Shell, AGR and TRACS
Personal: Author, 'Hydrocarbon Exploration and Production', Member of Energy Institute