



HARNESS THE POWER  
OF KNOWLEDGE

**Well Intervention: Advanced  
Techniques for Enhancing Well  
Performance and Extending  
Reservoir Life**

**TRAIN**



## Course Overview:

Well intervention encompasses a wide range of operations performed on existing wells to address wellbore problems, restore production, and extend reservoir life

This comprehensive 5-day professional training course will provide a thorough understanding of advanced well intervention techniques, including coiled tubing interventions, hydraulic fracturing, and plug and abandonment (P&A) operations

## Course Objectives:

By the end of this course, participants will be able to:

1

Grasp the fundamental principles and applications of well intervention in maintaining wellbore integrity, optimizing well performance, and extending reservoir life

2

Identify the different types of well intervention operations, including remedial workovers, preventive workovers, and recompletion workovers

3

Understand the design and operational considerations for coiled tubing interventions, hydraulic fracturing, and P&A operations

4

Apply well intervention techniques to address specific wellbore problems, such as sand production, gas coning, and water influx

5

Select and operate specialized well intervention equipment, including coiled tubing units, fracturing equipment, and P&A tools

6

Analyze the safety procedures, environmental considerations, and regulatory compliance requirements for well intervention operations

## Course Agenda:

### Day 1: Introduction to Well Intervention

- Delve into the historical context of well intervention and its evolution in oil and gas production
- Explore the regulatory framework and safety standards governing well intervention operations
- Discuss the environmental considerations associated with well intervention activities and mitigation strategies
- Analyze the applications of well intervention in various wellbore configurations, reservoir types, and production scenarios

### Day 2: Coiled Tubing Interventions

- Understand the principles and applications of coiled tubing interventions in wellbore cleanout, stimulation, and completions
- Discuss the design and operation of coiled tubing units, including coiled tubing strings, injection systems, and control panels
- Analyze techniques for coiled tubing cleanout, including jetting, milling, and chemical treatments
- Explore advanced coiled tubing interventions, such as horizontal well cleanout and matrix stimulation

### Day 3: Hydraulic Fracturing

- Grasp the fundamental principles of hydraulic fracturing and its role in enhancing well productivity in unconventional reservoirs
- Discuss the design and implementation of hydraulic fracturing operations, including fracturing fluids, proppants, and fracturing techniques
- Analyze techniques for fracture geometry modeling and post-fracture evaluation

- Explore advanced hydraulic fracturing technologies, such as multi-stage fracturing and horizontal well fracturing

#### Day 4: Plug and Abandonment (P&A) Operations

- Understand the principles and regulations governing P&A operations, ensuring wellbore integrity and environmental protection
- Discuss the design and execution of P&A operations, including wellbore isolation, cementing, and surface restoration
- Analyze techniques for P&A tool selection and operation, including bridge plugs, cement plugs, and cutting tools
- Explore advanced P&A technologies, such as coiled tubing P&A and cementless P&A

#### Day 5: Well Intervention Optimization and Case Studies

- Understand the principles of well intervention optimization and its impact on well performance and reservoir productivity
- Discuss techniques for optimizing well intervention design, operation, and post-intervention evaluation
- Analyze well intervention case studies, highlighting problem identification, design considerations, operational challenges, and optimization strategies
- Explore emerging technologies and advancements in well intervention, such as real-time monitoring, data-driven decision-making, and autonomous intervention systems

#### Who Should Attend:

- Petroleum engineers, reservoir engineers, and completions engineers responsible for well intervention planning, design, and execution
- Production engineers and field supervisors overseeing well intervention operations, wellbore remediation, and production optimization
- Well intervention equipment manufacturers and service company personnel engaged in well intervention design, implementation, and maintenance

#### Course Benefits:

- Develop a comprehensive understanding of advanced well intervention techniques, including coiled tubing interventions, hydraulic fracturing, and P&A operations
- Gain hands-on experience in well intervention planning, design, and execution through case studies and real-world scenarios
- Enhance your ability to identify wellbore problems, design effective well intervention solutions, and optimize well performance in complex reservoir environments
- Stay updated on the latest advancements in well intervention technologies and optimization methodologies
- Network with other professionals from diverse backgrounds within the oil and gas industry