DIRECTIONAL, HORIZONTAL, AND MULTILATERAL DRILLING

DRPT175

Drilling, Reservoir & Petroleum Training

TRAINIT ACADEMY

COURSE TITLE

DIRECTIONAL, HORIZONTAL, AND MULTILATERAL DRILLING

COURSE DATE/ VENUE

20th-24th Apr 26'

Munich, Germany

COURSE REFERENCE

DRPT175

COURSE DURATION

05 Days

DISCIPLINE

Drilling, Reservoir & Petroleum Training

COURSE INTRODUCTION

This course builds a firm foundation in the principles and practices of directional drilling, calculations, and planning for directional and horizontal wells. Specific problems associated with directional/horizontal drilling such as torque, drag, hole cleaning, logging, and drill string component design are included. Participants will receive instruction on planning and evaluating horizontal wells based on the objectives of the horizontal well. The basic applications and techniques for multi-lateral wells are covered in the course. Additionally, they will become familiar with the tools and techniques used in directional drilling such as survey instruments, bottomhole assemblies, motors, steerable motors, and steerable rotary systems. Participants will be able to predict wellbore path based on historical data and determine the requirements to hit the target.

COURSE OBJECTIVE

Upon successful completion of this course, the delegates will be able to:

- ✓ Make survey calculations
- ✓ Interpret TVD, polar and rectangular coordinates, and vertical section

- ✓ Interpret dogleg severity and the problems associated with dogleg severity
- ✓ Plan a two-dimensional directional well
- ✓ Plan horizontal wells based on the objectives of the well
- ✓ Determine the best multi-lateral completion for an application
- ✓ Determine declination and non-magnetic drilling collar selection
- ✓ Apply the best survey instrument for the job
- ✓ Directionally drill with rotary BHAs, jetting, whipstocks, motor, steerable motors, and rotary steerable systems
- ✓ Drill horizontally underbalanced
- ✓ Interpret torque and drag and determine what factors will affect the torque and drag
- ✓ Determine cementing requirements for directional wells

COURSE AUDIENCE

Drilling, production and operations engineers, field supervisors, tool pushers, managers, and technical support personnel

COURSE CONTENT

- Applications for directional drilling
- Directional profiles
- Extended reach wells
- Survey calculations and accuracy
- Dogleg severity calculations and problems associated with doglegs
- Planning directional and horizontal wells
- Horizontal drilling methods and applications
- Logging high angle wells
- Hole-cleaning
- Multi-laterals
- Types of survey instruments
- Tools used to deflect a wellbore
- Torque and drag calculations
- Cementing

COURSE CERTIFICATE

TRAINIT ACADEMY will award an internationally recognized certificate(s) for each delegate on completion of training.

COURSE FEES

£5,750 per Delegate. This rate includes participant's manual, Hand-Outs, lunch, coffee/tea on arrival, morning & afternoon of each day.

COURSE METHODOLOGY

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions