Maneuvering, Horizontal and Detour Drilling

Maneuvering, Horizontal, and Detour Drilling Techniques.

Introduction

The participants' comprehension of the tasks performed by directional drillers and the planning and optimisation of directional and horizontal wells will grow as a result of this Course N Carry Maneuvering, Horizontal and Detour Drilling training session. Participants will learn about the fundamental applications and methods for multilateral wells as well as how to plan and assess horizontal wells according to their goals. They will also learn how to properly plan both directional and horizontal wells. This Course N Carry training session will also explain how to forecast the wellbore route using previous data, figure out what's needed to reach the goal, and assist in resolving associated issues.

Featured in this Course N Carry training seminar are:

- How to create multilateral and horizontal well profiles and find candidate wells for horizontal drilling
- Knowing the differences between a single and double build curve
- Figuring out drag and torque
- Compile a drilling and completion programme, comprehend kick off techniques, and calculate wellbore stability mud weights.

Objectives

Following this Course N Carry training programme, attendees will be qualified to:

- Interpret TVD, dogleg severity, polar and rectangular coordinates, and related issues.
- Explain torque and drag and the variables that impact them during the drilling operation.
- Recognise the key ideas behind well-path planning.
- Suggest appropriate actions to reduce operational problems associated with horizontal and directional drilling.
- Recognise the key ideas behind the development of multilateral wells.

Training Methodology

A range of tried-and-true adult learning strategies will be employed in this Course N Carry Maneuvering, Horizontal and Detour Drilling training event to guarantee optimal absorption, retention, and understanding of the material offered. There will be a lot of

interaction and participation in the daily workshops.

Organizational impacts

By sending staff members to this specific Course N Carry training session, the company will benefit from the following:

- Reaching the ideal well design while minimising risk
- Extending and managing a healthy life
- Maintaining the integrity of the well at all times

Personal Imapct

- Acquire integrating knowledge to lessen and eventually eradicate the drilling issues
- Develop their expertise and gain the self-assurance necessary to carry out the right design and learn how to solve any kind of issue.

Who should attend?

Professionals of all stripes can benefit from this Course N Carry training programme, but the following will be very helpful:

- Completion and Drilling Engineers
- Supervisors of Completion
- Supervisors of Drilling
- Technical Support Personnel for Drilling

Course Outline

Day 1

Oriented Profiles and Additional Uses for Directional Drilling

- Basics of Directional Drilling and a Brief History
- Uses and Restrictions
- The Background and Uses of Extended Reach Drilling
- Designer wells, 3D, and 2D directional well profiles
- Tangential and Balanced Tangential Survey Calculation Methods
- Minimum Curvature, Radius of Curvature, and Average Angle
- Survey Computation Activities

Day 2

Torque, Drag, and Dogleg Calculations

- Variables that Impact Drag Friction Coefficient and Torque
- Weight of Directional Profile String
- Drill String Design with Directions
- Traditional Horizontal, High Angle, or Directional Wells
- Issues & Past Events

Day 3

Planning Extended Reach (ERD) and Directional and Horizontal Wells

- How to Choose a Directional Well Plan
- Directional Well Planning Using a Single Equation
- Scheduling ERD and Horizontal Wells

Day 4

Methods of Hole Cleaning in Horizontal and Deviated Wells

- Issues With Hole Cleaning Caused By Inclination Annular Velocity
- Regime Of Flow And Viscosity
- The rotation and reciprocation of drill pipes
- Multiple-lateral Wells Ideas and Use
- Techniques and Applications of Horizontal and Multilateral Drilling Technology
- Multilateral Well Levels
- How a Multilateral Well Is Performed
- Application of New Technologies (e.g., Thin Wall Motors, Rotary Steerable)

Day 5

Horizontal and multilateral well completion

- The Production Distinction between Vertical and Horizontal
- Production Disparities between ERD and Horizontal
- Production Difference between Multilateral and Horizontal