WELL PLACEMENT FUNDAMENTALS

MAESTRO CONSULTANTS

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TRAINING TITLE

WELL PLACEMENT FUNDAMENTALS

VENUE

Dubai, UAE

DURATION

5 Days

DATES

08 - 12 December 2019

PRICE

US$4,000 per attendee including training material/handouts, morning/afternoon coffee breaks and Lunch buffet.

TRAINING INTRODUCTION

The main purpose of high angle and horizontal wells is to maximize reservoir contact and enhance well productivity. To plan and construct such wells requires real-time collaboration between geologists (who need quality formation evaluation data), drillers (who require considerable input from the geologists), and petrophysicists (who interpret the formation evaluation data during the drilling process in order to optimize well placement). This process is generally facilitated by the well placement coordinator

TRAINING OBJECTIVES

The goal of this course will be to introduce the concept of geological well placement (geosteering) and provide the knowledge of the processes and techniques that can be used to successfully place high angle and horizontal wells, using geological and petrophysical data in real-time during drilling. Various technologies involved in directional drilling, measurement, and formation evaluation while drilling will be reviewed. The three different methods used to geologically place horizontal wells will be introduced and the applications will be discussed.

TRAINING AUDIENCE

This course is aimed toward members of multi-disciplinary asset teams of operating companies comprising mainly of drilling engineers, reservoir engineers, and geoscientists who need to make decisions regarding the applicability and benefits of

implementing a geological well placement process for drilling horizontal and high-angle wellbores.

TRAINING OUTLINE

Day 1

Geological Well Placement and Reservoir Geology

- Basic concepts and application
- Technologies, processes, and methods
- Essential elements of reservoir geology
- Structural features

The first day of this course will focus on geological well placement and reservoir geology. Participants will learn about the basic concepts and application of well placement. Technologies, processes, and three complementary methods of geological well placement will be discussed. The day will continue with a discussion over the essential elements of reservoir geology. Structural features important to well placement will be covered using practical examples.

Day 2

Directional Drilling and Measurement While Drilling (MWD)

- Direction drilling concepts
- MWD position and drilling-related data
- MWD techniques and tools

Day two will cover directional drilling and MWD. Participants will learn about direction drilling concepts, the process of planning a well, and the technologies and techniques involved in controlling the location of a wellbore. Acquiring position and drilling related data while drilling will be covered. MWD techniques and tools will also be discussed.

Day 3

Formation Evaluation and Logging While Drilling (LWD)

- LWD tools and techniques
- Formation evaluation techniques

- Practical examples

The focus of day three will be formation evaluation and LWD. LWD tools and techniques will be covered. Formation evaluation measurements including gamma-ray, porosity, resistivity, and other measurements made while drilling and their use will be discussed. Attendees will also receive practical examples that will explore the influence of LWD measurements on high angle wells.

Day 4

Applications of LWD Measurements

- Influence of LWD on high angle wells
- Practical examples
- LWD images, acquisition, and application

Application of LWD measurements will be the focus of day four. Participants will learn about the influence of LWD measurement on high angle wells. Practical examples will be given to review the behavior of LWD measurements at high angles. Finally, LWD images, their acquisition and application in the well placement process will be covered.

Day 5

Applying Well Placement Methods

- Model-compare-update method
- Incorporating real-time dip analysis
- Remote boundary detection

On the last day, participant will learn about applying well placement methods. Practical well placement using the model-compare-update approach using modeling log responses will be covered. Participants will learn how to incorporate real-time dip analysis into well placement and will get an introduction to remote boundary detection. The day will end with case studies illustrating the use of the three well placement methods.

TRAINING CERTIFICATE

MAESTRO CONSULTANTS Certificate of Completion for delegates who attend and complete the training course

METHODOLOGY

Our courses are highly interactive, typically taking a case study approach that we have found to be an effective method of fostering discussions and transferring knowledge. Participants will learn by active participation during the program through the use of individual exercises, questionnaires, team exercises, training videos and discussions of "real life" issues in their organizations.
The material has been designed to enable delegates to apply all of the material with immediate effect back in the workplace.