Essentials of Surface Well Test Design & Execution

INTRODUCTION

- Well Testing is sets of planned activities to enable us establish the properties and characteristics of a well behavior through data acquisition. Production / Injection well testing is a routine activity in the oil and gas industry and is key in effective monitoring or health-check of the state of our wells. Since this activity is routine based, we constantly loose sight of the essentials of a quality well test especially in good data acquisition practice, overtime.
- It is instructive to note, that almost all the decisions about any well performance both in the field and at the support team from office will largely depend on the robustness of the acquired data during these production well test operations.
- Some of the challenges of an effective well test campaign is that key elements for a good well test campaign are not highlighted to the team especially the field operators. This Oil & Gas Technology training seminar on Essentials of Surface Well Test Design & Execution will highlight these essentials and proffer an improvement system as well as a sustainable process for a high performing team in well test design and execution. To close the loop, a basic introduction to well test interpretation will be provided. This will ensure those acquiring the data at the field are in sync with the office support staff in terms of efficient well test execution and objectives alignment.

This training seminar will feature:

- Overview of Surface Production Well Testing
- Business Process for Well testing design and Execution – Challenges & Solutions
- Managing well testing operation in deep-water environment
- Well test data acquisition, verification and validation process
- Importance of team alignment (especially within the domain experts) for good well tests campaign

OBJECTIVES

The goal of this training seminar will focus on the following objectives:

- Understand the reasons why we carry-out well test
- Design a well test programme that satisfy the business-driver
- Make appropriate business inferences using the acquired well test data

At the end of this training seminar, you will learn to:

- Carry-out well test with clear understanding of the best practice
- Understand the business process specific to your asset
- Recognize what to watch for in a quality well test data acquisition
- Develop asset-specific execution plan
- Provide first-line well test interpretation

TRAINING METHODOLOGY

- This Essentials of Surface Well Test Design & Execution training seminar will be in a workshop format with strong emphasis on industry best practice alongside an interactive approach from all participants.

WHO SHOULD ATTEND?

This training seminar is suitable to a wide range of professionals but will greatly benefit:

- Production Operators
- Field Production Personnel and Supervisors
- Production Engineers
- Asset Managers and Senior Managers
- Asset Support Engineers
- Process Engineers
- Reservoir Engineers
- Planning Engineers
- Metering Staff
- Production Accountants

Course Outline

Overview of Well Testing

- Principles of Well Testing
- Assessing Participants Level of Awareness in Well Testing
- Basic Overview of Well Testing Processes
- Case Study of Well Testing
- Defining Asset-specific Objective of Well Testing

Well Test Business Process Embedment

- Well Test Programme Design
- Key Domain Experts for Successful Well Testing
- Standard Well Test Workflow
- Real-time Technology in Well Testing
- Defining Asset-specific Business Process for Well Testing

Surface Well Testing in Deepwater Environment

- Highlights of Deepwater Production Operations
- Well Testing in Deepwater Environment
- Challenges of Well Test in Deepwater
- Managing Challenges of Well Test in Deepwater
- Review of Experiences

Fundamentals of Well Test Interpretation

- Introduction to Well Test Interpretation
- Theories Behind Well Test Interpretation
- Common Tools Required
- Limit of Inferences and Application
- Best Practice in Well Test Interpretation

Performance Review

- Course Review
- Case Study
- Assessment of Participants