

ADVANCED WELL INTEGRITY MANAGEMENT

DRL019

COURSE OVERVIEW

Well Integrity is the fundamental to maintaining a safe working environment, to extracting maximum business value from an Asset and to upholding Company reputation. It is a prerequisite to achieving lasting business success, a continued 'license to operate' and positive and constructive relations with stakeholders and customers. It is therefore imperative to demonstrate to regulators, shareholders and other stakeholders that the integrity of wells is being effectively managed and that a system, allowing continuous improvement, is embedded in the organization, the work processes, and practices.

The course envisages that the participants will have complete knowledge of the well integrity assurance operations right from the conceptualization of well design of the accessories, running procedures and maintenance. Risk assessment of the well integrity components and evaluating failure criteria is mainly a vital point in well integrity. Therefore barrier theory, annuli specification and tubular wear detection are parts of the objectives for the attendees. Quality assurance and maintaining well in a safe condition also will be covered

COURSE OBJECTIVES

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

- Gain knowledge and understanding well integrity management fundamentals regulation, polices and standards
- Become familiar with the general terms of well integrity, well barrier, annuli, failure mode of well integrity and tubular wear
- Find out more about the problems encountered due to well integrity and how to deal with them
- Understand the principles of well integrity design and failure detection as well as risk assessment.
- Learn about the well integrity design and risk assessment of well integrity failure
- Recognize the importance of well integrity and company survive.

WHO SHOULD ATTEND

Drilling Engineers, Reservoir engineering, production engineering, operation engineering.

COURSE DURATION

5 Working Days



COURSE OUTLINES

1. Pre course evaluation

2. Well Integrity Management

- Well Integrity Management Principals
- Definition of Well Integrity
- Well Integrity Management System
- Well Integrity Data Management
- Well Integrity Skills Development
- Elements of Well Integrity Management
- Well Integrity Monitoring and Maintenance Activities
- Well Abandonment Policy

3. Well Operations - Annular Pressure Management

- Principles
- Types of annular pressures
- The Purpose of Annular Pressure Management
- Maximum Allowable Annulus Surface Pressure (MAASP)
- 'A' Annulus MAASP
- 'B' and Outer Annuli MAASP
- 'C' Annulus and MAASP
- Check List for determining MAASP
- Setting of MAWOP (Maximum Allowable Wellhead Operating Pressure)

4. Failure Types

- Failure Types
- Failure Points
- Decision Tree for Failure determinations

5. Well Integrity Assurances

- SCE Definition
- SCE Performance Standards
- PS Assurance Task (WIT, SIT)
- Well Barriers
- Leak Criteria



6. Barrier Theories

- Primary Barrier
- Secondary Barrier
- Tertiary Barrier
- Testing Barriers
- Maintaining Barriers
- Risk Assessment and Mitigation

7. Well Integrity with Well Intervention Techniques

- Wireline operation integrity
- Coiled tubing operation integrity
- HWO operation integrity

8. Well Failure Model

- Summary of the WFP
- Model Annotation
- Review Process
- Use Of the Model
- Risk Assessment and Mitigation

9. Tubular Wear

- Types Of Wellbore Wear
- Methods To Detect Tubular Wear
- Non-Intervention Protection
- Intervention Protection

10. Case History for Well Integrity Regain

- Repair of gas well here The Total Integrity are lost and Gas Leaked 50 ft away from a well

11. Post course evaluation.

