

# Essentials of Well Integrity Management System (EWIMS)

3 Days Open Course



www.stuartwright.com.sg

## INSTRUCTOR:

**Colin Stuart**

**Managing & Technical Director**

- 40 years of experience
- Fellow of Institute of Mechanical Engineers
- Specialist in well control support, risk management, integrity management and complex well design including HPHT
- NOPSEMA Expert Witness for the Montara Blowout Investigation

## COURSE TESTIMONIALS:

*"Good discussions, very knowledgeable trainer with very diverse experience & Well designed exercises"*

*Well Interventions Engineer, DK*

*"This is a great training course that provided very useful, practical knowledge & case studies. I learnt a lot about Well Integrity issues & enjoyed the course"*

*Technical Deputy GD, VN*

*"Very good overview of well integrity, useful examples from cases across the globe on how others deal with well integrity"*

*Well Integrity Engineer, DK*

*"The best course I have been on – I want MORE!! The course has given me a new enthusiasm/passion to expand my knowledge in this area"*

*Well Integrity Engineer, CN*

*"This course is insightful and very relevant to our work"*

*National Regulator, NZ*

*"This course reignited my passion for engineering"*

*Drilling Engineer, AU*

## Course Overview

**Well integrity** is of the utmost importance for personnel safety, environmental protection and risk management. As such there is an ever increasing need for raising awareness and managing risks for oil and gas operators and government bodies. This applies both to well construction and production operations.

Skill sets acquired:

- **BE AWARE** of the latest well integrity industry best practices and current international well integrity standards and guidelines.
- **GAIN** essential knowledge on how to develop an effective Well Management System
- **LEARN** how to manage production well Integrity to maximize well productivity and techniques to minimize asset risk
- **IDENTIFY AND QUANTIFY** the risks associated with different types of well integrity issues
- **DEFINE** procedures, roles and responsibilities of personnel involved in the well lifecycle
- **COMMUNICATE EFFECTIVELY AND EFFICIENTLY** with your organization on well integrity issues

## Who Should Attend?

- Technical Directors
- Asset Managers
- Petroleum Engineers
- Well Integrity Engineers
- Production Technologists
- Production Personnel (OIMs, Production Operators, Maintenance Supervisors)
- Drilling and Well Servicing Personnel (Drilling Managers, Well Engineers, Completion and Well Service Engineers, Drilling Supervisors, Rig Managers, Toolpushers, Drillers)
- Regulators
- Service Companies

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## Course Schedule

**DAY 1: Learn the definitions, principles, techniques and processes of Well Integrity Management. Understand importance of well barriers and their corresponding threats.**

### Lecture Series

- Introduction and WI risk perspectives
- Well Barriers & Rules
  - Critical Well Acceptance Criteria
  - Barrier Integrity for the lifecycle
- Well integrity threats and preventive measures
  - Casing, tubing, cementing failure and consequences

### Activity Series

Activity 1: Well Design Impact on WI

Activity 2: Barriers Minimum Acceptance Criteria

**DAY 2: Understand importance of well barriers and their corresponding threats. Understand available WI standards and best practices. Understand the management of WI during production and abandonment**

### Lecture Series

- Well integrity threats and preventive measures (**Cont.**)
  - Casing/tubing selection using corrosion standards
  - Understand cement hydration for competent cement barriers
- Industry available standards for WI management (ISO 16530-2, API RP 90 & OGUK)

### Activity Series

Activity 3: Understand WI in Terms of Operator & Regulator Perspectives

Activity 4: Procedures of Annulus Pressure Management

**DAY 3: Understand the key elements of an effective well integrity management system. Learn and be aware of latest well integrity diagnostic technology and techniques**

### Lecture Series

- WI in Production and Abandonment
  - Understand causes of sustained casing pressure
  - Understand effect of annular fluid expansion
  - Understand standards, guidelines and best practices for suspension and abandonment
- Purpose and elements of well integrity management systems
- Well Failure Model
- Wellhead Maintenance
- Importance of quality handover of well operations to different departments

### Activity Series

Activity 5: Well Abandonment

**DAY 4: Well Integrity Clinic - Client Specific Well Integrity Challenges**

**Optional Clinic** for discussion on client specific well integrity challenges.

SW Well Integrity Specialist shall participate and provide WI related consultation and recommendations based on workshop material presented by client(s).

**(Strictly by appointment only, minimum 2 hour per session, additional hourly charge shall apply)**