

# COURSE OVERVIEW DE0293 Well Integrity and Annular Pressure Evaluation

## **Course Title**

Well Integrity and Annular Pressure Evaluation

# **Course Date/Venue**

Session 1: May 04-08, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Session 2: October 13-17, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference

DE0293



Five days/3.0 CEUs/30 PDHs

# **Course Description**









This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and up-to-date overview of Well Integrity Management. The course is structured, but flexible, to provide the essential knowledge and skills required to apply sound well integrity and risk management principles during well operations.

The course uses a holistic, multi-disciplinary and integrated management approach to explain the concepts behind the process of well integrity management and its implementation throughout the lifecycle of the well. It covers the elements, scope and importance of well integrity in the oil and gas industry; the purpose of well barriers including the primary and secondary well barriers and zonal isolation and its significance; the difference of well integrity from well barriers and the significance of maintaining well integrity; the lifecycle of a well from drilling to abandonment and identifying key threats at each stage; and the major incidents and learning real-life scenarios including historical perspective on major well integrity failures, lessons learned and measures taken.











During this interactive course, participants will learn the well integrity monitoring, including tools and techniques and the importance and frequency of monitoring; the latest techniques of inspection and testing methodologies through hands-on experience with selected equipment; the risk management in well integrity including steps and tools used for effective risk assessments; the essential components of a functioning system for maintaining well integrity and maintenance, calibration and operational best practices; the annular pressure and its impact and the best practices in managing annular casing pressure; identifying and classifying anomalies and steps to manage and maintain well anomalies; recognizing key threats to well integrity and measures to identify and mitigate these threats; the essential services related to well integrity and insights into risk assessments and anomaly management; and the latest techniques in well inspection, maintenance and risk assessments including new technologies and methodologies and the future of well integrity management.

#### **Course Objectives**

Well integrity management training course can make a significant and lasting difference to your well integrity capabilities:-

- Apply and gain a comprehensive knowledge on well integrity management
- Analyse the essential components of a functioning well system
- Review major incidents and target learning to real-life scenarios
- Learn key well integrity threats and how to identify and mitigate them
- Implement key well integrity services such as well risk assessments and anomaly management
- Understand the latest well inspection, maintenance and risk assessment methodologies and techniques
- Complete a series of well integrity case studies and gain hands on experience
- Network with a variety of influential personnel
- Identify the elements, scope and importance of well integrity in the oil and gas industry
- Recognize the purpose of well barriers including the primary and secondary well barriers and zonal isolation and its significance
- Differentiate well integrity from well barriers and discuss the significance of maintaining well integrity
- Describe the lifecycle of a well from drilling to abandonment and identify key threats at each stage
- Explain major incidents and learn from real-life scenarios including historical perspective on major well integrity failures, lessons learned and measures taken
- Carryout well integrity monitoring including tools and techniques and discuss the importance and frequency of monitoring











- Apply latest techniques of inspection and testing methodologies through handson experience with selected equipment
- Carryout risk management in well integrity including steps and tools used for effective risk assessments
- Identify the essential components of a functioning system for maintaining well integrity and maintenance and apply proper calibration and operational best practices
- Discuss annular pressure and its impact and carryout best practices in managing annular casing pressure
- Identify and classify anomalies and implement steps to manage and maintain well anomalies
- Recognize key threats to well integrity and implement measures to identify and mitigate these threats
- Recognize essential services related to well integrity and explain insights into risk assessments and anomaly management
- Apply latest techniques in well inspection, maintenance and risk assessments and develop new technologies and methodologies and the future of well integrity management

#### Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes electronic version of the course materials conveniently saved in a Tablet PC.

#### **Who Should Attend**

This course provides an overview of all significant aspects and consideration of well integrity management for production engineers, completion engineers, well services engineers, well integrity management engineers, drilling/completion/intervention engineers (including drilling supervisor and drilling superintendent), production technologists and production operation personnel (including OIM, area production supervisors) and HSE personnel.

#### **Training Methodology**

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures

20% Practical Workshops & Work Presentations

30% Hands-on Practical Exercises & Case Studies

20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.















## Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

#### **Certificate Accreditations**

Certificates are accredited by the following international accreditation organizations: -



#### British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

ACCREDITED
PROVIDER

The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

#### Course Fee

**US\$ 8,000** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

#### Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.











# **Course Instructor(s)**

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. David Berryman is a Senior Drilling Operations Engineer with over 40 years of Offshore & Onshore experience within the Oil & Gas industries. He is an international expert in Drill String Intensity & Design, Drill String Optimization, Stuck Pipe Prevention, Wireline Operations & Techniques, Fishing Operations, Drilling & Petroleum Engineering, ERD Drilling, Well Service Operations, Well Test Design & Analysis, Well

Composite, Construction Integrity, Completion & Production Optimization, Well Completion, Well Integrity Management, Well Bore Analysis, Well Control & Blowout Prevention, Well Bore Integrity, High Pressure High Temperature (HPHT), Pulling Out of Hole (POOH), PWD Interpretation, Surface Logging, Drilling Optimization, Well Planning, Horizontal & Directional Drilling, Well Hole Cleaning, Mud-Logging, Downhole Vibration, Extended Reach Drilling, Torque & Drag Modelling, Pore Pressure Evaluation, Pressure Transient Testing & Reservoir Performance Evaluation, Review Process Data & Fluid Properties, Conductor Line Pressure Surveys and Chemical Tubing Cutting. He is also well-versed in Bow-Tie HSE Risk Management System, Hydraulics Management, Data Interpretation, Petroleum Data Management, Hydraulic Calculations, Safety Management System, Rig Operations and various drilling softwares including Well Plan and Compass (Landmark); DFG, Planit, Insite Anywhere (Halliburton); Discovery Well, Discovery Web (Kongsberg); Digital Well File (Petrolink) and Well View (Peloton).

Throughout his long career life, Mr. Berryman has worked for many international companies in the **Gulf of Mexico**, **Europe**, **Africa**, **Central Asia** (Kazakhstan) the **Middle East**, **Far East** and the **North Sea** such as Marathon Oil UK, Talisman-Sinopec, BG Group, Sperry Drilling, Stavanger, BP, Hycalog, Camtest/Camco and Gearheart. He had occupied various key positions as the **Drilling Manager**, **Drilling Engineer Supervisor**, **Drilling Supervisor**, **Drilling Operations Engineer**, **Applied Drilling Technology Engineer**, **Data Engineer**, **Mud Logger**, **Sales & Service Engineer** and **Downhole Gauge Engineer** and **Senior Instructor/Trainer**. During this period, he has led the development of a **software solution** for real-time monitoring of drag whilst tripping in extended reach wells.

Mr. Berryman has a **Bachelor's** degree in **Mining** from the **University of Leeds**, **UK**. Further, he has acquired **certifications** from the **IWCF** for **Combined Surface** and **Subsea Blow-Out Preventer Stack**, the **BOSIET**, the **UKCS** for Offshore Working and the **Prince2 Foundation** for **Project Management**. Further, he is a **Certified Instructor/Trainer**, a **Drill String Design Proctor** by **Fearnley**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management** (**ILM**) and has delivered and presented innumerable training courses and workshops worldwide.













# **Course Program**

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

Day I	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Introduction to Well Integrity
	The Importance of Well Integrity • Course Objectives & Expected Outcomes
0930 - 0945	Break
0945 - 1100	Well Integrity Management Elements
	Definition & Scope • Importance in the Oil & Gas Industry
	Well Barriers
1100 – 1230	Definition & Purpose • Primary & Secondary Well Barriers • Zonal
	Isolation & Its Significance
1230 - 1245	Break
	Well Integrity
1245 - 1420	Definition & Differentiation from Well Barriers • The Significance of
	Maintaining Well Integrity
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2

Day Z	
	Threats Lifecycle Well Integrity
0730 - 0830	The Lifecycle of a Well from Drilling to Abandonment • Identifying Key
	Threats at each Stage
0930 - 0945	Break
	Major Incidents & Learning from Real-Life Scenarios
0945 – 1100	Historical Perspective on Major Well Integrity Failures • Lessons Learned &
	Measures Taken
1100 – 1215	Well Integrity Monitoring
	Tools & Techniques • Importance & Frequency of Monitoring
1215 - 1230	Break
	Inspection & Testing Methodologies
1230 - 1420	Latest Techniques & Methodologies • Hands-on Experience with Select
	Equipment
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3

0730 - 0830	Well Integrity Risk Assessments Introduction to Risk Management in Well Integrity • Steps & Tools Used for Effective Risk Assessments
0930 - 0945	Break
0945 - 1100	Essential Components of a Functioning System Components Vital for Maintaining Well Integrity











1100 – 1215	Essential Components of a Functioning System (cont'd) Maintenance, Calibration & Operational Best Practices
1215 - 1230	Break
1230 – 1420	Annular Casing Pressure Management Understanding Annular Pressure & Its Impact Managing Annular Casing Pressure  Best Practices in
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

<u></u>	
0730 - 0830	Network with Influential Personnel Interactive Session with Industry Experts • Knowledge Sharing and Q&A
0930 - 0945	Break
0945 - 1100	Well Anomaly Management & Maintenance Identifying & Classifying Anomalies
1100 – 1215	Well Anomaly Management & Maintenance (cont'd) Steps to Manage & Maintain Well Anomalies
1215 – 1230	Break
1230 – 1420	Key Well Integrity Threats Recognizing Key Threats to Well Integrity • Measures to Identify & Mitigate These Threats
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5

Day 5	
0730 - 0830	Key Well Integrity Services
	An Overview of Essential Services Related to Well Integrity • Insights into
	Risk Assessments & Anomaly Management
0930 - 0945	Break
0045 1100	Latest Techniques in Well Inspection, Maintenance & Risk
	Assessments
0945 – 1100	Introduction to New Technologies & Methodologies • The Future of Well
	Integrity Management
1100 – 1215	Well Integrity Case Studies
	Analyzing Real-Life Scenarios • Hands-on Experience in Problem-Solving &
	Decision-Making
1215 - 1230	Break
1230 - 1345	Concluding Session & Feedback
	Recap of the Course Material • Feedback & Open Discussion for Future
	Improvements
1345 - 1400	Course Conclusion
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course









# **Practical Sessions**

This practical and highly-interactive course includes real-life case studies and exercises: -



# **Course Coordinator**

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org



