COURSE OVERVIEW DE0972
Well Integrity Management

Course Title
Well Integrity Management

Course Date/Venue
Session 1: June 15-19, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha, Qatar
Session 2: October 26-30, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha, Qatar

Course Reference
DE0972

Course Duration/Credits
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 up-to-date overview of well integrity management. It covers the well integrity for the operational phase and well integrity life cycle; the barrier standards and applications, barrier verification and subsequent monitoring; the various examples of well integrity management systems; the completion design for sustained well integrity and the function of each component.

Further, the course will also discuss the component (barrier) fails including the reliability and operability concerns; the stress and loads on completion strings and manual calculation; the external and internal influences like corrosion on the well integrity envelope and how to design for them; the change of well operating envelope; the well failure models and risk assessments, well integrity verification, confirmation of barrier envelope and the various types of well integrity testing; and the issues associated with sustained casing pressure and/or MAASP excursions.

During this interactive course, participants will learn to conduct the well/field investigations and changes to well operating envelope; repair and reinstate well barrier envelope; employ rig interventions, planning for workovers, remediations on wells with well integrity issues including multiple barrier failures; recognize the rigless remediation options covering sealants, straddles, insert SSSV's; apply management of change, extension of a well life and well suspension (temporary or permanent); and identify the criteria for extending or changing a well status as well as well abandonment, current technologies and methods.

Course Objectives

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

- Apply and gain an in-depth knowledge on well integrity management
- Discuss the well integrity for the operational phase and well integrity life cycle
- Recognize barrier standards and applications, barrier verification and subsequent monitoring
- Give various examples of well integrity management systems
- Apply completion design for sustained well integrity and identify the function of each component
- Explain what happen when a component (barrier) fails including the reliability and operability concerns
- Describe stress and loads on completion strings and apply manual calculation
- Identify external and internal influences like corrosion on the well integrity envelope and how to design for them
- Discuss change of well operating envelope and illustrate well failure models and risk assessments
- Carryout well integrity verification, confirmation of barrier envelope and the various types of well integrity testing
- Identify the issues associated with sustained casing pressure and/or MAASP excursions
- Conduct well/field investigations and changes to well operating envelope
- Repair and reinstate well barrier envelope as well as employ rig interventions, planning for workovers, remediations on wells with well integrity issues including multiple barrier failures
- Recognize the rigless remediation options covering sealants, straddles, insert SSSV's
- Apply management of change, extension of a well life and well suspension (temporary or permanent)
- Identify the criteria for extending or changing a well status as well as well abandonment, current technologies and methods

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 Fee

US$ 8,500 per Delegate. 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 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:

- 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.

- 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.

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 **35 years** of **Offshore** & **Onshore** experience within the **Oil & Gas** industries. He is an international expert in **Stuck Pipe Prevention**, **Drilling & Petroleum Engineering**, **ERD Drilling**, **Well Service Operations**, **Well Test Design & Analysis**, **Well Composite**, **Well Construction**, **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**, **Drill String Intensity & Design**, Well **Hole Cleaning**, **Mud-Logging**, **Downhole Vibration**, **Extended Reach Drilling**, **Torque** & **Drag Modelling**, **Pore Pressure Evaluation**, **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 and 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**. 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** 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

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Well Integrity Standards*** *ISO 16530-2 – Well Integrity for the Operational Phase ● ISO 16530-1 – Well Integrity Life Cycle*
0930 – 0945	*Break*
0945 – 1100	***Well Integrity Standards (cont'd)*** *NORS OK D10 rev 4 ●Understanding Barriers Standards & Applications*
1100 – 1230	***Well Integrity Standards (cont'd)*** *Barriers Verification and Subsequent Monitoring ● Examples of Well Integrity Management Systems*
1230 – 1245	*Break*
1245 – 1420	***Well Integrity Standards (cont'd)*** *Real Life Examples are Used to Illustrate the Subjects*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Completion Design*** *Completion Design for Sustained Well Integrity ● What is the Function of Each Component (Why it is Run? Why is it Essential? Is it Critical for Safety?)*
0930 – 0945	*Break*
0945 – 1100	***Completion Design (cont'd)*** *What Happens When a Component (Barrier) Fails ● Reliability and Operating Concerns*
1100 – 1230	***Completion Design (cont'd)*** *Stress and Loads on Completion Strings. Manual Calculation is Used to Better Understand the Mater, as Opposed to Learning How to Use a Software Program to Calculate Stress and Loads ● External and Internal Influences, like Corrosion, on the Well Integrity Envelope and How to Design for them.*
1230 - 1245	*Break*
1245 – 1420	***Completion Design (cont'd)*** *Change of Well Operating Envelope (Product to Injector; Introduction of Artificial Lift; Stimulation, Fracturing, Perforating during the full Well Life Cycle)*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Identification of Well Integrity Issues*** *Well Failure Models & Risk Assessments ● Well Integrity Verification, Confirmation of Barrier Envelope*
0930 – 0945	*Break*
0945 – 1100	***Identification of Well Integrity Issues (cont'd)*** *Understand Various types of Well Integrity Testing ● Understand the Issues Associated with Sustained Casing Pressure and /or MAASP Excursions*
1100 – 1230	***Identification of Well Integrity Issues (cont'd)*** *Conduct Well/Field Investigations and Changes to Well Operating Envelop ● Examples of WI Identification Tools*
1230 – 1245	*Break*
1245 – 1420	***Identification of Well Integrity Issues (cont'd)*** *Opportunity to Discuss Internal Examples of Failures*
1420 - 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	***Well Integrity Solutions*** *Repairing and Reinstating the Well Barrier Envelope*
0930 – 0945	*Break*
0945 – 1100	***Well Integrity Solutions (cont'd)*** *Rig Interventions, Planning for Workovers, Remediation's on Wells with Well Integrity Issues Including Multiple Barrier Failures*
1100 – 1230	***Well Integrity Solutions (cont'd)*** *Rigless Remediations Options – Sealants, Straddles, Insert SSSV's*
1230 – 1245	*Break*
1245 – 1420	***Well Integrity Solutions (cont'd)*** *Management of Change – Derogations – Deviations – Produce until Failure of Well.*
1420 - 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***End of Well Life Cycle*** *Extension of a Well Life ● Well Suspension (Temporary or Permanent)*
0930 – 0945	*Break*
0945 – 1100	***End of Well Life Cycle (cont'd)*** *Criteria for Extending or Changing a Well Status ● Well Abandonment, Current Technologies & Methods*
1100 – 1230	***End of Well Life Cycle (cont'd)*** *Case Studies of Above both Positive & Negative Results*
1230 – 1245	*Break*

1245 - 1345	***End of Well Life Cycle (cont'd)*** *Closing the Loop, Effective Lessons Learned, AAR's as well as Understanding the Need for Change as Opposed to the Reluctance of Change*
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

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