COURSE OVERVIEW DE0970
Trouble-Free Drilling (Stuck Pipe Prevention)

Course Title
Trouble-Free Drilling (Stuck Pipe Prevention)

Course Date/Venue
Session 1: February 09-13, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha, Qatar
Session 2: August 10-14 2025/ Meeting Plus 8, City Centre Rotana Doha Hotel, Doha, Qatar

Course Reference
DE0970

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.

The single most frequent and expensive unscheduled event while drilling is stuck pipe. Preventing stuck pipe incidents can save thousands of dollars in non-productive time. If you attend this course, you will learn all of the twenty-seven (27) causes of stuck pipe, what causes each, how to identify them, what immediate action can be taken, what to do for most efficient recovery, and most importantly how to prevent the sticking in the first place.

During the period of this course, participants will be able to learn:-

- Causes and mechanisms of stuck pipe
- Warning signs of impending problems
- How to prevent stuck pipe
- Theory and proper use of jars
- Freeing techniques
- A working knowledge of all the mechanisms which result in pipe becoming stuck.
- Complete diagnostic methods for identifying a specific mechanism
- The methods and procedures available to minimize or eliminate a potential sticking problem when it is encountered

- The knowledge to plan the most effective and least expensive procedure to recover from sticking that does occur
- How to plan a well and then implement that plan to prevent pipe sticking

The course is presented with class discussion and participation is required. Case histories provide practical examples of the problems, recovery methods, and preventive means being discussed. The building of a team concept with maximum coordination and communication capabilities is stressed.

With emphasis on prevention of stuck pipe, the team concept is used throughout the course, explaining the contribution and value of every crewmember in the goal of keeping the pipe free. With your data, courses can be customized, and past stuck pipe incidents can be analyzed to determine what was done correctly and where techniques can be improved.

Course Objectives

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

- Apply the latest techniques and procedures in stuck pipe prevention
- Cope with new drilling and updated technologies
- Avoid stuck pipes and improve hole cleaning
- Explain the best methods for avoiding stuck pipe problems while drilling operations and the techniques that are used for pipe releasing in case of occurrence of this problem
- Plan well drilling operations taking into account risks factors of stuck pipe and their inclusion in the well program
- Recognize the indications and signals both downhole and on surface that may lead to a stuck pipe incident
- Describe with the various indicators and causes of stuck pipe during all pipe handling operations
- Express the importance of evaluating the symptoms, accurate reporting and the teamwork required to implement the preventative measures

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 considerations of stuck pipe prevention for drilling operations section leaders, drilling engineering supervisors and well engineers.

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:

Dr. Chris Kapetan (**Christos Kapetanios**), PhD, MSc, BSc, is a **Senior Drilling & Process Engineer** with over **40 years** of international experience within the **onshore** and **offshore oil and gas** industry. His wide experience covers **Asset Operational Integrity** for Operations, **Process Plant** Operations, Control & Troubleshooting, **Plant Shutdown** System & **Flare** Systems, **Heat Exchangers & Fired Heaters** Operation & Troubleshooting, **Gas Conditioning**, Treatment & Processing Technology, **Production Operations** in the Oil & Gas Fields & **Surface Facilities**, **LNG Process**, **Applied Process** Engineering Elements, **Production Control** Systems, Well Commissioning & Crude Oil Specifications, **Hydrogenation** & **Gasification** Technology, **Physical** & **Chemical** Solvents, Sulfide Stress Cracking (**SSC**), Hydrogen Induced Cracking (**HIC**), **Corrosion**, Steels & Alloys, **Fertilizer Manufacturing** Process Technology, **Fertilizer Storage** Management (Ammonia & Urea), **Process Calculation Methods**, **Directional Planning**, **Completion Design**, **Directional Surveying**, **Drilling Fluids**, **Matrix Acidizing**, **Hydraulic Fracturing**, **Well Completion** Design & Operation, **Cased Hole Formation Evaluation**, **Cased Hole Logs**, **Production** Management, **Drilling Operations**, **Directional Drilling**, **Gas Lift** Operations, **Petroleum Business**, **Petroleum Economics**, **Gas Lift Valve** Changing & Installation, **Horizontal & Multilateral Wells**, **Well Stimulation** & **Control** and **Workover Planning**, **Completions** & **Workover**, **Rig** Sizing, **Hole Cleaning** & **Logging**, **Well Completion**, **Servicing** & **Work-Over** Operations, Practical **Reservoir** Engineering, **X-mas Tree & Wellhead** Operations, Maintenance & Testing, **Advanced Petrophysics/Interpretation** of **Well Composite**, **Construction Integrity** & **Completion**, **Coiled Tubing Technology**, **Corrosion Control**, **Wireline & Coil Tubing**, **Pipeline Pigging**, **Corrosion Monitoring**, **Cathodic** Protection, Root Cause Analysis (**RCA**), Root Cause Failure Analysis (**RCFA**), **Production Safety** and **Delusion of Asphalt**. Currently, he is the **Operations Manager** at **GEOTECH** and an independent **Drilling Operations Consultant** of various engineering services providers to the international clients as he offers his expertise in many areas of the **drilling discipline** and is well **recognized & respected** for his process and procedural expertise as well as ongoing participation, interest and experience in continuing to promote technology to producers around the world. Currently, he is the **Operations Consultant & the Technical Advisor** at **GEOTECH** and an independent **Drilling Operations Consultant** of various engineering services providers to the international clients as he offers his expertise in many areas of the **drilling & petroleum** discipline and is well **recognized & respected** for his process and procedural expertise as well as ongoing participation, interest and experience continuing to promote technology to producers around the world.

Throughout his long career life, Dr. Chris has worked for many international companies and has spent several years **managing** technically **complex wellbore interventions** in both **drilling** & **servicing**. He is a **well-regarded** for his **process** and **procedural expertise**. Further, he was the **Operations Manager** at **ETP Crude Oil Pipeline Services** where he was fully responsible for optimum operations of crude oil pipeline, **workover** and **directional drilling**, **drilling rigs** and equipment, drilling of various geothermal deep wells and **exploration wells**. Dr. Chris was the **Drilling** & **Workover Manager** & **Superintendent** for **Kavala Oil** wherein he was responsible for supervision of **drilling** operations and **offshore exploration**, quality control of performance of **rigs**, **coiled tubing**, **crude oil** transportation via pipeline and abandonment of **well** as per the API requirements. He had occupied various key positions as the **Drilling Operations Consultant**, **Site Manager**, **Branch Manager**, **Senior Drilling** & **Workover Manager** & **Engineer**, **Drilling** & **Workover Engineer**, **Process Engineer**, **Operations Consultant** and **Technical Advisor** in several petroleum companies responsible mainly on an **offshore** sour oil field (under water flood and gas lift) and a gas field. Further, Dr. Chris has been a **Professor** of the **Oil Technology College**.

Dr. Chris has **PhD** in **Reservoir Engineering** and a **Master's** degree in **Drilling & Production Engineering** from the **Petrol-Gaze Din Ploiesti University**. Further, he is a **Certified Surfaced BOP Stack Supervisor** of **IWCF**, a **Certified Instructor/Trainer**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management** (**ILM**) and has conducted numerous short courses, seminars and workshops and has published several technical books on **Production Logging**, **Safety Drilling Rigs** and **Oil Reservoir**.

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.

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 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	***Introduction to the Stuck Pipe Problem & Prevention***
0930 – 0945	*Break*
0945 – 1100	***Explanation of the Mechanisms of Stuck Pipe*** *Differential Sticking • Hole Pack-off/Bridge • Wellbore Geometry*
1100 – 1230	***Mechanical-Related Causes***
1230 – 1245	*Break*
1245 – 1420	***Formation-Related Causes***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Warning Signals of Stuck Pipe***
0930 – 0945	*Break*
0945 – 1100	***Hole Cleaning*** *Straight-Hole • High-Angle Hole • Better Hole Cleaning • Enhancing Hole & Shake Stability*
1100 – 1230	***Impact of the Drilling Team/Roles*** *Driller • Directional Driller • Shakerman/ Derrickman/ Floorhand • Mud Logger*
1230 – 1245	*Break*
1245 – 1420	***Impact of the Drilling Team/Roles (cont'd)*** *Mud Engineer • Drilling Engineer • Drilling Supervisor • Contract Supervisor*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Preventive Drilling Practices*** *Top Drives • Good Drilling Practices*
0930 – 0945	*Break*
0945 – 1100	***Preventive Drilling Practices (cont'd)*** *Making Connections*
1100 – 1230	***Preventive Drilling Practices (cont'd)*** *Good Tripping Practices*
1230 – 1245	*Break*
1245 – 1420	***Preventive Drilling Practices (cont'd)*** *Trends*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

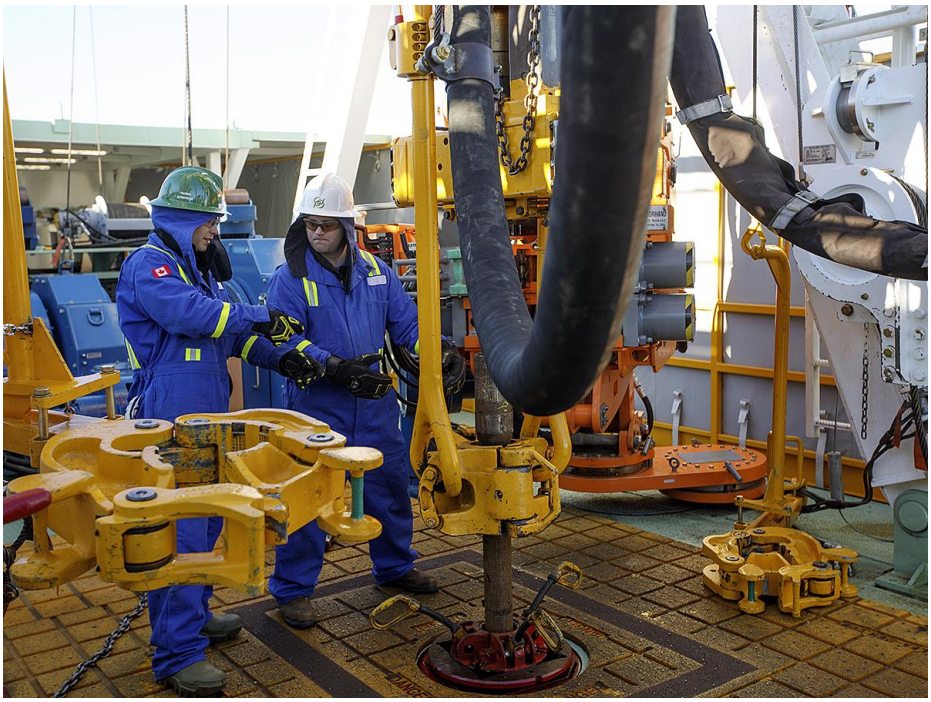
0730 – 0930	***Basic "Jar" Theory*** *Hydraulic vs. Mechanical Jars • Pump Open Forces*
0930 – 0945	*Break*
0945 – 1100	***Basic "Jar" Theory (cont'd)*** *Jar Placement Techniques • Jar Accelerators*
1100 – 1230	***Basic "Jar" Theory (cont'd)*** *Running Jar in Tension vs. Compression*
1230 – 1245	*Break*
1245 – 1420	***Basic "Jar" Theory (cont'd)*** *Jar Vendor*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	***Freeing Procedures Overview*** *Pre-recorded Data*
0930 – 0945	*Break*
0945 – 1100	***Freeing Procedures Overview (cont'd)*** *Stretch Readings*
1100 -1230	***Freeing Procedures Overview (cont'd)*** *Maximum Overpull Calculations*
1230 – 1245	*Break*
1245 – 1345	***Freeing Procedures Overview (cont'd)*** *Methods for Three Mechanisms*
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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