

**COURSE OVERVIEW DE0750**

**Wireline Operations & Techniques**

**Course Title**

Wireline Operations & Techniques

**Course Date/Venue**

April 06-10, 2025/Al Buraimi Meeting Room, Sheraton Oman Hotel, Muscat, Oman

**Course Reference**

DE0750

**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.***



Many of today's most vital oilfield operations depend directly on the use of wireline. Wireline is particularly important during completion and production. Field operators can run anything from a basic downhole directional survey to the most delicate gamma ray formation log on wireline. They can fire perforating charges at precisely determined downhole locations, back off a string of stuck pipe, retrieve a wrench, or manipulate complex subsurface well pressure and flow controls.



Wireline operations can be done inside the tubing without killing the well, by means of a lubricator connected to the wellhead. Operations can be carried out under pressure and even without stopping production. Further, wireline operations are performed quickly due to the use of lightweight, highly mobile equipment and run by two or three specialized operators. As a result, wireline operations can be readily implemented at relatively low cost.

Wireline technology has been modernized steadily, along with significant improvements in wireline capability. During the past decades, Wireline Formation Testing has emerged as one of the critical formation evaluation means in the upstream hydrocarbon exploration activities. The wireline formation test is a quick, inexpensive means of measuring pressures at precise depths in the wellbore. Wireline tests are performed mostly in open hole using a cable-operated formation tester and sampling tool anchored at depth while reservoir communication is established through one or more pressure and sampling probes.

This comprehensive and up-to-date course covers the development of wireline operations and techniques. It describes wireline equipment in details and discusses the various operations performed using such equipment including diagnostic, troubleshooting, completion and production maintenance. Further, the course covers the openhole wireline testing, the wireline sampling techniques and the drawdown & buildup mobilities from wireline testers. The course ends up with a useful demonstration of the various wireline test interpretation software.

### Course Objectives

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

- Apply an in-depth knowledge in wireline equipment, techniques and operations during well completion, servicing, workover and production
- Identify and handle the various wireline equipment including reel & power system, instrumentation & testing devices, the tool string and the pressure containment
- Perform wireline diagnostic operations including downhole conditions, vertical drilling, formation logging and sidewall coring
- Carryout wireline troubleshooting operations such as correcting downhole problems, freeing stuck pipe, repairing & conditioning tubing, controlling sand & paraffin and fishing
- Practice wireline completion and production maintenance operations such as well completion, perforating, swabbing and pressure/flow control
- Discuss wireline formation testing, wireline sampling techniques, drawdown & buildup mobilities and wireline test interpretation software

### 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 covers systematic techniques and methodologies on wireline operations for new or limited-experienced petroleum, geological, petrophysical and reservoir engineers. Further, the course is important for other technical staff such as foremen, technicians and operators who are in charge of wireline operations and for engineers and technical personnel who have frequent interfaces with wireline operations.

**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: -

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**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.

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**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.

**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**, 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**.

**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.

**Accommodation**

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

**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 be always met:

**Day 1: Sunday, 06<sup>th</sup> of April 2025**

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Overview of Well Bore Completion Operations</b> Checking and Conditioning the Borehole • Remedial Cementing • Re-establishing Pay Zone-Borehole Communication • Well Testing • Treating the Pay Zone • Equipment Installation • Putting the Well on Stream • Assessing Performance • Moving the Rig
0930 – 0945	Break
0945 – 1100	<b>Overview of Well Servicing &amp; Workover Operations</b> Measurement Operations • Maintenance Operations • Workover Operations
1100 – 1230	<b>Introduction to Wireline Technology</b> Development of Nonconductive Wireline • Development of Conductive Wireline • Wireline Sizes • Wireline and Wire Rope • Wireline Services
1230 – 1245	Break
1245 – 1420	<b>Wireline Equipment</b> Initial Considerations • Reel and Power Systems
1420 – 1430	<b>Recap</b> 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: Monday, 07<sup>th</sup> of April 2025**

0730 – 0930	<b>Wireline Equipment(cont'd)</b> Instrumentation & Testing Devices
0930 – 0945	Break



0945 – 1130	<b>Wireline Equipment(cont'd)</b> The Tool String • Pressure Containment Break
1130 – 1230	<b>Wireline Equipment (cont'd)</b> Care and Handling of Wireline Equipment
1230 – 1245	Break
1245 – 1420	<b>Wireline Diagnostic Operations</b> Determining Downhole Conditions • Controlled Vertical Drilling
1420 – 1430	<b>Recap</b> 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

**Day3: Tuesday, 08<sup>th</sup> of April 2025**

0730 – 0930	<b>Wireline Diagnostic Operations (cont'd)</b> Formation Logging • Sidewall Coring
0930 – 0945	Break
0945 – 1130	<b>Wireline Diagnostic Operations (cont'd)</b> Checking Tubing or Casing • Running Temperature and Pressure Surveys
1130 – 1230	<b>Wireline Troubleshooting Operations</b> Correcting Downhole Problems • Freeing Stuck Pipe
1230 – 1245	Break
1245 – 1420	<b>Wireline Troubleshooting Operations (cont'd)</b> Repairing and Conditioning Tubing • Controlling Sand and Paraffin • Fishing
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day Three

**Day 4: Wednesday, 09<sup>th</sup> of April 2025**

0730 – 0930	<b>Wireline Completion and Production Maintenance Operations</b> Well Completion • Perforating
0930 – 0945	Break
0945 – 1130	<b>Wireline Completion and Production Maintenance Operations (cont'd)</b> Swabbing • Pressure and Flow Control
1130 – 1230	<b>Openhole Wireline Formation Testing</b> Pressure Profiling • Permeability Anisotropy Profiling
1230 – 1245	Break
1245 – 1420	<b>Openhole Wireline Formation Testing (cont'd)</b> Miniproduction Tests • Representative Fluid Sampling
1420 – 1430	<b>Recap</b> 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: Thursday, 10<sup>th</sup> of April 2025**

0730 – 0930	<b>Wireline Sampling Techniques</b> <i>Dual-packer Fluid Sampling • Pumpout Module Performance • Controlled Drawdown Sampling • Low-shock Sampling • Charged-chamber Sampling • Guard Probe Sampling</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<b>Drawdown Mobility from Wireline testers</b> <i>Drawdown Mobility • Radius of Investigation for Drawdown • Drawdown Permeability • Buildup Mobility • Interpretation of Drawdown Tests</i>
1030 – 1230	<b>Buildup Mobilities from Wireline Testers</b> <i>Spherical and Radial Derivatives • Buildup Mobilities • Radius of Investigation of Buildup • Interpretation of Buildup Tests</i>
1230 – 1245	<i>Break</i>
1245 – 1345	<b>Wireline Test Interpretation Software</b>
1345 – 1400	<b>Course Conclusion</b> <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course</i>
1400 – 1415	<b>POST-TEST</b>
1415 – 1430	<i>Presentation of Course of Certificates</i>
1430	<i>Lunch &amp; End of Course</i>

**Practical Sessions**

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



**Course Coordinator**

Mari Nakintu, Tel: +971 2 30 91 714, Email: [mari1@haward.org](mailto:mari1@haward.org)