

COURSE OVERVIEW DE0750-4D

Wireline Operations & Techniques

Course Title

Wireline Operations & Techniques

Course Date/Venue

November 11-14, 2024/Club B Meeting Room,
Ramada Plaza by Wyndham Istanbul City Center,
Istanbul, Turkey

Course Reference

DE0750-4D

Course Duration/Credits

Four days/2.4 CEUs/24 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.

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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

Course Fee

US\$ 7,250 per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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.

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:-

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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 **2.4 CEUs** (Continuing Education Units) or **24 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.

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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.

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. Mohamed El-Sayed is a **Senior Petroleum & Production Engineer** and **Well Service Consultant** with over **35 years** of extensive experience in **Drilling/Reservoir/Petroleum Engineering** and **Well Service Operations** within the **Oil and Gas** industries. He is a **recognized authority** in **“Hands On” Service** and **Drilling Operations** and **Well Completions (Riggless Operations)**. Further, his expertise covers the areas of **wellhead operations, Wellbore Interventions, Well Testing, Wire/Slickline Equipment and Operations, Coil Tubing, Water Flooding, Electric Submersible Pumps (ESPs), SMART well completion technology, X-mas trees, well intervention, well control, wireline, slickline & fishing operations, well completion & workover, coiled tubing technology and pipeline pigging**. He is as well **recognized & respected** for his process, procedural expertise, modus operandi as well. He is currently working as the **Well Intervention Division Manager** of **GUPCO**.

Mr. Mohamed has handled various positions during the past three decades in his career. He worked in **production, drilling, workover, complex wellbore interventions** in both **drilling & servicing** and **wellhead operations** where he served as an important engineer and manager in these areas. He has indeed exhibited sheer diligence in his field. He was in-charge of setting **subsurface safety valves** and in **troubleshooting and testing all types of valves tubing and wireline retrievable SSSV** for renowned companies such as **Halliburton, Schlumberger, Baker Hughes** and **Weatherford**. He has also worked and evaluated the advanced measuring system in one of PDO's oil fields thru Halliburton. Further, he has very good experience in the set-up and commissioning, maintenance & troubleshooting of wireline equipment. As **Wellhead and Wireline Manager**, he was primarily responsible of planning the wellhead and wireline daily activities and spearheaded the solving of problems encountered during daily operations. This also covered the **installation, operation, troubleshooting and testing of the wellheads** and the supervision of **electric line operations** and **coiled tubing jobs**.

Mr. Mohamed has participated in various hydrocarbon and production engineering conferences and **presented papers** on **multilateral wells** for the **Society of Petroleum Engineers (SPE)** and has taken specialized trainings on production technology, safety management, gas lift design, wireline and **wellhead operations** with **Schlumberger, Halliburton** and **AMA** in the **USA**.

Mr. Mohamed has a **Bachelor's** degree in **Petroleum Engineering** and is also a well-regarded member of the Society of Petroleum Engineers (**SPE**). Further, he is a **Certified Instructor/Trainer**.

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: Monday, 11th November 2024

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	PRE-TEST
0830 – 0930	Overview of Well Bore Completion Operations Checking and Conditioning the Borehole • Remedial Cementing • Re-establishing Pay Zone-Borehole Communication • Well Testing
0930 – 0945	Break
0945 – 1100	Overview of Well Bore Completion Operations (cont'd) Treating the Pay Zone • Equipment Installation • Putting the Well on Stream • Assessing Performance • Moving the Rig
1100 – 1230	Overview of Well Servicing & Workover Operations Measurement Operations • Maintenance Operations • Workover Operations
1230 – 1245	Break
1245 – 1420	Introduction to Wireline Technology Development of Nonconductive Wireline • Development of Conductive Wireline • Wireline Sizes • Wireline and Wire Rope • Wireline Services
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: Tuesday, 12th November 2024

0730 – 0930	Wireline Equipment Initial Considerations • Reel and Power Systems • Instrumentation & Testing Devices • The Tool String • Pressure Containment Break • Care and Handling of Wireline Equipment
0930 – 0945	Break
0945 – 1130	Wireline Diagnostic Operations Determining Downhole Conditions • Controlled Vertical Drilling • Formation Logging • Sidewall Coring • Checking Tubing or Casing • Running Temperature and Pressure Surveys
1130 – 1230	Wireline Troubleshooting Operations Correcting Downhole Problems • Freeing Stuck Pipe
1230 – 1245	Break
1245 – 1420	Wireline Troubleshooting Operations (cont'd) Repairing and Conditioning Tubing • Controlling Sand and Paraffin • Fishing
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

Day3: Wednesday, 13th November 2024

0730 – 0930	Wireline Completion and Production Maintenance Operations <i>Well Completion • Perforating • Swabbing • Pressure and Flow Control</i>
0930 – 0945	<i>Break</i>
0945 – 1130	Openhole Wireline Formation Testing <i>Pressure Profiling • Permeability Anisotropy Profiling • Miniproduction Tests • Representative Fluid Sampling</i>
1130 – 1230	Wireline Sampling Techniques <i>Dual-packer Fluid Sampling • Pumpout Module Performance • Controlled Drawdown Sampling</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Wireline Sampling Techniques (cont'd) <i>Low-shock Sampling • Charged-chamber Sampling • Guard Probe Sampling</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Three</i>

Day 4: Thursday, 14th November 2024

0730 – 0930	Drawdown Mobility from Wireline Testers <i>Drawdown Mobility • Radius of Investigation for Drawdown • Drawdown Permeability</i>
0930 – 0945	<i>Break</i>
0945 – 1130	Drawdown Mobility from Wireline Testers (cont'd) <i>Buildup Mobility • Interpretation of Drawdown Tests</i>
1130 – 1230	Buildup Mobilities from Wireline Testers <i>Spherical and Radial Derivatives • Buildup Mobilities • Radius of Investigation of Buildup • Interpretation of Buildup Tests</i>
1230 – 1245	<i>Break</i>
1245 – 1345	Wireline Test Interpretation Software
1345 – 1400	Course Conclusion <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course</i>
1400 – 1415	POST-TEST
1415 – 1430	<i>Presentation of Course of Certificates</i>
1430	<i>Lunch & End of Course</i>

Practical Sessions

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



Course Coordinator

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