

COURSE OVERVIEW DE0822

Troubleshooting - Well Testing Artificial lift

Course Title

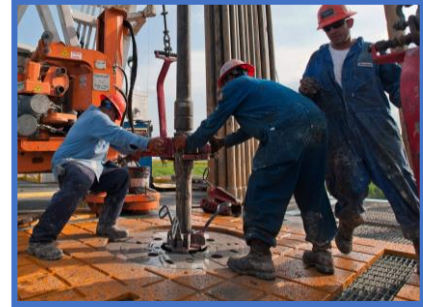
Troubleshooting - Well Testing Artificial lift

Course Reference

DE0822

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Date/Venue

Session(s)	Date	Venue
1	April 21-25, 2024	Kizkulesi, Crown Plaza Istanbul Asia Hotels & Convention Center, Istanbul, Turkey
2	July 28 – August 01, 2024	Oryx Meeting Room, Doubletree By Hilton Doha-Al Sadd, Doha, Qatar
3	February 09-13, 2025	The KooH Al Noor Meeting Room, The H Dubai Hotel, Sheikh Zayed Rd - Trade Centre, Dubai, UAE

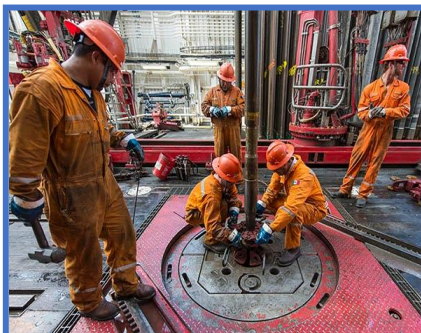
Course Description



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 troubleshooting - well testing artificial lift. It covers the inflow-outflow and IPR curve of well performance; the formation and fluid characterization, PVT and sampling; the reservoirs description and driving mechanisms; the need of well testing, the principles of well testing and well testing processes; testing exploration wells and appraisal wells; and the drill stem testing, objectives, tools, principles of operations, types of DST's and job design principles.



During this interactive course, participants will learn the testing producing wells and opportunistic testing; the well test program design; the key parameters for successful well testing and real time technology in well testing; the early production testing; the well test interpretation and theories behind well test interpretation; the common tools required for test interpretation; observing from various plots and pressure transient analysis; the testing surface and down hole data acquisition; the open hole and cased hole sampling, methods of sampling, sample transfer, types of samplers and carriers; and the surface well testing operations, safety concerns, operations and job design.

Course Objectives

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

- Apply and gain an in-depth knowledge on well testing
- Discuss inflow-outflow and IPR curve of well performance
- Describe formation and fluid characterization, PVT and sampling
- Explain reservoirs description and driving mechanisms
- Interpret the need of well testing and carryout principles of well testing and well testing processes
- Identify testing exploration wells and appraisal wells
- Determine drill stem testing, objectives, tools, principles of operations, including the types of DST's and job design principles
- Employ testing producing wells, opportunistic testing and well test program design
- Identify the key parameters for successful well testing and real time technology in well testing
- Implement early production testing and well test interpretation as well as discuss theories behind well test interpretation
- Identify the common tools required for test interpretation and illustrate the best practice in well test interpretation
- Observe from various plots and apply pressure transient analysis, testing surface and down hole data acquisition
- Employ open hole and cased hole sampling, methods of sampling, sample transfer, types of samplers and carriers
- Carryout surface well testing operations, safety concerns, operations and job design

Who Should Attend

This course provides an overview of all significant aspects and considerations of well testing for drilling operations section leaders, drilling engineering supervisors, well engineers, petroleum engineers, well servicing/workover/ completion staff and field production staff.

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 **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.

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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.

Course Fee

Istanbul	US\$ 8,500 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Doha	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.
Dubai	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:



Ms. Diana Helmy, PgDip, MSc, BSc, is a **Senior Petroleum & Geologist** with extensive years of experience within the **Oil & Gas, Refinery and Petrochemical** industries. Her expertise widely covers in the areas of **Tubular & Pipe Handling, Tubular Strength, Casing & Tubing Design, Production/Injection Loads** for Casing Strings & Tubing, **Drilling Loads, Drilling & Production Thermal Loads, Well Architecture, Wellhead Integrity, Well Integrity & Artificial Lift, Well Integrity Management, Well Completion & Workover, Applied Drilling**

Practices, Horizontal Drilling, Petroleum Production, Resource & Reserve Evaluation, Reserves Estimation & Uncertainty, Methods for Aggregation of Reserves & Resources, Horizontal & Multilateral Wells, Well Completion & Stimulation, Artificial Lift System Selection & Design, Well Testing & Oil Well Performance, Well Test Design Analysis, Well Test Operations, Well Testing & Perforation, Directional Drilling, Formation Damage Evaluation & Preventive, Formation Damage Remediation, Drilling & Formation Damage, Simulation Program for The International Petroleum Business, Well Testing & Analysis, Horizontal & Multilateral Wells & Reservoir Concerns, Oil & Gas Analytics, Petrophysics & Reservoir Engineering, Subsurface Geology & Logging Interpretation, Petroleum Geology, Geophysics, Seismic Processing & Exploration, Seismic Interpretation, Sedimentology, Stratigraphy & Biostratigraphy, Petroleum Economy, Core Analysis, Well Logging Interpretation, Core Lab Analysis & SCAL, Sedimentary Rocks, Rock Types, Core & Ditch Cuttings Analysis, Clastic, Carbonate & Basement Rocks, Stratigraphic Sequences, Petrographically Analysis, Thin Section Analysis, Scanning Electron Microscope (SEM), X-ray Diffraction (XRD), Cross-Section Tomography (CT), Conventional & Unconventional Analysis, Porosity & Permeability, Geological & Geophysical Model, Sedimentary Facies, Formation Damage Studies & Analysis, Rig Awareness, 2D&3D Seismic Data Processing, Static & Dynamic Correction, Noise Attenuation & Multiple Elimination Techniques, Velocity Analysis & Modeling and various software such as Petrel, OMEGA, LINUX, Kingdom and Vista. She is currently a **Senior Consultant wherein she is responsible in different facets of **Petroleum & Process Engineering** from managing **asset integrity, well integrity process, pre-commissioning/commissioning and start up** onshore & offshore process facilities.**

During her career life, Ms. Diana worked as a **Reservoir Geologist, Seismic Engineer, Geology Instructor, Geoscience Instructor & Consultant** and **Petroleum Geology Researcher** from various international companies like the **Schlumberger, Corex Services** for Petroleum Services, Petrolia Energy Supplies and Alexandria University.

Ms. Diana has a **Postgraduate Diploma in Geophysics, Master's degree in Petroleum Geology and Geophysics** and a **Bachelor's degree in Geology**. Further, she is a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management (ILM)** and has delivered numerous trainings, courses, workshops, seminars and conferences internationally.

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 always be met:

Day 1

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Well Performance: Inflow – Outflow, IPR Curve
0930 – 0945	<i>Break</i>
0945 – 1100	Formation & Fluid Characterization PVT & Sampling
1100 – 1215	Reservoirs Description & Driving Mechanisms
1215 – 1230	<i>Break</i>
1230 – 1420	The Need for Well Testing
1420 - 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0930	Principles of Well Testing, Basic Overview of Well Testing Processes
0930 – 0945	<i>Break</i>
0945 – 1100	Testing Exploratin Wells - Appraisal Wells
1100 – 1215	Drill Stem Testing & Case Study, Objectives, Tools, Principle of Operations, Types of DST's, Job Design Principles
1215 – 1230	<i>Break</i>
1230 – 1420	Testing Producing Wells, Opportunistic Testing
1420 - 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0930	Well Test Program Design
0930 – 0945	<i>Break</i>
0945 – 1100	Key Parameters for Successful Well Testing
1100 – 1215	Real-Time Technology in Well Testing
1215 – 1230	<i>Break</i>
1230 – 1420	Early Production Testing
1420 - 1430	Recap
1430	<i>Lunch & End of Day Three</i>

Day 4

0730 – 0930	Introduction to Well Test Interpretation, Theories Behind Well Test Interpretation
0930 – 0945	<i>Break</i>
0945 – 1100	Common Tools Required for Test Interpretation
1100 – 1215	Best Practice in Well Test Interpretation
1215 – 1230	<i>Break</i>
1230 – 1420	Observations from Various Plots, Pressure Transient Analysis
1420 - 1430	Recap
1430	<i>Lunch & End of Day Four</i>

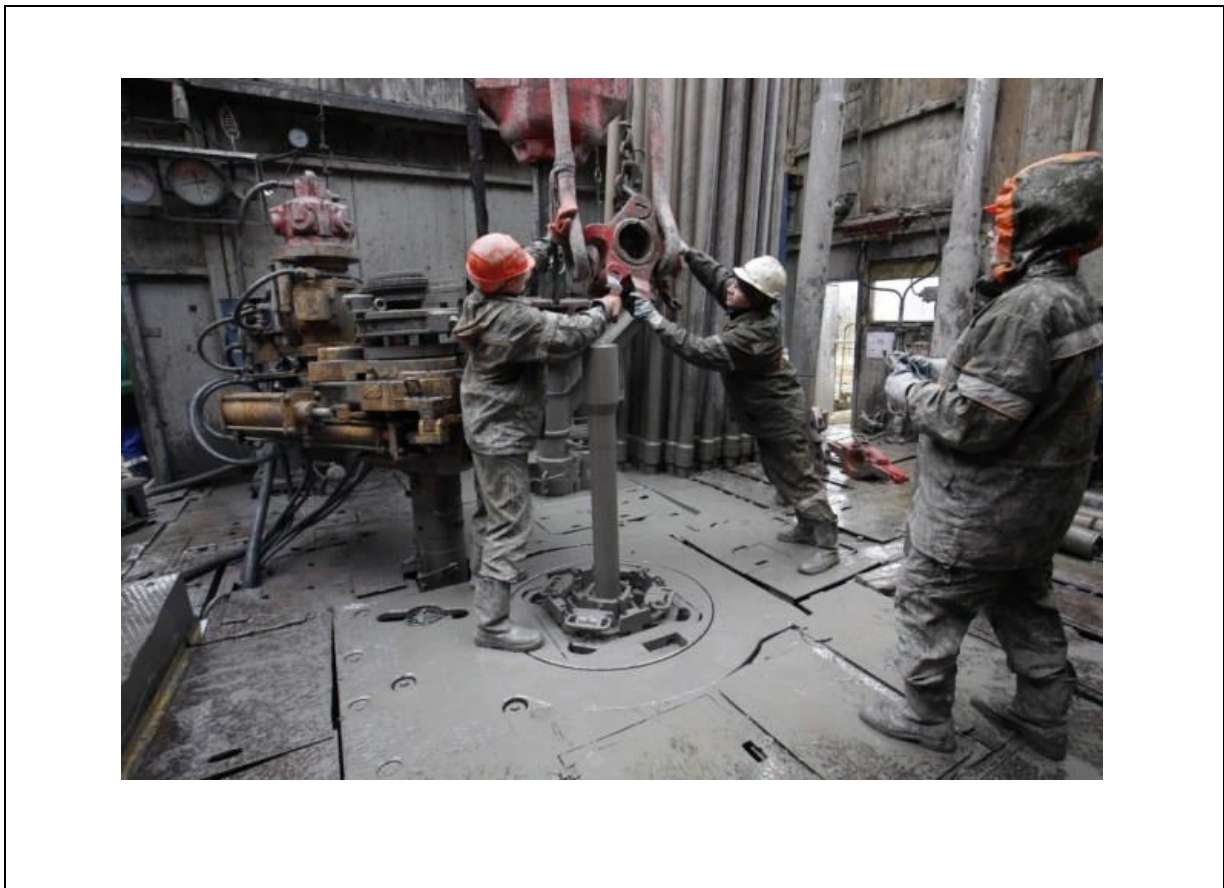


Day 5

0730 – 0930	<i>Testing Surface & Down Hole Data Acquisition</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<i>Open Hole & Cased Hole Sampling, Methods of Sampling, Sample Transfer, Types of Samplers & Carriers</i>
1100 – 1215	<i>Surface Well Testing Operations: Safety Concerns, Operations & Job Design</i>
1215 – 1230	<i>Break</i>
1230 – 1345	<i>Surface Well Testing Operations: Safety Concerns, Operations & Job Design (cont'd)</i>
1345 – 1400	<i>Course Conclusion</i>
1400 – 1415	POST-TEST
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>

Practical Sessions

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



Course Coordinator

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