

COURSE OVERVIEW DE0822

Troubleshooting - Well Testing Artificial lift

Course Title

Troubleshooting - Well Testing Artificial lift

Course Date/Venue

February 18-22, 2024/Hourous Meeting Room,
Holiday Inn Suites Maadi, Cairo, Egypt

Course Reference

DE0822

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



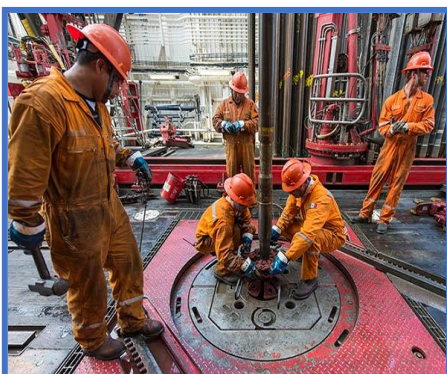
Course Description



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 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: -


- 

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 Fee

US\$ 8,000 per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), 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 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. Saber Hussein is a **Senior Geologist** with over **40 years** of extensive experience within the **Oil & Gas, Petrochemical** and **Refinery** industries. His specialization widely covers in the areas of **Exploration & Development Geology, Petroleum Geology, Exploration Production, Structural Geology, Wellsite Geology, Reservoir Management, Reservoir Appraisal & Development, Carbonate Reservoir Management, Fractured Reservoirs Evaluation & Management, Naturally Fractured Reservoir, Integrated Carbonate Reservoir**

Characterization, Core & Log Integration, Water Saturation, Coring & Core Analysis, Special Core Analysis, Log Interpretation, Cased-hole Logging, Core Calibration, Geological Modelling for Integrated Reservoir Studies, Reservoir Characterization, Geomodelling, Geologic Modelling, Analytic Modelling Methods, Economic Evaluation, Geophysics, Geophysical Exploration, Advanced Petrophysics, Petroleum Exploration, Petroleum Economics, Petroleum Engineering, Reservoir Modelling, Reserve Estimation, Reserve Evaluation, Uncertainty Calculations, Reservoir Management, Reservoir Engineering, Tectonics & Structural Development, Petroleum Systems, Reservoir Characterization, Clastic Reservoir, Carbonate Reservoir, Subsurface Facies Analysis, Borehole Images, Geophysical Methods, Oil & Gas Exploration, Exploration Geochemistry, Reservoir Performance Using Classical Methods, Fractured Reservoir Evaluation & Management, Reservoir Surveillance & Management, Reservoir Engineering & Stimulation, Reservoir Monitoring, Pressure Transient Testing & Reservoir Performance Evaluation, Reservoir Characterization, Reservoir Engineering Applications, Reservoir Volumetrics, Water Drive Reservoir, Reservoir Evaluation, Wireline Logging, Mud Logging, Cased Hole Logging, Production Logging, Slick Line, Coil Tubing, Horizontal Wells, Well Surveillance, Well Testing, Design & Analysis, Well Testing & Oil Well Performance, Well Log Interpretation (WLI), Formation Evaluation, Well Workover Supervision, Pressure Transient Analysis, Petrophysical Log Analysis, Drilling, Core Analysis, Core-to-Log Data Integration (SCAL), Basin Modelling & Total Petroleum System (TPS), Seismic Interpretation, Seismic Methods, Seismic Coherence Techniques, Seismic Attribute Analysis, Seismic Inversion Techniques, Well Logging, Rock Physics & Seismic Data, Formation Evaluation, Well Testing & Data Interpretation, Pore Pressure Prediction and Oil & Gas Reserves Estimations.

During his career life, Mr. Saber has gained his practical and field experience through his various significant position and dedication as the **Exploration General Manager & Board Member, Geology General Manager, Geological Studies Assistant General Manager, Mud Logging Assistant General Manager, Geological Operations Department Head, Geological Operations Section Head, Geologist, Well-Site Geologist, Mud Logger, Pressure Engineer, Expert and Senior Technical Consultant/Instructor** for various international companies such as the Suez Oil Company, DECO, DISUCO, Segulled, Geoline, Ltd.

Mr. Saber has a **Bachelor** degree in **Geology**. Further, he is a **Certified Instructor/Trainer** and an active member of Egyptian Petroleum Exploration Society (EPEX), American Association of Petroleum Geologists (AAPG), Government Sponsored Enterprise (GSE) and the Petroleum and Scientific Professional Syndicate. He has further delivered numerous trainings, courses, seminars and conferences internationally.



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: Sunday, 18th of February 2024

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

Day 2: Monday, 19th of February 2024

0730 – 0930	Principles of Well Testing, Basic Overview of Well Testing Processes
0930 – 0945	Break
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	Break
1230 – 1420	Testing Producing Wells, Opportunistic Testing
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3: Tuesday, 20th of February 2024

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

Day 4: Wednesday, 21st of February 2024

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

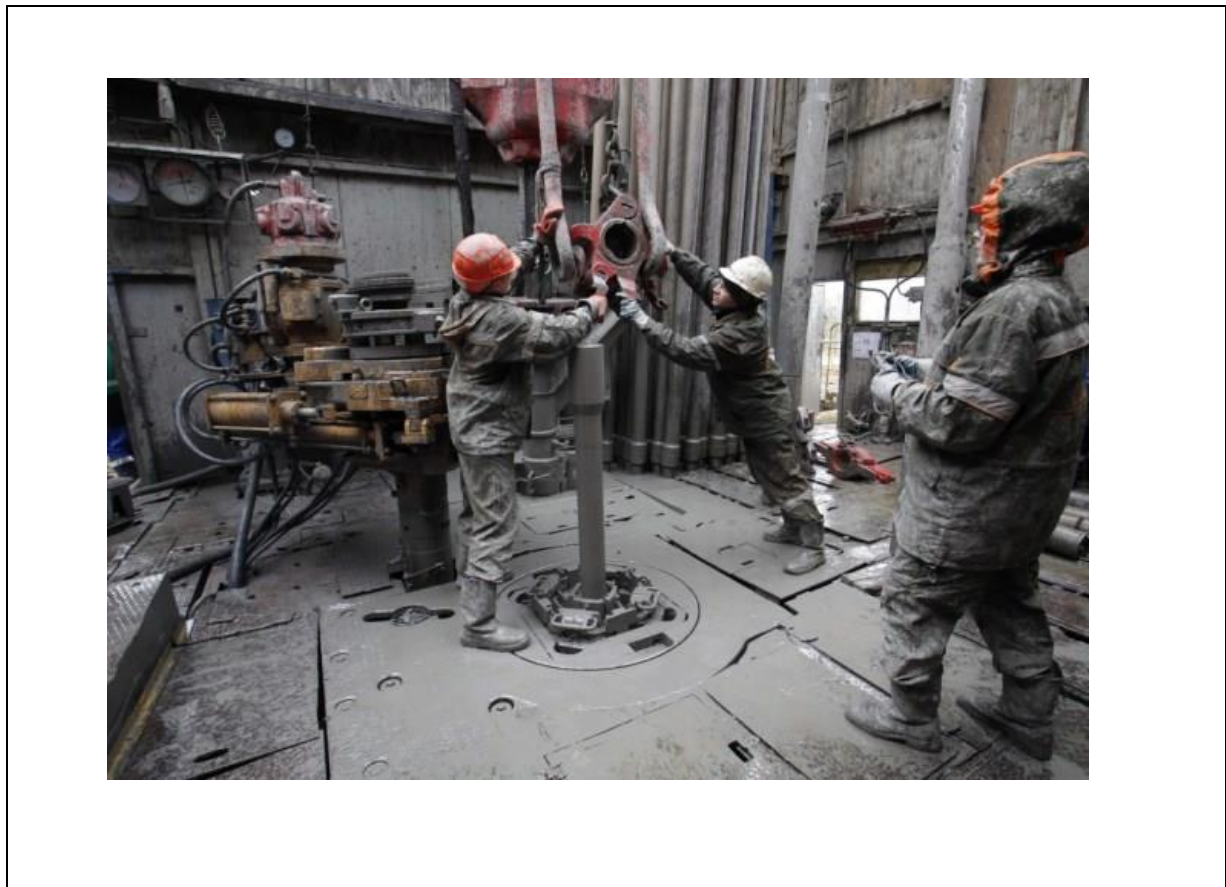


Day 5: Thursday, 22nd of February 2024

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

Practical Sessions

This hands-on, highly-interactive course includes real-life case studies and exercises:-



Course Coordinator

Kamel Ghanem, Tel: +971 2 30 91 714, Email: kamel@haward.org