

COURSE OVERVIEW DE0333
Log Data Acquisition and Quality Control and Petrophysical
Data Uncertainty Analysis

Course Title

Log Data Acquisition and Quality Control and Petrophysical Data Uncertainty Analysis

Course Date/Venue

Session 1: January 26-30, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Session 2: July 28-August 01, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

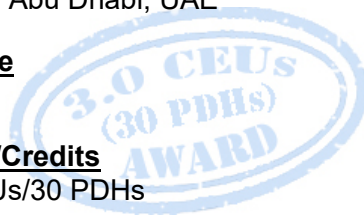


Course Reference

DE0333

Course Duration/Credits

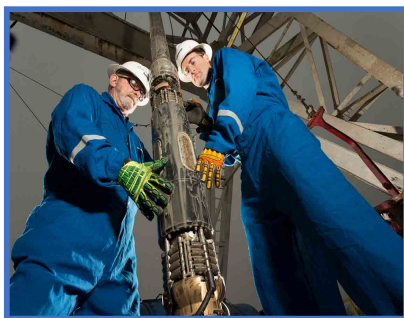
Five days/3.0 CEUs/30 PDHs



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 complete and up-to-date overview of Cased-Hole Logging (Program Design, Acquisition and Interpretation) Including Production Logging Tool, Cement Bond Log, Corrosion Detection. It covers the design programs and procedures for cased hole formation and cement job evaluation, downhole casing inspection, production, borehole imaging and nuclear logging in shallow vertical wells; review information from bulk rate measurement, noise logging, temperature, caliper, gamma ray, neutron and carbon/oxygen measurements to ensure good quality, representative well data; identify and discard those data that do not match actual well behavior.



Further, the course will also discuss the importance of cased-hole logging in oil and gas industry; the basic concepts of well logging and its role in reservoir management; the comparisons and benefits of cased-hole logging versus open-hole logging; the steps and challenges to design programs and procedures for cased hole formation; the fundamentals of well construction and casing design; and selecting the right and appropriate tools and criteria from major service companies, their offerings, customizations and adaptations.

Moreover, the course will also cover the purpose, design and real-time monitoring of tools for cement job evaluation; the importance, types and best practices of downhole casing inspection tools; the nuclear logging in shallow vertical wells, its basics, applications and safety concerns; the different types, advantages and challenges of borehole imaging tools; the data acquisition in cased-hole logging techniques, tools and protocols; the concepts, importance and interpretation of information from bulk rate measurement; the tools and interpretation of noise logging in cased-hole; the temperature, caliper, gamma ray and neutron measurements using appropriate tools, techniques and quality assurance; the carbon/oxygen measurements in cased-hole logging; and ensuring good quality, representative well data through proper techniques and best practices.

During this interactive course, participants will learn the data interpretation in cased-hole logging; the interpretation of production logging tools (PLT); the importance, tools and how to interpret data of cement bond logging (CBL); the corrosion detection in downhole casing, its tools, techniques and mitigation measures; identifying and discarding non-representative data including the criteria, techniques and importance; the advanced techniques in cased-hole logging; the integration with other reservoir monitoring techniques; the technical, environmental and economical challenges and solutions in modern cased-hole logging; and the future trends in cased-hole logging.

Course Objectives

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

- Apply and gain an in-depth knowledge on cased-hole logging
- Know how to design programs and procedures for cased hole formation and cement job evaluation, downhole casing inspection, production, borehole imaging and nuclear logging in shallow vertical wells
- Know how to select the appropriate tools from service companies that are applicable to the specific well and reservoir conditions
- Know how to review information from bulk rate measurement, noise logging, temperature, caliper, gamma ray, neutron and carbon/oxygen measurements to ensure good quality, representative well data
- Identify and discard those data that do not match actual well behavior
- Explain the importance of cased-hole logging in oil and gas industry and the basic concepts of well logging and its role in reservoir management
- Differentiate the comparisons and benefits of cased-hole logging versus open-hole logging
- Identify the steps and challenges to design programs and procedures for cased hole formation and the fundamentals of well construction and casing design
- Select the right and appropriate tools and criteria from major service companies, their offerings, customizations and adaptations
- Discuss the purpose, design and real-time monitoring of tools for cement job evaluation and the importance, types and best practices of downhole casing inspection tools

- Perform nuclear logging in shallow vertical wells, its basics, applications and safety concerns
- Recognize the different types, advantages and challenges of borehole imaging tools
- Carryout the data acquisition in cased-hole logging techniques, tools and protocols
- Explain the concepts, importance and interpretation of information from bulk rate measurement
- Employ proper tools and interpretation of noise logging in cased-hole as well as carryout temperature, caliper, gamma ray and neutron measurements using appropriate tools, techniques and quality assurance
- Determine the carbon/oxygen measurements in cased-hole logging and ensure good quality, representative well data through proper techniques and best practices
- Explain data interpretation in cased-hole logging and the interpretation of production logging tools (PLT)
- Discuss the importance, tools and how to interpret data of cement bond logging (CBL)
- Carryout the corrosion detection in downhole casing, its tools, techniques and mitigation measures
- Identify and discard non-representative data including the criteria, techniques and importance
- Carryout the advanced techniques in cased-hole logging and integrate with other reservoir monitoring techniques
- Implement the technical, environmental and economical challenges and solutions in modern cased-hole logging and the future trends in cased-hole logging

Exclusive Smart Training Kit - H-STK®



*Participants of this course will receive the exclusive “Howard 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 cased-hole logging for petrophysicists, reservoir engineers, petroleum engineers, geoscientists and production engineers.

Course Fee

US\$ 8,000 per Delegate + **VAT**. This rate includes H-STK® (Howard Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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: -

- 

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.

- 

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.

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. Stan Constantino, MSc, BSc, is a **Senior Petroleum & Reservoir Engineer** with over **40 years** of **Offshore & Onshore** extensive experience within the **Oil, Gas & Petroleum** industries. His area of expertise include **Cased Hole Logging, Advanced Petrophysics/Interpretation of Cased Hole Logs, Cased Hole Formation Evaluation, Cased Hole Formation Evaluation, Cased Hole Evaluation, Cased-Hole Logging, Applied Production Logging & Cased Hole & Production Log Evaluation, Cased Hole Logging & Formation Evaluation, Open & Cased Hole Logging, Fractured Reservoir Classification & Evaluation, Screening of Oil Reservoirs for Enhanced Oil Recovery, Oil Reservoir Evaluation & Estimation, Reserves & Resources, Reserves Estimation & Uncertainty, Reserve Evaluation, OIP Estimation & Range of Uncertainty, Reservoir Characterization, Water Flooding, Reservoir Souring & Water Breakthrough, Reservoir Performance Using Classical Methods, Fractured Reservoir Evaluation & Management, Reservoir Surveillance & Management, Reservoir Engineering & Simulation, Reservoir Monitoring, Pressure Transient Testing & Reservoir Performance Evaluation, Reservoir Characterization, Reservoir Engineering Applications with ESP & Heavy Oil, Reservoir Volumetrics, Water Drive Reservoir, Unconventional Resource & Reserves Evaluation, Oil & Gas Reserves Estimation, Petrophysics & Rock Properties, Seismic Technology, Geological Modelling, Water Saturation, Crude Oil & Natural Gas Demand, Exploration Agreements & Financial Modelling, Seismic Survey Evaluation, Exploration Well Identification, Field Production Operation, Field Development Evaluation, Crude Oil Marketing, Core & Log Data Integration, Core Logging, Advanced Core & Log Integration, Well Logs & Core Analysis, Enhanced Oil Recovery, Enhanced Oil Recovery Techniques, Petroleum Economic Analysis, Oil Industry Orientation, Oil Production & Refining, Crude Oil Market, Global Oil Supply & Demand, Global Oil Reserves, Crude Oil Types & Specifications, Oil Processing, Oil Transportation-Methods, Oil & Gas Exploration and Methods, Oil & Gas Extraction, Technology Usage in Industrial Security; Upstream, Midstream & Downstream Operations; Oil Supply & Demand, Oil Contracts, Government Legislation & Oil Contractual Agreements, Oil Projects & Their Feasibility (revenue and profitability), Rock & Fluid Properties, Fluid Flow Mechanics, PVT Analysis, Material Balance, Darcy's Law & Applications, Radial Flow, Gas Well Testing, Natural Water Influx, EOR Methods, Directional Drilling, Drilling Production & Operations, Field Development & Production of Oil & Gas, Wireline Logging, Mud Logging, Production Logging, Slick Line, Coil Tubing, Exploration Wells Evaluation, 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 and Petrophysical Log Analysis. Currently, he is the **CEO & Managing Director** of **Geo Resources Technology** wherein he is responsible in managing the services and providing technical supports to underground energy related projects concerning **field development, production, drilling, reservoir engineering and simulation.****

Throughout his long career life, Mr. Stan has worked for many international companies such as the **Kavala Oil, North Aegean Petroleum Company** and **Texaco Inc.**, as the **Managing Director, Operations Manager, Technical Trainer, Training Consultant, Petroleum Engineering & Exploration Department Head, Assistant Chief Petroleum Engineer, Reservoir Engineer, Resident Petroleum Engineer, Senior Petroleum Engineer** and **Petroleum Engineer** wherein he has been managing the evaluation of exploration wells, reservoir simulation, development training, production monitoring, wireline logging and well testing including selection and field application of well completion methods.

Mr. Stan has a **Master's** degree in **Petroleum Engineering** and a **Bachelor's** degree in **Geology** from the **New Mexico Institute of Mining & Technology (USA)** and from the **Aristotelian University (Greece)** respectively. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership of Management (ILM)** and a member of the **Society of Petroleum Engineers, USA (SPE)**, **Society of Well Log Professional Analysts, USA (SPWLA)** and **European Association of Petroleum Geoscientists & Engineers (EAGE)**. Moreover, Mr. Stan published numerous scientific and technical papers and delivered various trainings, courses and workshops worldwide.

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	<i>Introduction to Cased-hole Logging: Historical Overview & Importance in Oil & Gas Industry</i>
0930 – 0945	Break
0945 – 1030	Key Terminologies & Basic Concepts
1030 – 1130	Basics of Well Logging & Its Role in Reservoir Management
1130 – 1215	Cased-hole Logging vs. Open-hole Logging: Comparisons & Benefits
1115 – 1230	Break
1230 – 1330	How to Design Programs & Procedures for Cased Hole Formation: Steps, Objectives & Challenges
1330 – 1420	Fundamentals of Well Construction & Casing Design
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2

0730 – 0830	Selecting the Right Tools: Criteria & Objectives
0830 – 0930	Appropriate Tools from Service Companies: Overview of Major Service Companies & their Offerings & Customizations & Adaptations
0930 – 0945	Break
0945 – 1100	Tools for Cement Job Evaluation: Purpose, Design & Real-time Monitoring
1100 – 1230	Downhole Casing Inspection Tools: Importance, Types & Best Practices
1230 – 1245	Break
1230 – 1330	Nuclear Logging in Shallow Vertical Wells: Basics, Applications & Safety Concerns
1330 – 1420	Borehole Imaging Tools: Different Types, Advantages & Challenges
1420 – 1430	Recap
1430	Lunch & End of Day Two

Day 3

0730 – 0830	<i>Data Acquisition in Cased-hole Logging: Techniques, Tools & Protocols</i>
0830 - 0930	<i>Information from Bulk Rate Measurement: Concepts, Importance & Interpretation</i>
0930 – 0945	Break
0945 – 1100	<i>Noise Logging in Cased-Hole: Introduction, Tools & Interpretation</i>
1100 – 1230	<i>Temperature, Caliper, Gamma Ray & Neutron Measurements: Tools, Techniques & Quality Assurance</i>
1230 – 1245	Break
1230 – 1330	<i>Carbon/Oxygen Measurements in Cased-hole Logging</i>
1330 – 1420	<i>Ensuring Good Quality, Representative Well Data: Techniques, Best Practices & Real-world Case Studies</i>
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 – 0830	<i>Introduction to Data Interpretation in Cased-hole Logging</i>
0830 - 0930	<i>Production Logging Tools (PLT): Overview, Tools & Interpretation</i>
0930 – 0945	Break
0945 – 1100	<i>Cement Bond Logging (CBL): Importance, Tools & How to Interpret Data</i>
1100 – 1230	<i>Corrosion Detection in Downhole Casing: Tools, Techniques & Mitigation Measures</i>
1230 – 1245	Break
1230 – 1330	<i>Identifying & Discarding Non-representative Data: Criteria, Techniques & Importance</i>
1330 – 1420	<i>Case Studies: Real-world Scenarios of Well Evaluation using Cased-hole Logging</i>
1420 – 1430	Recap
1430	Lunch & End of Day Four

Day 5

0730 – 0930	<i>Advanced Techniques in Cased-hole Logging</i>
0930 – 0945	Break
0945 – 1100	<i>Integration with Other Reservoir Monitoring Techniques</i>
1100 – 1230	<i>Challenges & Solutions in Modern Cased-hole Logging: Technical, Environmental & Economical</i>
1230 – 1245	Break
1245 – 1345	<i>Future Trends in Cased-hole Logging</i>
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	Lunch & End of Course

Practical Sessions

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



Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org