

COURSE OVERVIEW DE0867 Cased Hole and Production Log Evaluation

Course Title

Cased Hole and Production Log Evaluation

Course Reference

DE0867

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs

Course Date/Venue

Session(s)	Date	Venue
1	September 08-12, 2024	Boardroom, Warwick Hotel Doha, Doha, Qatar
2	November 03-07, 2024	Boardroom, Warwick Floter Dona, Dona, Qatar

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.

Water identification and fluid and fluid movement in both injection and producing wells are evaluated using spinners, tracers, pulsed neutron oxygen activation, temperature and noise survey. A variety of fluid identification devices are used to evaluate multiphase flow. These tools together are used to quantify the sources water, oil, gas production and are critical to the control of excessive water or other phases. Videos of and in vertical, deviated and horizontal flows are used to aid in visualization of the logging environment.

This course is designed to provide delegates with detailed and up-to-date overview of applied production logging and cased hole & production log evaluation. It covers oil and gas entries from flowmeter/fluid ID and temperature surveys, fluid movement in both injection and producing wells using spinners, tracers, pulsed neutron oxygen activation, temperature and noise survey as well as detecting movement inside/outside of pipe using oxygen activation.

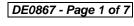




















The course will discuss heavy phase "fallback" in flows and select tools to minimize its effect including the various tools used to quantify the sources of water, oil gas production that are critical to the control of excessive water or other phases and the various problems of highly deviated/horizontal well.

Computation of fluid saturations from pulsed neutron (Sigma and C/O) measurements and evaluation of water, oil and gas entry profiles from flowmeter/fluid ID and temperature will also be discussed during the course.

Course Objectives

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

- Apply and gain a comprehensive knowledge on applied production logging and cased hole and production log evaluation
- Identify water as well as locate water, oil and gas entries from flowmeter/fluid ID and temperature surveys
- Evaluate fluid and fluid movement in both injection and producing wells using spinners, tracers, pulsed neutron oxygen activation, temperature and noise survey
- Detect water movement inside/outside of pipe using oxygen activation
- Identify fluid devices used to evaluate multiphase flow
- Describe heavy phase "fallback" in flows and select tools to minimize its effect
- Recognize various tools used to quantify the sources of water, oil gas production that are critical to the control of excessive water or other phases
- Enumerate the various problems of highly deviated/horizontal well, how to log them and what tools to use
- List the various formation environments suitable for Sigma or C/O logs
- Compute fluid saturations from pulsed neutron (Sigma and C/O) measurements
- Determine whether zonal isolation is likely from all types of bond logs
- Evaluate water, oil and gas entry profiles from flowmeter/fluid ID and temperature

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

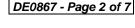
This course provides an overview of all significant aspects and considerations of applied production logging, cased hole and production log evaluation for reservoir and production engineers, geologist, petrophysicists, log analysts and others involved in well surveillance.



















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

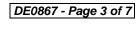
US\$ 8,500 per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



















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:



Mr. Moammar Khallouf, is a Senior Petroleum & Process Safety Engineer with over 25 years of integrated experience within the Oil & Gas, Petroleum and Refinery industries. His specialization widely covers in the areas of Completion Perforation. Completion & **Production** Engineering, Oil Wells Drilling Engineering, Oil Production Equipment Maintenance, Well Services, Wellhead Valves,

Well Test Analysis & Rod Pumping Operation, Well Integrity Investigations, Well Perforation, Well Control, Advanced Well Completion, Artificial Lift System, **Production Logging** Interpretation, Production Technology, Production Operation, Oil Production Optimization, Drilling Supervision, Well Drilling Operations, Drilling Technology, Drilling & Initial Completion, Well Completion & Workover Operation, Completion & Safety, Completion Design, Well Test Data Gathering, Wireline & Coiled Tubing Operation, Advanced Coiled Tubing & Stimulation, Electrical Submersible Pump (ESP), Beam Pump Operation & Troubleshooting, Mud Logging Interpretation Technique, Bits, Casing, Tubing & Drilling Milling Tools, Fishing & Milling Tools, Directional Drilling Technology & Tools, Water Shut Off, Water Injection, Acid Stimulation, Sand & Cement Plug Calculation and Ultra-Low Sulphur Diesel Production & VGO Deep Hydro Treatment. Further, he is also well-versed in **Vessel Traffic** Management System, Oil & Gas Marine Terminals, Tank Farm & Storage Tank Design, Inspection Procedure, Operation, Repair & Maintenance, Liquid & Gas Flow Metering & Meter Proving, HSE Risk Assessment, HSE Induction, Accident & Incident Investigation, Job Hazards Analysis (JHA), Maintenance Planning, Firefighting, Permit to Work, Safety Skills, H2S, Unsafe Acts/Conditions, Emergency Response and Work Environment.

During his career life, Mr. Moammar held significant positions and dedication as the Artificial Lift Section Head, Drilling & Completion Materials Supervisor, Drilling Safety Supervisor, Well Services/Intervention Supervisor, Production Technology Engineer, Safety Engineer, Petroleum Engineering Consultant & Instructor and Senior Instructor/Trainer for various international companies like the Alfurat Petroleum Company (Shell JV), TUV Nord, ASASA, CMC, GTFG, **ARAMCO**, UNICO, etc., just to name a few.

Mr. Moammar a Bachelor's degree in Petroleum Engineering. Further, he is a Certified Instructor/Trainer and has delivered numerous trainings, workshops, courses, seminars and conferences internationally.

Accommodation

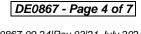
Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.



















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

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0730 - 0800	Registration & Coffee
0800 - 0830	Welcome & Introduction
0830 - 0900	PRE-TEST
0900 - 0930	Water Identification
0930 - 0945	Break
0945 - 1100	Locating Water, Oil & Gas Entries from Flowmeter/Fluid ID &
0010 1100	Temperature Surveys
1100 – 1230	Evaluation of Fluid & Fluid Movement in Both Injection & Producing Wells
1230 – 1245	Break
1245 - 1420	Spinners
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2

0730 - 0930	Tracers
0930 - 0945	Break
0945 - 1100	Pulsed Neutron
1100 - 1230	Oxygen Activation
1230 - 1245	Break
1245 - 1420	Temperature
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3

0730 - 0930	Noise Survey
0930 - 0945	Break
0945 – 1100	Detecting Water Movement Inside/Outside of Pipe Using Oxygen
	Activation
1100 - 1230	Fluid Identification Devices Used to Evaluate Multiphase Flow

















1230 – 1245	Break
1245 - 1420	Heavy Phase Fallback in Flows & Selecting Tools to Minimize its Effect
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

Tools Used to Quantify the Sources of Water, Oil & Gas Production	
that Are Critical to the Control of Excessive Water or Other Phases	
Break	
Identifying Problems of Highly Deviated /Horizontal Well, How to Log	
Them & What Tools to Use	
Identifying Formation Environments that are Suitable for Sigma or C/O	
Logs?	
Break	
Computing Fluid Saturations from Pulsed Neutron (Sigma & C/O)	
Measurements	
Recap	
Lunch & End of Day Four	

Day 5

Day 3	
0730 - 0830	Determining Whether Zonal Isolation is Likely from All Types of Bond
	Logs
0830- 0930	Evaluating Water, Oil & Gas Entry Profiles from Flowmeter/Fluid ID &
	Temperature
0930 - 0945	Break
0945-1100	Videos
1100 1245	Vertical, Deviated & Horizontal Flows are Used to Aid in Visualization
1100 - 1245	of the Logging Environment
1245- 1300	Course Conclusion
1300- 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	End of Course

















Practical Sessions

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



<u>Course Coordinator</u>
Jaryl Castillo, Tel: +974 4423 1327, Email: <u>jaryl@haward.org</u>

















