

COURSE OVERVIEW DE0805 Coring and Core Analysis

(30 PDHs)

Course Title Coring Core Analysis

Course Reference DE0805

Course Duration/Credits Five days/3.0 CEUs/30 PDHs



Course Date/Venue

| Session(s) | Date | Venue |
|------------|-----------------------|---|
| 1 | April 21-25, 2024 | |
| 2 | May 26-30, 2024 | Oryx Meeting Room, DoubleTree By Hilton Doha-Al |
| 3 | September 22-26, 2024 | Sadd, Doha, Qatar |
| 4 | November 17-21, 2024 | |

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 delegates with a detailed and up-to-date overview on coring and core analysis. It covers the coring programs and maximizing coring recovery; the well site procedures and core handling, preservation method; the sidewall coring and analysis and organizing effective laboratory progress; and the porosity, permeability and fluid saturation.

During this interactive course, participants will learn the quality control in core analysis; the petrography and minerology; the special core analysis, sample selection and statistical data analysis; the core-log correlation covering NMR log calibration, acoustic and nuclear properties: electrical the rock mechanics including wettability. relative permeability, capillary pressure, and reservoir fluid distribution; and the data integration and design of coring and core analysis.













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Course Objectives

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

- Apply the gain a good working knowledge on coring and core analysis
- Design coring programs and maximize coring recovery
- Carryout core handling, well site procedures and preservation method
- Apply sidewall coring and analysis and organize effective laboratory progress
- Identify porosity, permeability and fluid saturation
- Implement quality control in core analysis and discuss petrography and minerology
- Employ special core analysis, sample selection and statistical data analysis
- Discuss core-log correlation covering NMR log calibration, acoustic and nuclear and electrical properties
- Interpret rock mechanics including wettability, relative permeability, capillary pressure, and reservoir fluid distribution
- Carryout data integration and design of coring and core analysis

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

The course provides an overview of all significant aspects and considerations of special core analysis for geoscientists, reservoir engineers, exploration and development geologists, core and log analysts, geophysicists, drilling and completion engineers.

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.

Accommodation

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



















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.

BAC 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 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. Dimitri Massaras is a Senior Petroleum Engineer with over 35 years of Offshore & Onshore experience within the Oil, Gas, Refinery and Petrochemical industries. His expertise widely covers Petroleum Geology, Geophysics, Advanced Petrophysics, Petroleum Exploration, Petroleum Economics, Petroleum Engineering, Reservoir Modelling, Drilling, Core-to-Log Data Integration (SCAL), Basin Modelling & Total Petroleum System (TPS), Seismic Interpretation, Well Logging,

Formation Evaluation, Well Testing & Data Interpretation, Pore Pressure Prediction and Oil & Gas Reserves Estimations. He is also an expert in Risk Analysis, Refining Unit (De-asphalting), Catalytic Cracking Unit (CCU), Lube Oil Unit, Lighter Fluid Unit, Oil, Gas & Water Samples for HPLC Testing and Analysis, Petrel, SeisWorks, StrataModel, Finder, Charisma, Zmap, Seitex, LogTech & GeoLog, ASU, VSPC and many more. Currently, he is the Senior Petroleum Consultant & Asset Manager of one of the leading exploration company wherein his in-charge of petroleum exploration in various regions particularly in Algeria and Europe.

During his long career, Mr. Massaras has gained his practical and field experience through his various significant positions and dedication as the **Senior Petroleum Consultant**, **Senior Geologist**, **Project Geologist**, **Operations Geologist** and **Refinery Unit Operator** from numerous international companies such as the **Pennzoil E & P Company**, **Petrofina SA** and **Gulf Oil E & P Company** just to name a few.

Mr. Massaras has a Bachelor's degree in Petroleum Geology & Geophysics from the University of Massachusetts in USA. Further, he is a Certified Instructor/Trainer; a Certified Internal Verifier/Assessor/Trainer by the Institute of Leadership & Management (ILM); a former Director of Swiss Section of the Society of Petroleum Engineers (SPE); an active member of Swiss Association of Energy Geoscientists (SASEG) and has delivered innumerable trainings 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.

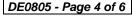




















Course Program

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

| Registration & Coffee |
|---|
| Welcome & Introduction |
| PRE-TEST |
| Coring and Core Analysis, Coring Hardware and Maximizing Core |
| Recovery |
| Break |
| Coring and Core Analysis, Coring Hardware and Maximizing Core |
| Recovery (cont'd) |
| Core-Handling, Well Site Procedures and Preservation Methods |
| Break |
| Core-Handling, Well Site Procedures and Preservation Methods |
| (cont'd) |
| Recap |
| Lunch & End of Day One |
| |

Day 2

| 0730 - 0930 | Sidewall Coring and Analysis |
|-------------|---|
| 0930 - 0945 | Break |
| 0945 - 1100 | Sidewall Coring and Analysis (cont'd) |
| 1100 - 1230 | Organizing Effective Laboratory Programs |
| 1230 – 1245 | Break |
| 1245 - 1420 | Organizing Effective Laboratory Programs (cont'd) |
| 1420 – 1430 | Recap |
| 1430 | Lunch and End of Day Two |

Day 3

| 0730 - 0930 | Porosity, Permeability and Fluid Saturation |
|-------------|--|
| 0930 - 0945 | Break |
| 0945 - 1100 | Porosity, Permeability and Fluid Saturation (cont'd) |
| 1100 - 1230 | Quality Control in Core Analysis |
| 1230 - 1245 | Break |
| 1245 - 1420 | Quality Control in Core Analysis (cont'd) |
| 1420 - 1430 | Recap |
| 1430 | Lunch & End of Day Three |

Day 4

| 0730 - 0930 | Petrography and Mineralogy |
|-------------|--|
| 0930 - 0945 | Break |
| 0945 - 1100 | Special Core Analysis Sample Selection and Statistical Data Analysis |
| 1100 – 1230 | Special Core Analysis Sample Selection and Statistical Data Analysis (cont'd) |
| 1230 - 1245 | Break |

















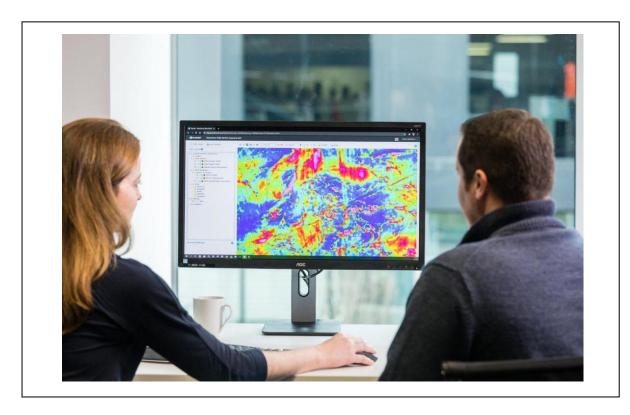
| 1245 – 1420 | Core-Log Correlation NMR Log Calibration ● Acoustic ● Nuclear and Electrical Properties |
|-------------|--|
| 1420 - 1430 | Recap |
| 1430 | Lunch & End of Day Four |

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| Day 3 | |
|-------------|---|
| 0730 - 0930 | An Introduction to Rock Mechanics |
| 0930 - 0945 | Break |
| 1945 – 1100 | Wettability, Relative Permeability, Capillary Pressure and Reservoir Fluid Distribution |
| 1100 - 1230 | Data Integration in Reservoir Simulation |
| 1230 – 1245 | Break |
| 1245 – 1345 | Design of Coring and Core Analysis Program |
| 1345 - 1400 | Course Conclusion |
| 1400 - 1415 | POST-TEST |
| 1415 - 1430 | Presentation of Course Certificates |
| 1430 | Lunch & 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>









