

## COURSE OVERVIEW DE0064 Gas Condensate Fields Development

<u>Course Title</u> Gas Condensate Fields Development

## Course Date/Venue

- Session 1: May 26-30, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE Session 2: November 16-20, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha,
  - Sheikh Zayed Road, Dubai, UAE

CEUS

(30 PDHs)

# Course Reference

DE0064

## **Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs

## Course Description









#### This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course is designed to provide participants with a detailed and up-to-date overview of Mastering Gas Condensate and Volatile Oil Reservoirs. It covers the gas condensate, volatile properties and equation of state; the characteristics of gas condensate and volatile oil reservoirs; the importance of mastering gas condensate and volatile oil reservoirs; the reservoir fluids, gas condensate fluids, volatile oil fluids, wellbore, reservoir and fluid effects and challenges; and the reservoir PVT analysis, gas and multiphase analysis, PVT analysis and reservoir fluid sampling.

During the interactive course, participants will learn the PVT laboratory measurements, PVT data interpretation and calculation of fluid properties from PVT data; the gas condensate reservoir characteristics and performance analysis; the reservoir modelling and gas condensate; the volatile oil reservoir development strategies and volatile oil reservoir performance analysis; the well testing and pressure transient analysis; the gas condensate and volatile oil well testing techniques, well test data analysis, well test interpretation, production optimization and artificial lift methods; and the productivity prediction and remediation, enhanced oil recovery techniques and field development planning.



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#### Course Objectives

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

- Apply and gain an in-depth knowledge on mastering gas condensate and volatile oil reservoirs
- Manage gas reservoir, apply acquisition of state and prepare practical activity by • using simulation
- Identify the gas condensate, volatile properties and equation of state •
- Recognize the characteristics of gas condensate and volatile oil reservoirs •
- Discuss the importance of mastering gas condensate and volatile oil reservoirs •
- Identify reservoir fluids, gas condensate fluids, volatile oil fluids, wellbore, reservoir • and fluid effects and challenges
- Carryout reservoir PVT analysis, gas and multiphase analysis, PVT analysis and • reservoir fluid sampling
- Apply PVT laboratory measurements, PVT data interpretation and calculation of • fluid properties from PVT data
- Discuss gas condensate reservoir characteristics and performance analysis •
- Illustrate reservoir modeling, gas condensate and volatile oil reservoir development • strategies and volatile oil reservoir performance analysis
- Employ well testing, pressure transient analysis and gas condensate and volatile oil well testing techniques
- Carryout well test data analysis, well test interpretation, production optimization and artificial lift methods
- Apply productivity prediction and remediation, enhanced oil recovery techniques and field development planning

## Exclusive Smart Training Kit - H-STK<sup>®</sup>



Participants of this course will receive the exclusive "Haward Smart Training Kit" (H-STK<sup>®</sup>). The H-STK<sup>®</sup> 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 mastering gas condensate and volatile oil reservoirs for reservoir engineers, reservoir managers, production engineers, production technologists and production engineering and petroleum engineers.

#### **Course Fee**

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



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### Course Certificate(s)

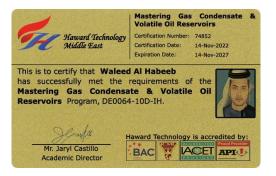
(1) Internationally recognized Competency Certificates and Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Certificates are valid for 5 years.

#### Recertification is FOC for a Lifetime.

#### Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-









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(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.



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### 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.



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#### 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. Konstantin Zorbalas, MSc, BSc, is a Senior Petroleum Engineer & Well Completions Specialist with over 25 years of offshore and onshore experience in the Oil & Gas, Refinery & Petrochemical industries. His wide expertise includes Well Stimulation, Workovers & Completions, Petroleum Risk & Decision Analysis, Acidizing Application in Sandstone & Carbonate, Well Testing Analysis,

Stimulation Operations, Reserves Evaluation, Reservoir Fluid Properties, Reservoir Engineering & Simulation Studies, Reservoir Monitoring, Artificial Lift Design, Gas Operations, Workover/Remedial Operations & Heavy Oil Technology, Applied Water Technology, Oil & Gas Production, X-mas Tree & Wellhead Operations & Testing, Artificial Lift Systems (Gas Lift, ESP, and Rod Pumping), Well Cementing, Production Optimization, Well Completion Design, Sand Control, PLT Correlation, Slickline Operations, Acid Stimulation, Well testing, Production Logging, Project Evaluation & Economic Analysis. Further, he is actively involved in Project Management with special emphasis in production technology and field optimization, performing conceptual studies, economic analysis with risk assessment and field development planning. He is currently the Senior Petroleum Engineer & Consultant of National Oil Company wherein he is involved in the mega-mature fields in the Arabian Gulf, predominantly carbonate reservoirs; designing the acid stimulation treatments with post-drilling rigless operations; utilizing CT with tractors and DTS systems; and he is responsible for gas production and preparing for reservoir engineering and simulation studies, well testing activities, field and reservoir monitoring, production logging and optimization and well completion design.

During his career life, Mr. Zorbalas worked as a Senior Production Engineer, Well Completion Specialist, Production Manager, Project Manager, Technical Manager, Technical Supervisor & Contracts Manager, Production Engineer, Production Supervisor, Production Technologist, Technical Specialist, Business Development Analyst, Field Production Engineer and Field Engineer. He worked for many world-class oil/gas companies such as ZADCO, ADMA-OPCO, Oilfield International Ltd, Burlington Resources (later acquired by Conoco Phillips), MOBIL E&P, Saudi Aramco, Pluspetrol E&P SA, Wintershall, Taylor Energy, Schlumberger, Rowan Drilling and Yukos EP where he was in-charge of the design and technical analysis of a gas plant with capacity 1.8 billion m3/yr gas. His achievements include boosting oil production 17.2% per year since 1999 using ESP and Gas Lift systems.

Mr. Zorbalas has **Master** and **Bachelor** degrees in **Petroleum Engineering** from the **Mississippi State University**, **USA**. Further, he is an **SPE Certified Petroleum Engineer**, **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)**, an active member of the Society of Petroleum Engineers (**SPE**) and has numerous scientific and technical publications and delivered innumerable training courses, seminars and workshops worldwide



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## **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 - 0900	Introduction to Gas Condensate & Volatile Oil Reservoirs
0900 - 0930	What are Gas Condensate & Volatile Oil Reservoirs?
0930 - 0945	Break
0945 – 1015	Gas Condensate & Volatile Properties
1015 – 1045	Equation of State
1045 – 1115	Characteristics of Gas Condensate & Volatile Oil Reservoirs
1115 – 1145	Importance of Mastering Gas Condensate & Volatile Oil Reservoirs
1145 – 1230	Reservoir Fluids
1230 – 1245	Break
1245 – 1315	Gas Condensate Fluids
1315 -1345	Volatile Oil Fluids
1345 - 1420	Properties of Reservoir Fluids
1420 – 1430	Recap
1430	Lunch & End of Day One

#### Day 2

Day Z	
0730 - 0810	Wellbore, Reservoir & Fluid Effects & Challenges
0810 - 0850	Reservoir PVT Analysis
0850 - 0930	Gas & Multiphase Analysis
0930 - 0945	Break
0945 – 1015	PVT Analysis
1015 – 1045	Reservoir Fluid Sampling
1045 – 1115	PVT Laboratory Measurements
1115 – 1145	PVT Data Interpretation
1145 – 1230	Calculation of Fluid Properties from PVT Data
1230 - 1245	Break
1245 – 1315	Gas Condensate Reservoir Characteristics
1315 -1345	Gas Condensate Reservoir Performance Analysis
1345 - 1420	Reservoir Modeling & Simulation of Gas Condensate Reservoirs
1420 - 1430	Recap
1430	Lunch & End of Day Two

#### Day 3

0730 - 0810	Gas Condensate Reservoir Development Strategies
0810 - 0850	Volatile Oil Reservoir Characteristics
0850 - 0930	Volatile Oil Reservoir Performance Analysis
0930 - 0945	Break
0945 - 1015	Reservoir Modeling & Simulation of Volatile Oil Reservoirs
1015 – 1045	Volatile Oil Reservoir Development Strategies



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1045 - 1115	Well Testing in Gas Condensate & Volatile Oil Reservoirs
1115 – 1145	Well Testing
1145 – 1230	Pressure Transient Analysis
1230 – 1245	Break
1245 – 1315	Specificity of Gas Condensate & Volatile Oil Well Tests
1315 -1345	Single-phase Versus Two-phase Pseudo-pressure Analysis
1345 - 1420	Gas Condensate & Volatile Oil Well Testing Techniques
1420 - 1430	Recap
1430	Lunch & End of Day Three

#### Day 4

Duy 4	
0730 - 0810	Analysis of Well Test Data
0810 - 0850	Practical Analysis Considerations
0850 - 0930	Compositional Simulation of Actual Well Tests
0930 - 0945	Break
0945 - 1015	Well Test Interpretation Challenges (Lean Versus Medium Rich Versus
	Rich Gas Versus Volatile Oil Behaviors)
1015 – 1045	Production Optimization in Gas Condensate & Volatile Oil Reservoirs
1045 - 1115	Overview of Production Optimization
1115 – 1145	Gas Condensate & Volatile Oil Production Optimization Techniques
1145 – 1230	Artificial Lift Methods in Gas Condensate & Volatile Oil Reservoirs
1230 - 1245	Break
1245 - 1315	Water & Gas Injection for Production Optimization
1315 -1345	Productivity Prediction & Remediation
1345 - 1420	Enhanced Oil Recovery Techniques
1420 - 1430	Recap
1430	Lunch & End of Day Four

### Day 5

Day 5	
0730 - 0810	Ultimate Recovery
0810 - 0850	Gas Injection for Enhanced Oil Recovery
0850 - 0930	Chemical & Thermal Methods for Enhanced Oil Recovery
0930 - 0945	Break
0945 - 1005	Evaluation of Enhanced Oil Recovery Techniques for Gas Condensate  &
	Volatile Oil Reservoirs
1005 – 1025	Field Development Planning
1025 – 1045	Gas Condensate & Volatile Oil Field Development Planning
1045 - 1130	Reservoir Characterization for Field Development Planning
1130 - 1145	Break
1145 – 1220	Field Development Economics & Risk Analysis
	Case Studies & Best Practices
	Review of Case Studies in Gas Condensate & Volatile Oil Reservoirs • Best
1220 - 1300	Practices in Gas Condensate & Volatile Oil Reservoir Management • Emerging
	Technologies in Gas Condensate & Volatile Oil Reservoir Management • Future
	Prospects for Gas Condensate & Volatile Oil Reservoirs
1300 - 1315	Course Conclusion
1315 - 1415	COMPETENCY EXAM
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course



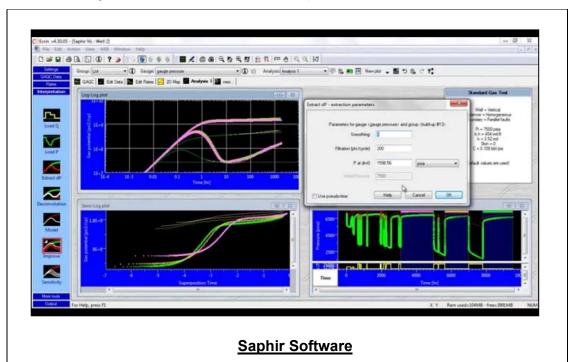
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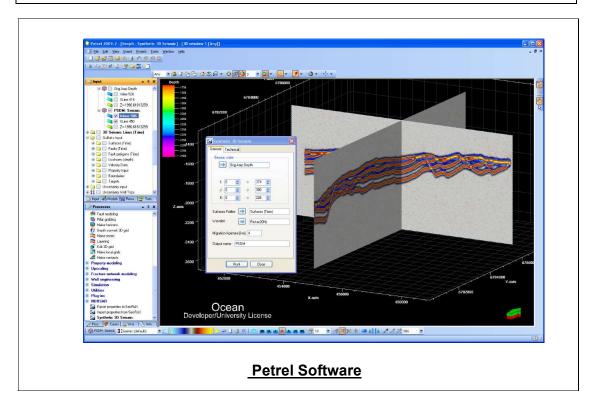




## Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using one of our state-of-the-art "Saphir" and "Petrel" software.





## Course Coordinator

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