

COURSE OVERVIEW DE0512

Operating Production Wells & Associated Equipment

Course Title

Operating Production Wells & Associated Equipment

Course Reference

DE0512

Course Duration

Five days/3.0 CEUs/30 PDHs

Course Date/Venue



Session(s)	Date	Venue
1	January 27-31, 2025	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
2	April 20-24, 2025	Oryx Meeting Room, Double Tree by Hilton Al Saad, Doha, Qatar
3	August 17-21, 2025	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
4	November 23-27, 2025	Al Khobar Meeting Room, Hilton Garden Inn, Al Khobar, KSA

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 Operating Production Wells & Associated Equipment. It covers the production wells and their importance in upstream operations; the operating principles of production wells including the components and functions of wellhead equipment; the various operational modes, capacity calculations and optimization techniques; the key process parameters and various techniques for accurate data collection and analysis; maintaining daily logs and the importance of accurate record-keeping for operational efficiency; the detailed procedures for startup and shutdown; the preparation steps for maintenance handover; and the reinstatement procedures after maintenance.



Further, the course will also discuss the common malfunctions in production wells and wellhead equipment; the troubleshooting techniques and initial corrective actions; the effective communication and coordination strategies; the instrumentation and control systems used in production wells; the abnormal conditions and reporting protocols to panel operator; maintaining production wells and ensuring consistent production and operational efficiency; handling emergency situations and unexpected issues; and implementing special procedures as needed.

During this interactive course, participants will learn the process parameters analysis, advanced log management, standards for maintenance and reinstatement and operational optimization techniques; coaching others in well operations and developing training programs for new operators; the troubleshooting techniques and effective coordination with upstream and downstream teams; managing risks in production well operations and risk mitigation strategies; the techniques for continuous improvement in well operations; and the feedback loops and improvement plans.

Course Objectives

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

- Apply and gain systematic techniques and methods on operating production wells and associated equipment
- Discuss the production wells and their importance in upstream operations
- Explain the operating principles of production wells including the components and functions of wellhead equipment
- Apply various operational modes, capacity calculations and optimization techniques
- Discuss key process parameters and carryout various techniques for accurate data collection and analysis
- Maintain daily logs and discuss the importance of accurate record-keeping for operational efficiency
- Employ detailed procedures for startup and shutdown, preparation steps for maintenance handover and reinstatement procedures after maintenance
- Recognize the common malfunctions in production wells and wellhead equipment and apply troubleshooting techniques and initial corrective actions
- Apply effective communication and coordination strategies and discuss instrumentation and control systems used in production wells
- Identify abnormal conditions and reporting protocols to panel operator
- Apply daily tasks for maintaining production wells and ensure consistent production and operational efficiency
- Handle emergency situations and unexpected issues and implement special procedures as needed
- Carryout process parameters analysis, advanced log management, standards for maintenance and reinstatement and operational optimization techniques
- Coache others in well operations and develop training programs for new operators
- Apply troubleshooting techniques and effective coordination with upstream and downstream teams
- Manage risks in production well operations and implement risk mitigation strategies
- Implement techniques for continuous improvement in well operations including feedback loops and improvement plans

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 intermediate overview of operating production wells and associated equipment for drilling operations section leaders, field supervisors, drilling engineering supervisors, production engineers, reservoir engineers, well engineers, petroleum engineers, oil field consultant, 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 Fee

Abu Dhabi	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Doha	US\$ 6,000 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	US\$ 5,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Al Khobar	US\$ 5,500 per Delegate + VAT . 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: -


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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.

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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. Stan Constantino, MSc, BSc, is a Senior Petroleum & Reservoir Engineer with over 35 years of Offshore & Onshore extensive experience within the Oil, Gas & Petroleum industries. His area of expertise include Reserves & Resources, Reserves Estimation & Uncertainty, Reservoir Characterization, Unconventional Resource & Reserves Evaluation, Oil & Gas Reserves Estimation, Methods for Aggregation of Reserves & Resources, Fractured Reservoir Classification & Evaluation, Sequence Stratigraphy, 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, 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, Screening of Oil Reservoirs for Enhanced Oil Recovery, 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 Reservoir Evaluation & Estimation, Oil Supply & Demand, Oil Contracts, Government Legislation & Oil Contractual Agreements, Oil Projects & Their Feasibility (revenue and profitability), 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 and Heavy Oil, Reservoir Volumetrics, Water Drive Reservoir, Reserve Evaluation, 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, Cased Hole 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.



Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop 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	Overview of Production Wells Introduction to Production Wells and their Importance in Upstream Operations • Types of Production Wells: Vertical, Horizontal, Multilateral
0930 – 0945	Break
0945 – 1030	Operating Principles of Production Wells & Wellhead Equipment Detailed Description of Operating Principles • Components and Functions of Wellhead Equipment
1030 – 1130	Operational Modes & Capacities Various Operational Modes (Production, Shut-In, Injection) • Capacity Calculations and Optimization Techniques
1130 – 1230	Daily Readings & Process Parameters Key Process Parameters: Flow Rate, Pressure, Temperature • Techniques for Accurate Data Collection and Analysis
1230 – 1245	Break
1245 – 1420	Recording & Registering Process Parameters Best Practices for Maintaining Daily Logs • Importance of Accurate Record-Keeping for Operational Efficiency
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day One

Day 2

0730 – 0830	Operational Procedures & Standards Overview of Standards for Normal Operations • Detailed Procedures for Startup and Shutdown
0830 – 0930	Startup & Shutdown Procedures Detailed Startup and Shutdown Procedures • Safety Considerations and Protocols
0930 – 0945	Break
0945 – 1100	Handover for Maintenance Preparation Steps for Maintenance Handover • Reinstatement Procedures After Maintenance
1100 – 1215	System & Equipment Malfunctions Common Malfunctions in Production Wells and Wellhead Equipment • Troubleshooting Techniques and Initial Corrective Actions





1215 – 1230	Break
1230 – 1420	Coordination with Maintenance Department Effective Communication and Coordination Strategies • Role of Maintenance in Ensuring Continuous Operations
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Two

Day 3

0730 – 0830	Instrumentation & Control Systems Overview of Instrumentation and Control Systems Used in Production Wells • Monitoring and Control Techniques for Optimal Performance
0830 – 0930	Initial Troubleshooting & Reporting Identifying Abnormal Conditions • Reporting Protocols to Panel Operator (OP-1)
0930 – 0945	Break
0945 – 1100	Routine Operational Activities Daily Tasks for Maintaining Production Wells • Ensuring Consistent Production and Operational Efficiency
1100 – 1215	Non-routine Operational Activities Handling Emergency Situations and Unexpected Issues • Implementing Special Procedures as Needed
1215 – 1230	Break
1230 – 1420	Process Parameters Analysis Advanced Techniques for Analyzing Daily Readings • Identifying Trends and Making Data-Driven Decisions.
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Three

Day 4

0730 – 0830	Advanced Log Management Enhanced Methods for Logging and Analyzing Operational Data • Use of Digital Tools and Software for Log Management
0830 – 0930	Standards for Maintenance & Reinstatement In-Depth Understanding of Standards • Ensuring Compliance with Operational and Safety Standards
0930 – 0945	Break
0945 – 1100	Operational Optimization Techniques Techniques for Optimizing Production Well Operations • Implementing Best Practices for Maximum Efficiency
1100 – 1215	Coaching & Mentoring Techniques for Coaching Others in Well Operations • Developing Training Programs for New Operators






1215 - 1230	Break
1230 - 1420	Troubleshooting Techniques <i>In-depth Troubleshooting Methods for Complex Issues • Case Studies and Practical Exercises</i>
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5


0730 - 0930	Instrumentation & Control Systems (Advanced) <i>Advanced Concepts in Instrumentation and Control • Latest Technologies and Innovations in Wellhead Control</i>
0930 - 0935	Break
1000 - 1100	Coordination with Other Teams <i>Effective Coordination with Upstream and Downstream Teams • Ensuring Seamless Operations Across Departments</i>
1100 - 1140	Operational Risk Management <i>Identifying and Managing Risks in Production Well Operations • Implementing Risk Mitigation Strategies</i>
1140 - 1225	Break
1225 - 1330	Continuous Improvement <i>Techniques for Continuous Improvement in Well Operations • Implementing Feedback Loops and Improvement Plans</i>
1345 - 1400	Course Conclusion <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course</i>
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Simulators (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 our state-of-the-art simulator “PROSPER”, “COMPASS” and “KAPPA” software.




PROSPER

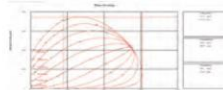


MULTIPHASE WELL AND PIPELINE NODAL ANALYSIS

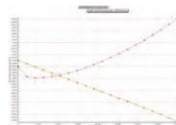
WELL AND PIPELINE MODELS




FULLY COMPOSITIONAL



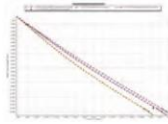
INFLOW/OUTFLOW RESPONSE




STEAM WELLS




OUTFLOW (VLPs) MODELS



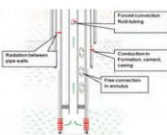
FLOW ASSURANCE



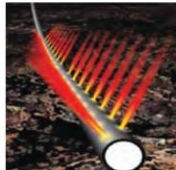
ARTIFICIAL LIFT SYSTEMS




THERMAL MODELLING



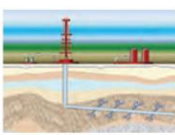
PERFORATION DESIGN AND PERFORMANCE

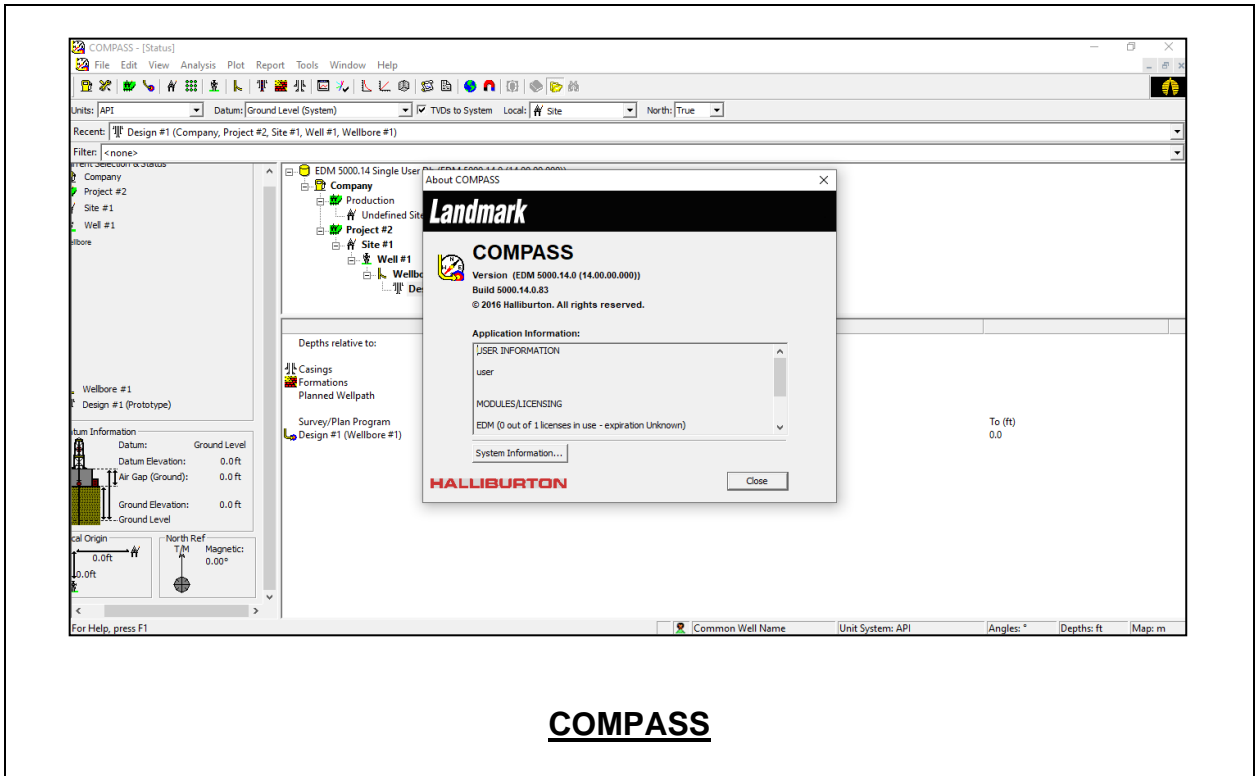


MULTILATERAL COMPLETIONS

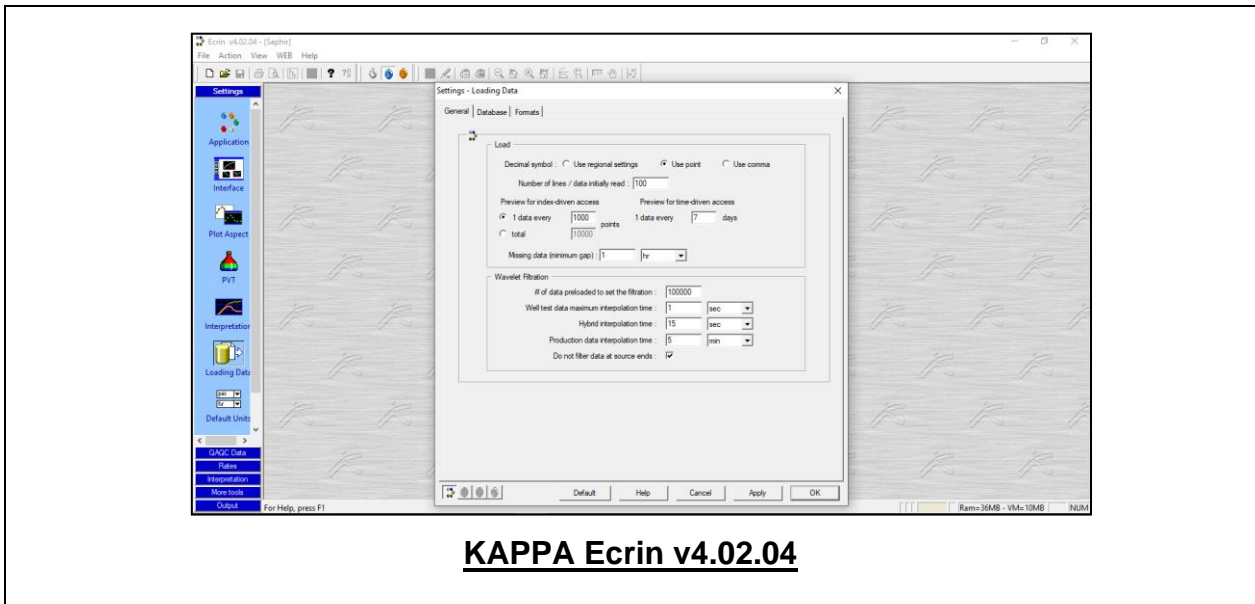


INFLOW (IPRs) MODELS

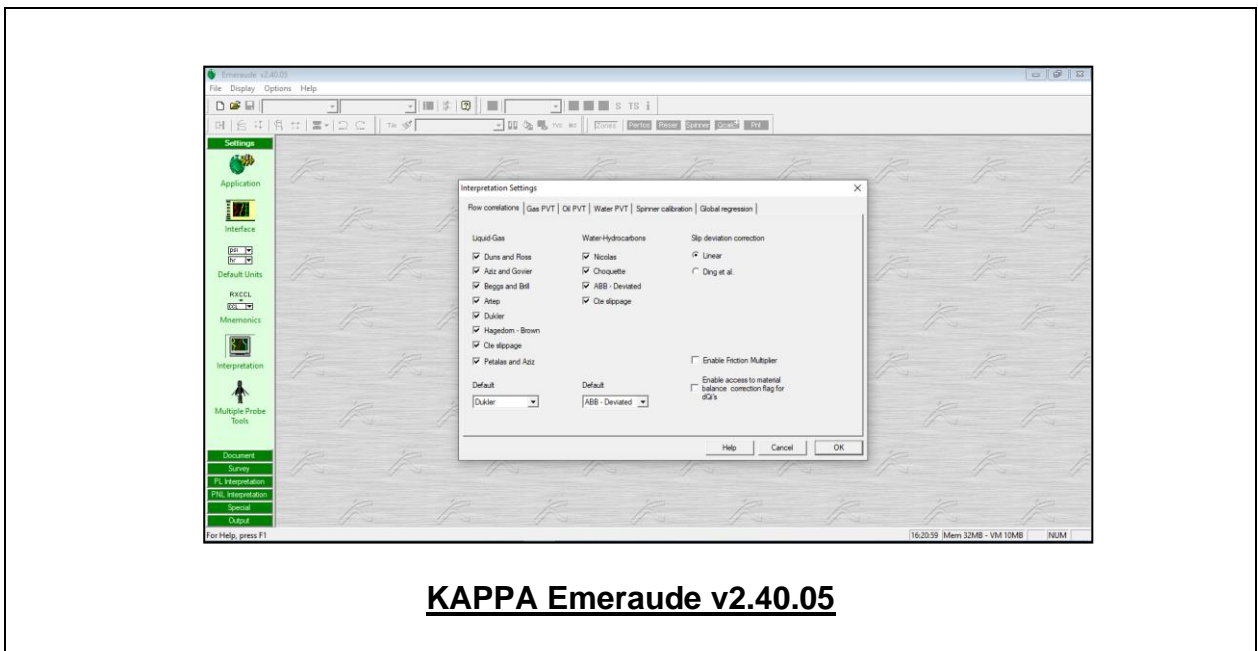
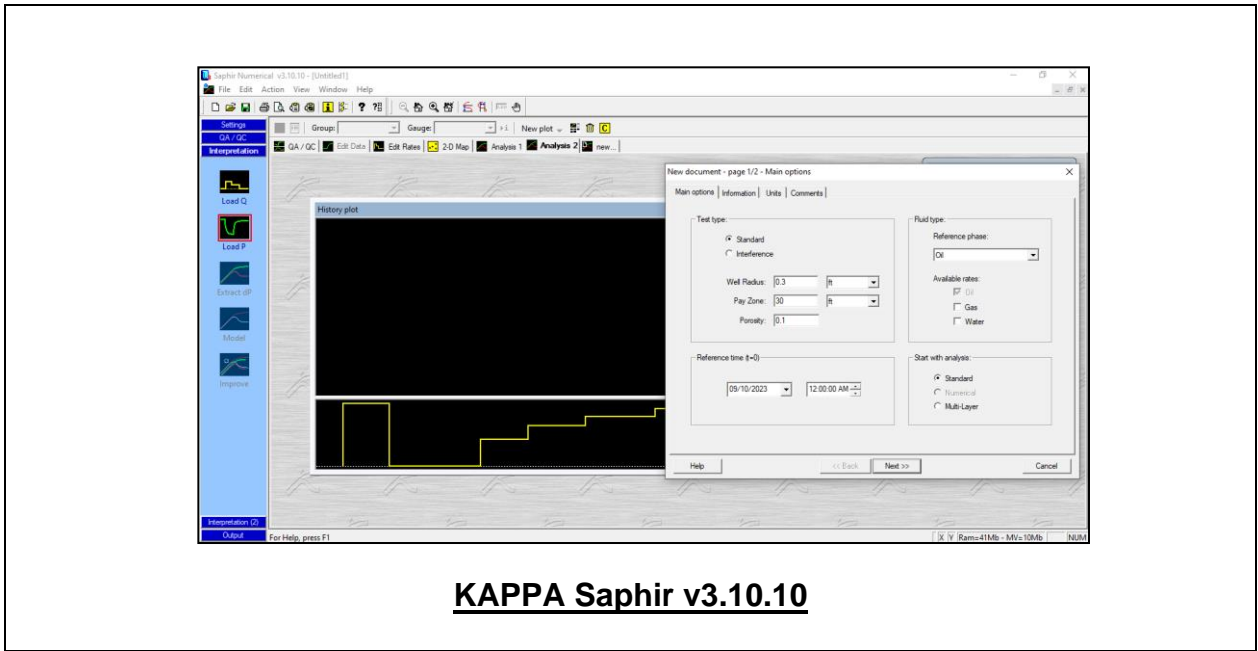




COMPASS



KAPPA Ecrin v4.02.04



Course Coordinator

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