COURSE OVERVIEW DE0512

Operating Production Wells & Associated Equipment



Course Title

Operating Production Wells & Associated Equipment

Course Date/Venue

Session 1: April 11-15, 2027/Meeting Plus 9, City Centre Rotana, Doha, Qatar
Session 2: October 03-07, 2027/Meeting Plus 9, City Centre Rotana, Doha, Qatar

Course Reference

DE0512

Course Duration

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 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/Outcomes & Benefits for the Participants

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

Our courses employ an interactive, learner-centred methodology that integrates theoretical knowledge with practical application. The training is delivered through a suitable combination of some or all of the following methods, selected according to the course content and learning objectives:

- Instructor-led presentations and facilitated discussions
- Practical workshops and participant presentations
- Hands-on exercises and real-world case studies
- Equipment demonstrations and technical drawings
- Hardware- and software-based simulations
- Gamification & Role Play in soft-skills courses only
- Virtual Reality (VR) and Augmented Reality (AR)
- Instructional videos and other relevant training resources

This blended approach encourages active participation, strengthens practical skills and supports the effective application of acquired knowledge in the workplace.

Learning Design & Customization

This course can be customized to the exact requirements of clients. Haward Technology is so proud of our huge capabilities in tailoring our courses to the training needs of our valued clients.

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

Haward's 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**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). 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.

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 **30 years** of **Offshore & Onshore** extensive experience within the **Oil**, **Gas & Petroleum** industries**.** His area of expertise include **Reserves & Resources**, **Reserves Estimation & Uncertainty**, **Reservoir** Characterization, **Unconventiona**l **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 Saturatiosn**, **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*

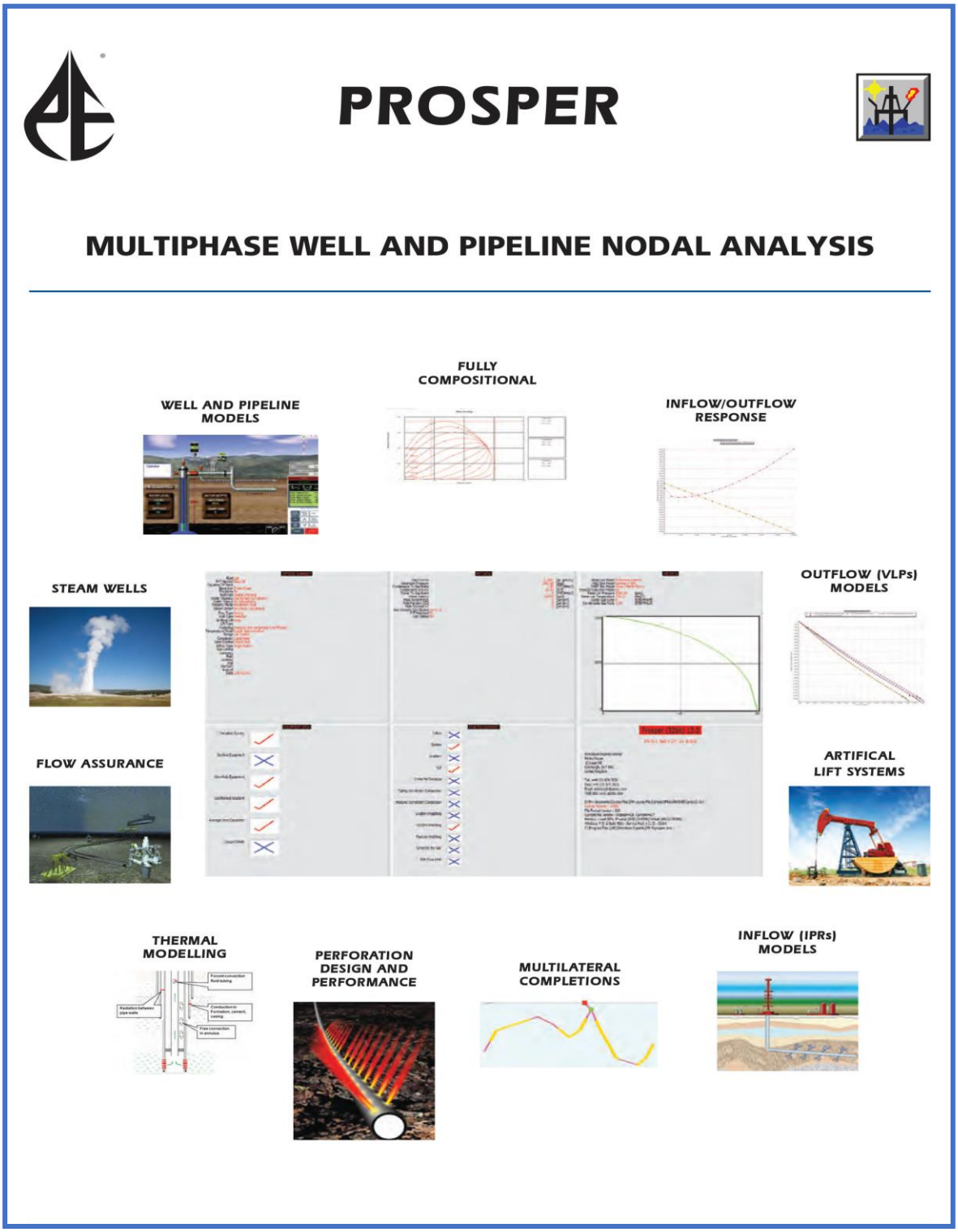
1215 – 1230	*Break*
1230 – 1420	***Troubleshooting Techniques*** *In-depth Troubleshooting Methods for Complex Issues • Case Studies and Practical Exercises*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

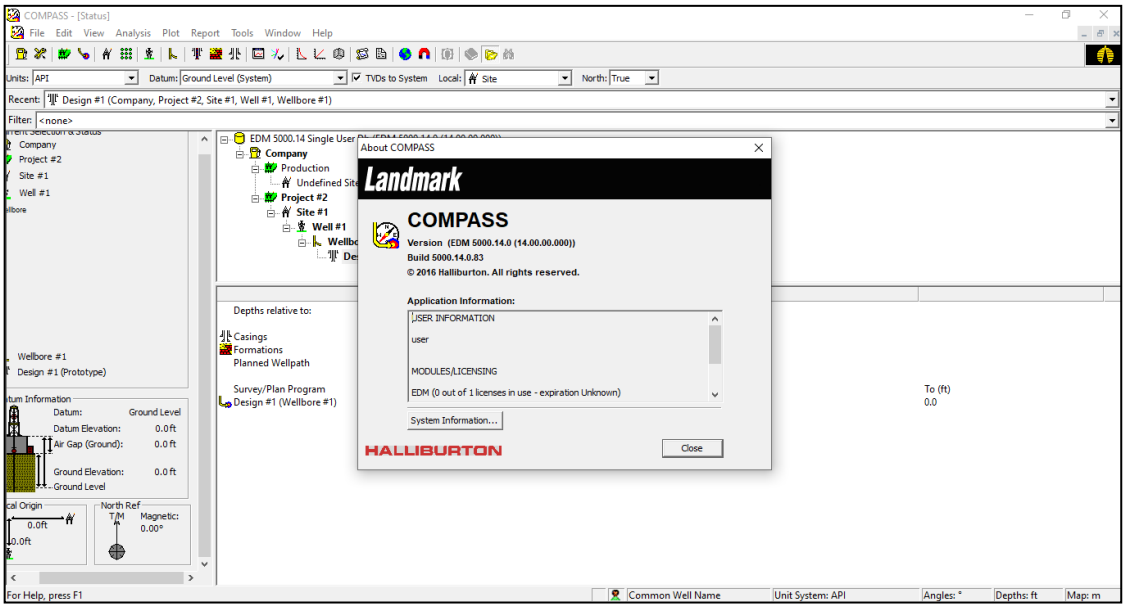
Day 5

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

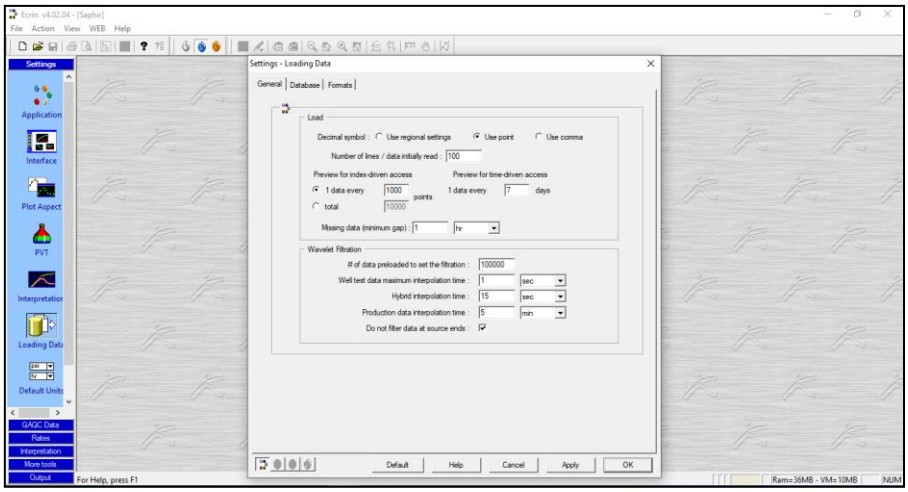
Simulators (Hands-on Practical Sessions)

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.

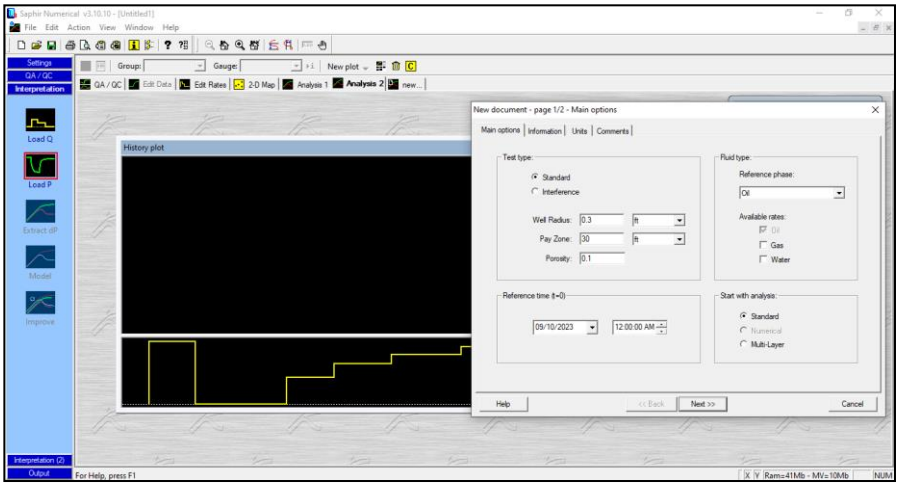




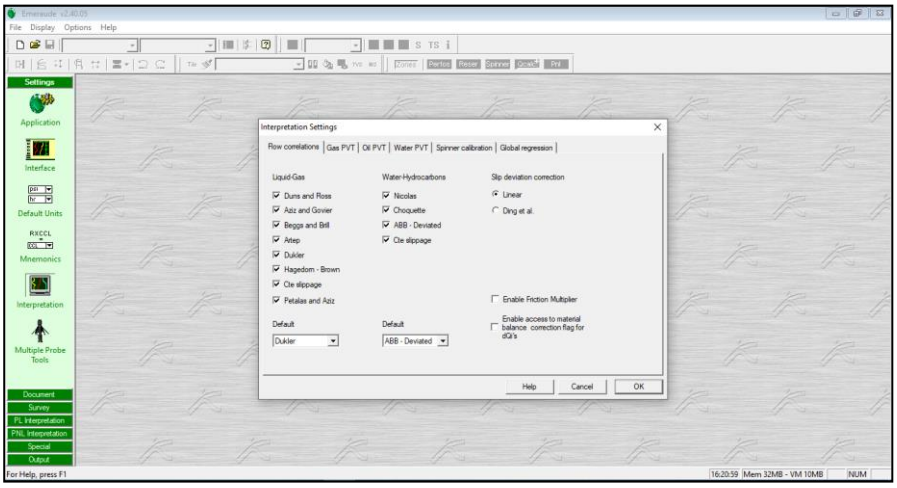
COMPASS



KAPPA Ecrin v4.02.04



KAPPA Saphir v3.10.10



KAPPA Emeraude v2.40.05

Course Coordinator

Jaryl Castillo, Tel: +974 6652 9196, Email: jaryl@haward.org