COURSE OVERVIEW DE1064
Cementing Operations

Course Title
Cementing Operations

Course Date/Venue
Please see page 4

Course Reference
DE1064

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.

Cementing is a fundamental element of effective well construction. By understanding cement chemistry, additive use, and lab procedures the participants will able to build a solid foundation to design and execute cement jobs. Mud removal and centralization will be taught so that the participants can apply effective processes to ensure cement job success.

Special purpose cements will be discussed in a way to show when they should and should not be used, as well as how they can be used to solve challenges encountered in complex and extreme well environments. Foamed, engineered particle sized, flexible, and salt cements will also be covered in detail.

During this course, participants will practice cementing calculations, as well as job design exercises and cement evaluation methods using real-life examples. Liner cementing and stage cementing jobs will be developed in the classroom. Cement design software will also be demonstrated.

Course Objectives

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

- Apply and gain an in-depth knowledge on cementing operations
- Demonstrate operational knowledge and understanding on how to use cementing additives properly to improve and reduce job costs
- Demonstrate operational knowledge and understanding on how cements are classified
- Demonstrate operational knowledge and understanding on how to interpret laboratory test results
- Perform primary cementing operations to include casing cementing, liner cementing, multi-stage cementing
- Conduct remedial squeeze jobs and selection of squeeze tools
- Perform remedial cementing plug operations to improve overall job success
- Perform the overall cementing operation i.e. perform primary and remedial cementing operations to include: casing cementing, liner cementing, multi-stage cementing, plug cementing, the use of cementing additives properly to improve and reduce job costs, interpret laboratory test results, conduct squeeze jobs and selection of squeeze tools
- Perform cement plug operations to improve overall job success and interpret cement sheath evaluation logs, all under minimum supervision
- Demonstrate operational knowledge and understanding on how to calculate cement slurry volumes the following types of casing jobs primary casing, intermediate casing, production casing and liners know how to calculate differential pressure to bump the cement plug and to calculate displacement volumes
- Demonstrate operational knowledge and understanding on how to identify cementing float equipment
- Discuss cementing operations, cement rheology, cementing equipment and cementing calculations and laboratory testing
- Explain well parameters to be considered for cementation, preparation of well and successful execution and how to use cementing additives properly to improve and reduce job costs
- Describe how cements are classified and how to interpret laboratory test results
- Demonstrate primary cementing operations, casing cementing, linear cementing, multi-stage cementing, remedial cementing and plug cementing
- Conduct squeeze jobs and selection of squeeze tools, perform cement plug operations to improve overall job, interpret cement sheath evaluation logs and calculate cement slurry volumes
- Explain types of casing jobs, primary casing, intermediate casing and production casing and liners.
- Calculate differential pressure to pump the cement plug and calculate displacement volumes

- Discuss ultra light weight cements, horizontal well cementing, evaluation of the job, reasons for failures and cement spacers and flushes
- Describe casing and squeeze tool hydraulics, tuned cementing, right angle set cement, API connection ratings and formulas and H.P.H.T cementing technology
- Explain squeeze techniques, squeezing fractured zones, packer squeeze tools, balance plug method and cementing problems

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 cementing operations for subsurface supervisors, senior engineers, mud engineers, cementing engineers, drilling engineers, drilling representatives, workover and completions personnel, drilling contractors, cement company personnel and for those who are responsible in cementing operations.

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.

Accommodation

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

Course Date/Venue

Session(s)	Date	Venue
1	May 10-14, 2026	Meeting Plus 9, City Centre Rotana, Doha, Qatar
2	June 28-July 02, 2026	Pierre Lotti Meeting Room, Movenpick Hotel Istanbul Golden Horn, Istanbul, Turkey
3	August 09-13, 2026	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
4	September 28-October 02, 2026	Ruben Boardroom, The Rubens at The Palace, Buckingham Palace Road, London, United Kingdom
5	November 01-05, 2026	Meeting Plus 9, City Centre Rotana, Doha, Qatar
6	November 09-13, 2026	Salon Expo, NH Hotel Plaza de Armas, Seville, Spain
7	December 20-24, 2026	Meeting Room 4, Four Seasons Hotel Cairo at Nile Plaza, Corniche El Nil, Garden City, Cairo, Egypt
8	January 17-21, 2027	Meeting Plus 9, City Centre Rotana, Doha, Qatar
9	March 14-18, 2027	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE

Course Fee

Doha	**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.
Istanbul	**US$ 8,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	**US$ 8,000** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
London	**US$ 8,800** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Seville	**US$ 8,800** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Cairo	**US$ 8,000** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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:

Dr. Chris Kapetan, PhD, MSc, is a **Senior Petroleum Engineer** with over **30 years** of international experience within the **onshore** and **offshore oil** & **gas** industry. His wide experience covers **Asset Management** Principles, Risks & Economics, **Petroleum Economics**, **Decision Analytic Modelling Methods** for **Economic Evaluation**, **Probabilistic Risk Analysis** (**Monte Carlo Simulator**) **Risk Analysis Foundations**, **Global Oil Demand**, Crude Oil Market, Global Oil Reserves, Oil Supply & Demand, Governmental Legislation, Contractual Agreements, **Financial** Modeling, **Oil Contracts**, **Project Risk Analysis**, **Feasibility Analysis** Techniques, **Capital Operational Costs**, Oil & Gas Exploration Methods, **Reservoir** Evaluation, **Extraction of Oil & Gas**, **Crude** Oil Types & Specifications, Sulphur, Sour Natural Gas, **Natural Gas Sweeting**, **Petroleum Production**, Field Layout, **Production** Techniques & Control, **Surface Production** Operations, **Oil Processing**, Oil Transportation-Methods, **Flowmetering & Custody Transfer** and **Oil Refinery**. Further, he is also well-versed in Enhanced Oil Recovery (**EOR**), Electrical Submersible Pumps (**ESP**), **Oil Industries Orientation**, **Geophysics**, Cased Hole **Formation Evaluation**, Cased Hole **Applications**, Cased Hole **Logs**, Production **Operations**, Production **Management**, Perforating **Methods & Design**, Perforating **Operations**, **Fishing** Operations, **Well & Reservoir** Testing, **Reservoir Stimulation**, **Hydraulic Fracturing**, **Carbonate** Acidizing, **Sandstone** Acidizing, **Drilling Fluids Technology**, Drilling **Operations**, **Directional** Drilling, **Artificial Lift**, **Gas Lift Design**, **Gas Lift Operations**, **Petroleum Business**, **Field Development Planning**, **Gas Lift Valve** Changing & Installation, **Well Completion** Design & Operation, Well **Surveillance**, Well **Testing**, Well **Stimulation** & **Control** and **Workover Planning**, **Completions** & **Workover**, **Rig Sizing**, **Hole Cleaning** & **Logging**, **Well Completion**, **Servicing** and **Work-Over Operations**, Practical **Reservoir Engineering**, **X-mas Tree & Wellhead** Operations, Maintenance & Testing, **Advanced Petrophysics/Interpretation** of **Well Composite**, **Construction Integrity** & **Completion**, **Coiled Tubing Technology**, **Corrosion Control**, **Slickline**, **Wireline & Coil Tubing**, **Pipeline Pigging**, **Corrosion Monitoring**, **Cathodic Protection** as well as Root Cause Analysis (**RCA**), Root Cause Failure Analysis (**RCFA**), **Gas Conditioning & Process Technology**, **Production Safety** and **Delusion of Asphalt**. Currently, he is the **Operations Consultant** & the **Technical Advisor** at **GEOTECH** and an independent **Drilling Operations Consultant** of various engineering services providers to the international clients as he offers his expertise in many areas of the **drilling & petroleum discipline** and is well **recognized & respected** for his process and procedural expertise as well as ongoing participation, interest and experience in continuing to promote technology to producers around the world.

Throughout his long career life, Dr. Chris has worked for many international companies and has spent several years **managing** technically **complex wellbore interventions** in both **drilling** & **servicing**. He is a **well-regarded** for his **process** and **procedural expertise**. Further, he was the **Operations Manager** at **ETP Crude Oil Pipeline Services** where he was fully responsible for optimum operations of crude oil pipeline, **workover** and **directional drilling**, **drilling rigs** and equipment, drilling of various geothermal deep wells and **exploration wells**. Dr. Chris was the **Drilling** & **Workover Manager** & **Superintendent** for **Kavala Oil** wherein he was responsible for supervision of **drilling operations** and **offshore exploration**, quality control of performance of **rigs**, **coiled tubing**, crude oil transportation via pipeline and abandonment of **well** as per the API requirements. He had occupied various key positions as the **Drilling Operations Consultant**, **Site Manager**, **Branch Manager**, **Senior Drilling** & **Workover Manager** & **Engineer** and **Drilling** & **Workover Engineer**, **Operations Consultant**, **Technical Advisor** in several petroleum companies responsible mainly on an **offshore** sour oil field (under water flood and gas lift) and a gas field. Further, Dr. Chris has been a **Professor** of the **Oil Technology College**.

Dr. Chris has **PhD** in **Reservoir Engineering** and a **Master's** degree in **Drilling & Production Engineering** from the **Petrol-Gaze Din Ploiesti University**. Further, he is a **Certified Surfaced BOP Stack Supervisor** of **IWCF**, a **Certified Instructor/Trainer**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management** (**ILM**) and has conducted **numerous short courses**, **seminars** and **workshops** and has published several technical books on **Production Logging**, **Safety Drilling Rigs** and **Oil Reservoir**.

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 Cementing Operations***
0900 – 0915	***Cement Rheology***
0915 - 0930	***Cementing Equipment***
0930 - 0945	*Break*
0945 – 1030	***Cementing Calculations & Laboratory Testing***
1030 – 1130	***Well Parameters to be Considered for Cementation***
1130 - 1230	***Preparation of Well & Successful Execution***
1230 – 1245	*Break*
1245 – 1345	***How to Use Cementing Additives Properly to Improve & Reduce Job Costs***
1345 - 1420	***How Cements are Classified***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0830	***How to Interpret Laboratory Test Results***
0830 – 0900	***Primary Cementing Operations***
0900 – 0930	***Casing Cementing***
0930 – 0945	*Break*
0945 – 1030	***Linear Cementing***
1030 – 1130	***Multi-Stage Cementing***
1130 - 1230	***Remedial Cementing***
1230 - 1245	*Break*
1245 – 1345	***Plug Cementing***
1345 – 1420	***Conduct Squeeze Jobs & Selection of Squeeze Tools***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0830	***Perform Cement Plug Operations to Improve Overall Job Success***
0830 – 0900	***Interpret Cement Sheath Evaluation Logs***
0900 – 0930	***Calculate Cement Slurry Volumes***
0930 – 0945	*Break*
0945 – 1030	***Types of Casing Jobs***
1030 – 1130	***Primary Casing***
1130 - 1230	***Intermediate Casing***
1230 - 1245	*Break*
1245 – 1345	***Production Casing & Liners***
1345 – 1420	***Calculate Differential Pressure to Pump the Cement Plug***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4

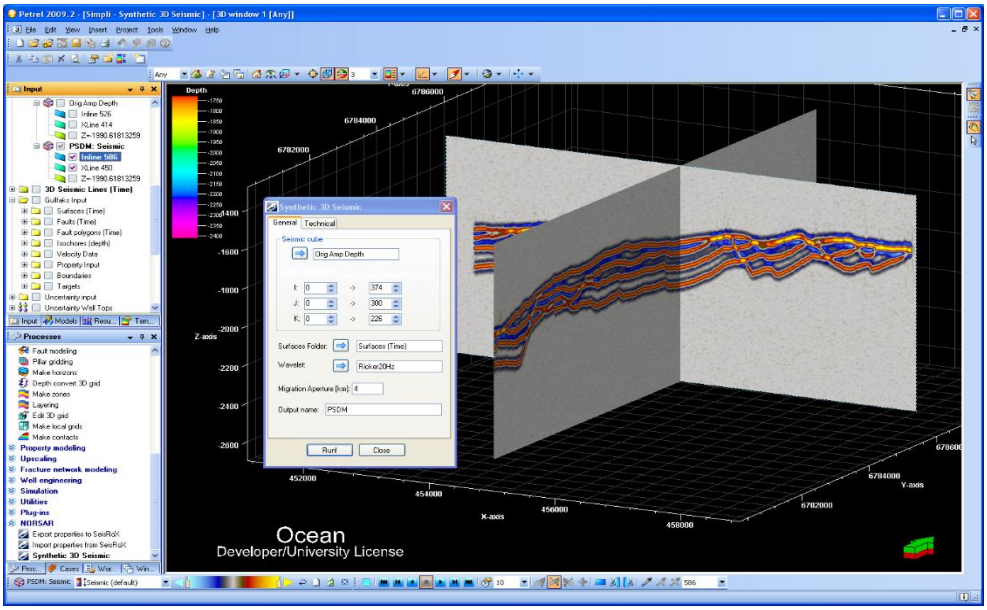
0730 – 0830	***Calculate Displacement Volumes***
0830 – 0900	***Cementing Float Equipment***
0900 – 0930	***Ultra Light Weight Cements***
0930 – 0945	*Break*
0945 – 1030	***Horizontal Well Cementing***
1030 – 1130	***Evaluation of the Job, Reasons for Failures***
1130 - 1230	***Cement Spacers & Flushes***
1230 - 1245	*Break*
1245 – 1345	***Casing & Squeeze Tool Hydraulics***
1345 – 1420	***Tuned Cementing***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5

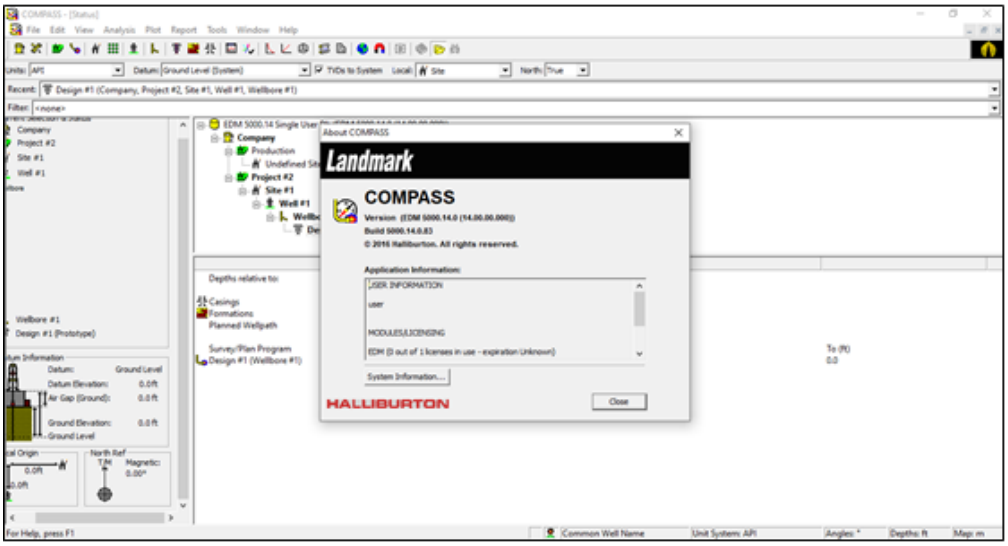
0730 – 0830	***Right Angle Set Cement***
0830 – 0900	***API Connection Ratings & Formulas***
0900 – 0930	***H.P.H.T Cementing Technology***
0930 – 0945	*Break*
0945 – 1030	***Squeeze Techniques***
1030 – 1130	***Squeezing Fractured Zones***
1130 - 1230	***Packer Squeeze Tools***
1230 - 1245	*Break*
1245 – 1315	***Balance Plug Method***
1315 - 1345	***Cementing Problems***
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Simulator (Hands-on Practical Sessions)

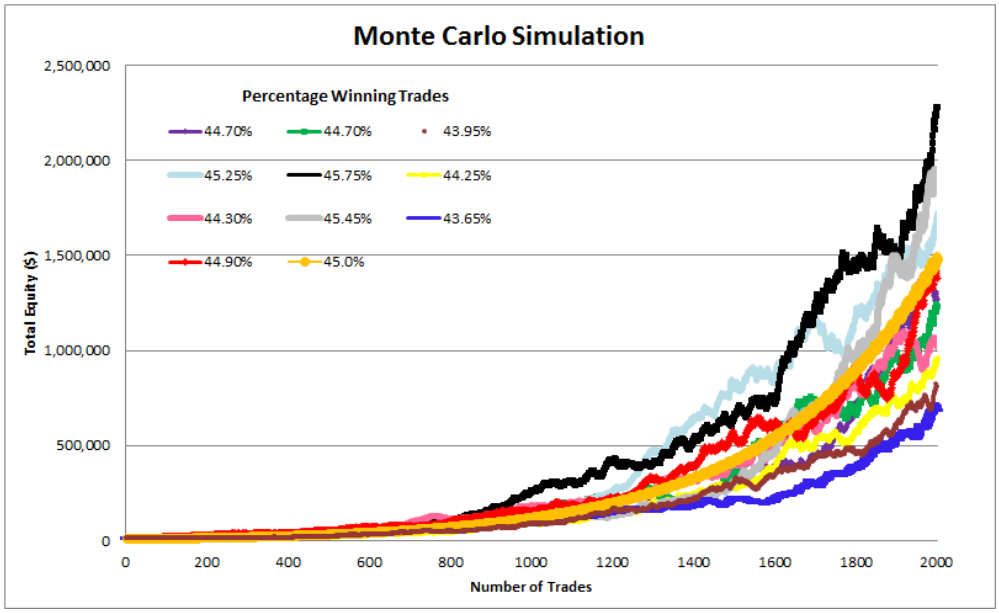
Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the "Petrel Software", "COMPASS", "Monte Carlo", "KAPPA", "Interactive Petrophysics (IP)", "ECRIN", "PIPESIM", "Eclipse Software" and "PROSPER" software's.



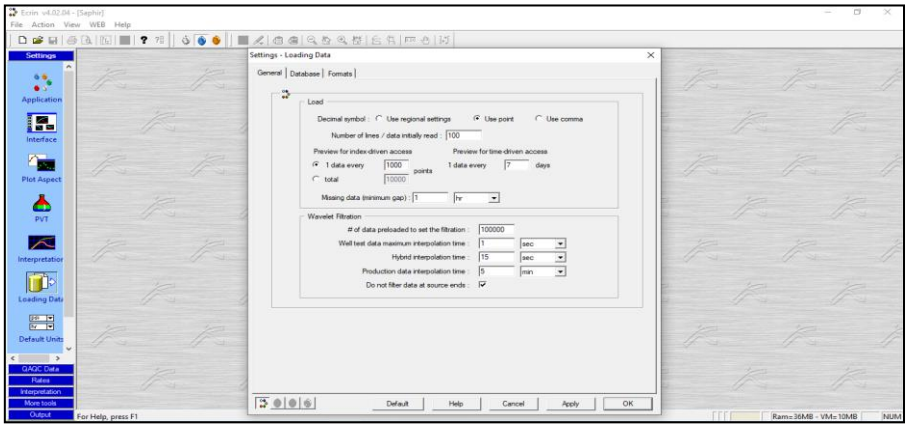
Petrel Software



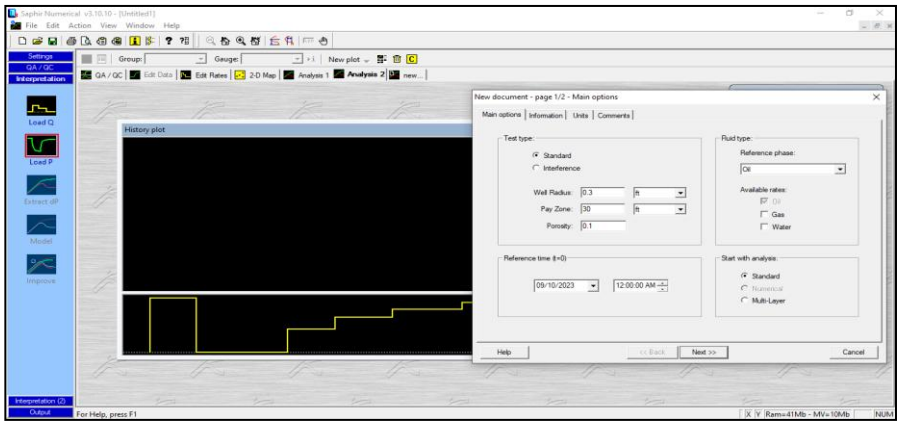
COMPASS



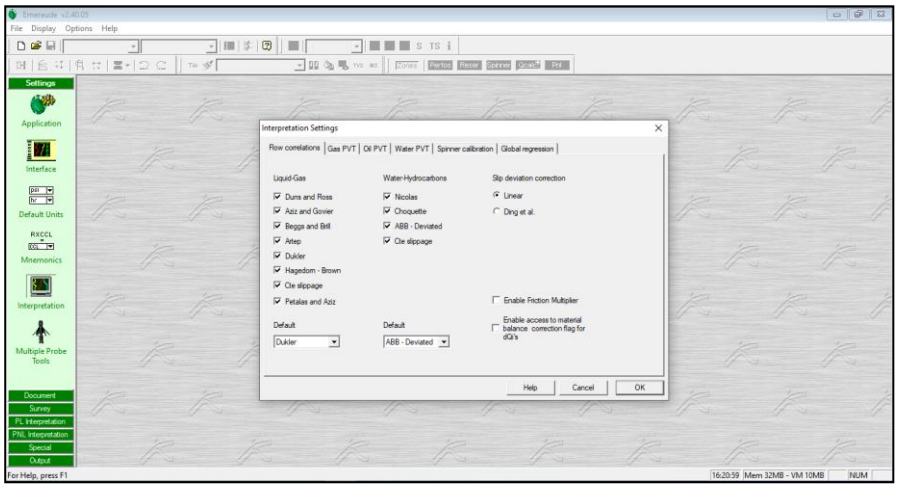
Monte Carlo Simulation



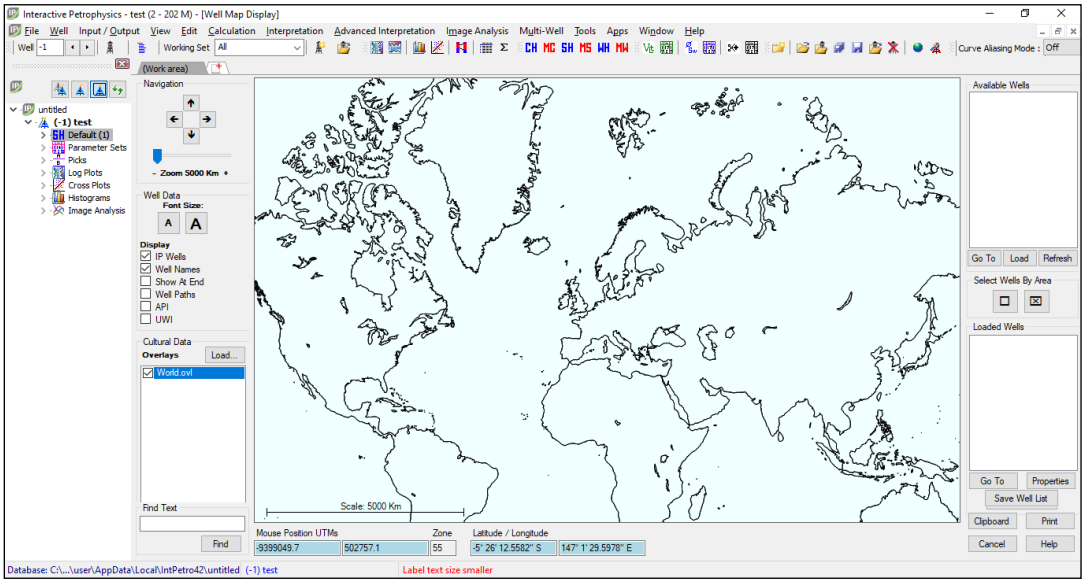
KAPPA Ecrin v4.02.04



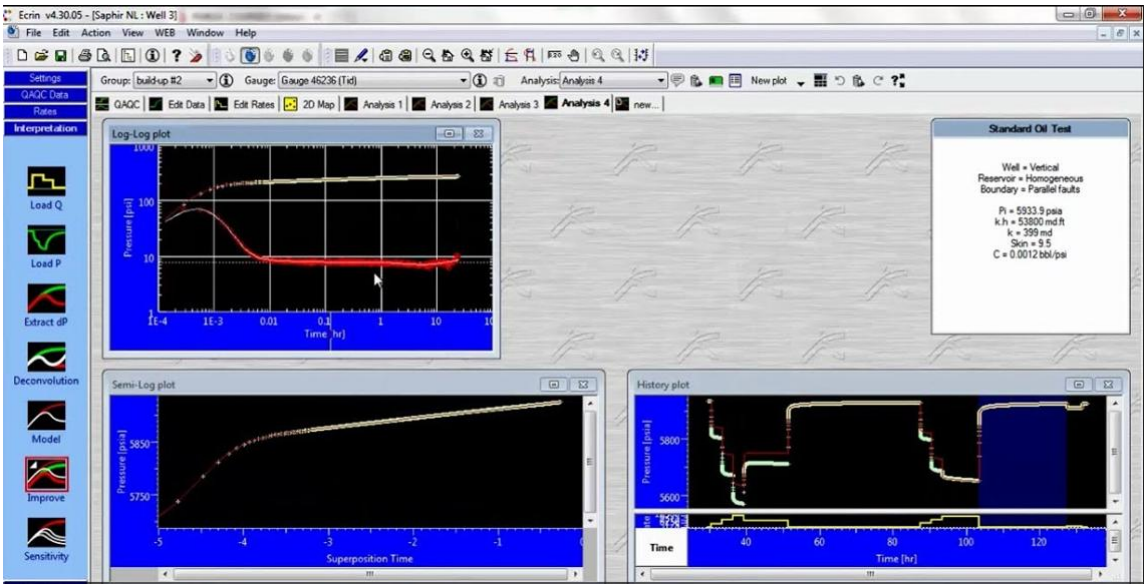
KAPPA Saphir v3.10.10



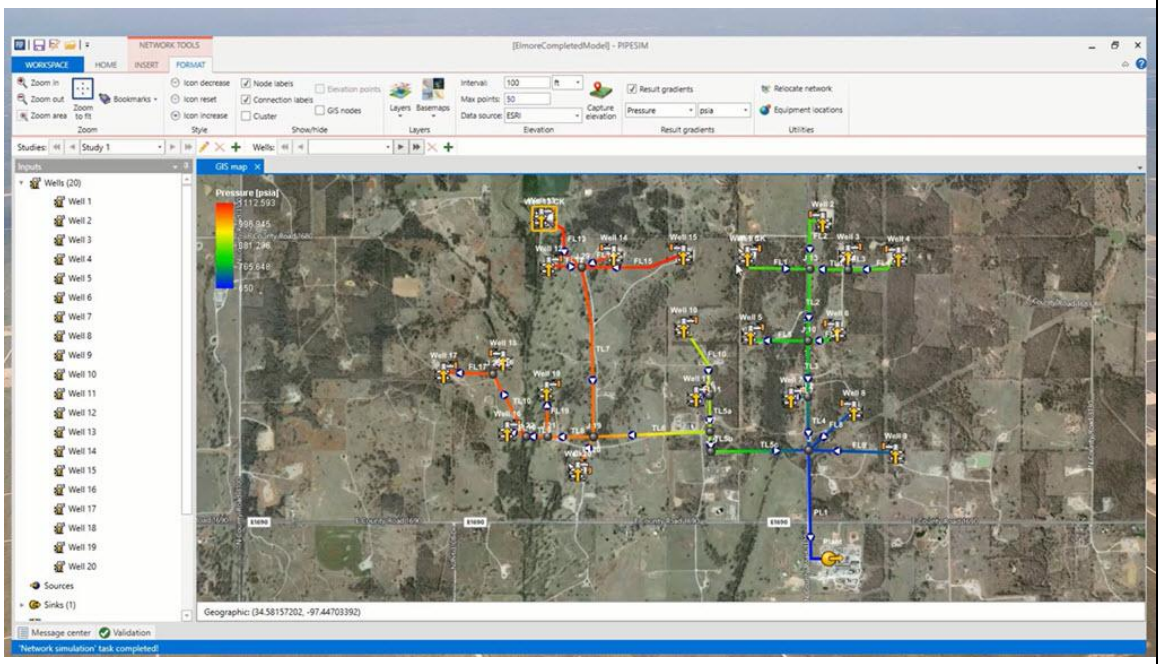
KAPPA Emeraude v2.40.05



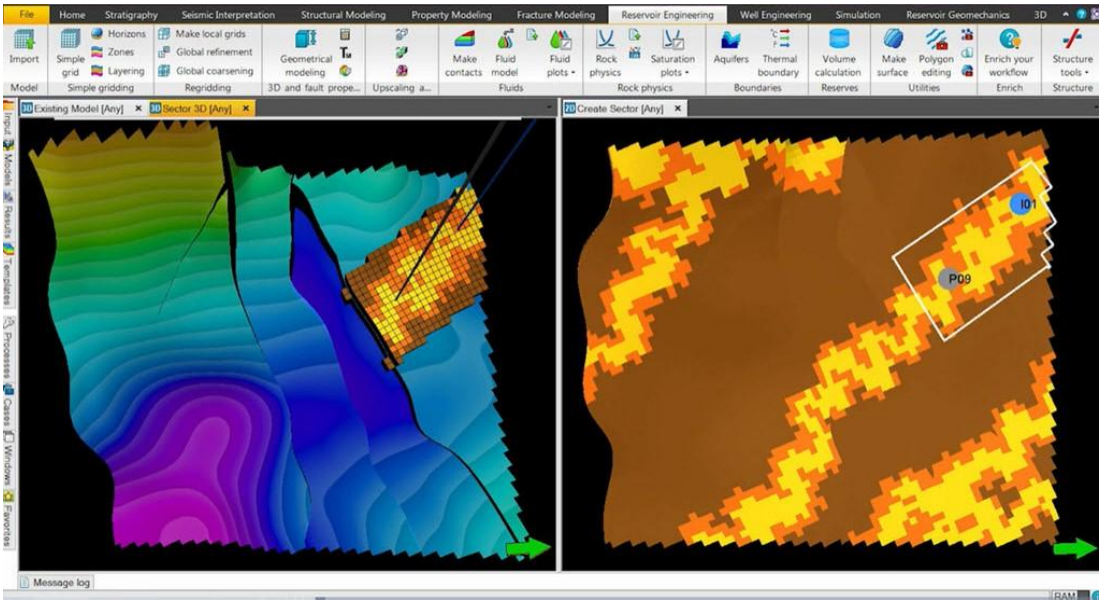
Interactive Petrophysics (IP) Software



ECRIN Software



PIPESIM



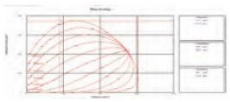
Eclipse Software

PROSPER

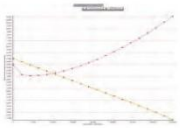
MULTIPHASE WELL AND PIPELINE NODAL ANALYSIS

WELL AND PIPELINE MODELS

FULLY COMPOSITIONAL

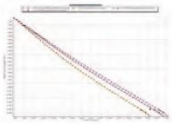


INFLOW/OUTFLOW RESPONSE



STEAM WELLS

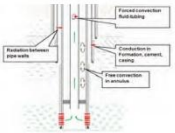
OUTFLOW (VLPs) MODELS



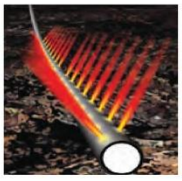
FLOW ASSURANCE

ARTIFICAL LIFT SYSTEMS

THERMAL MODELLING

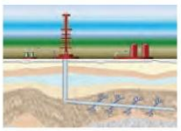


PERFORATION DESIGN AND PERFORMANCE



MULTILATERAL COMPLETIONS

INFLOW (IPRs) MODELS



Course Coordinator
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