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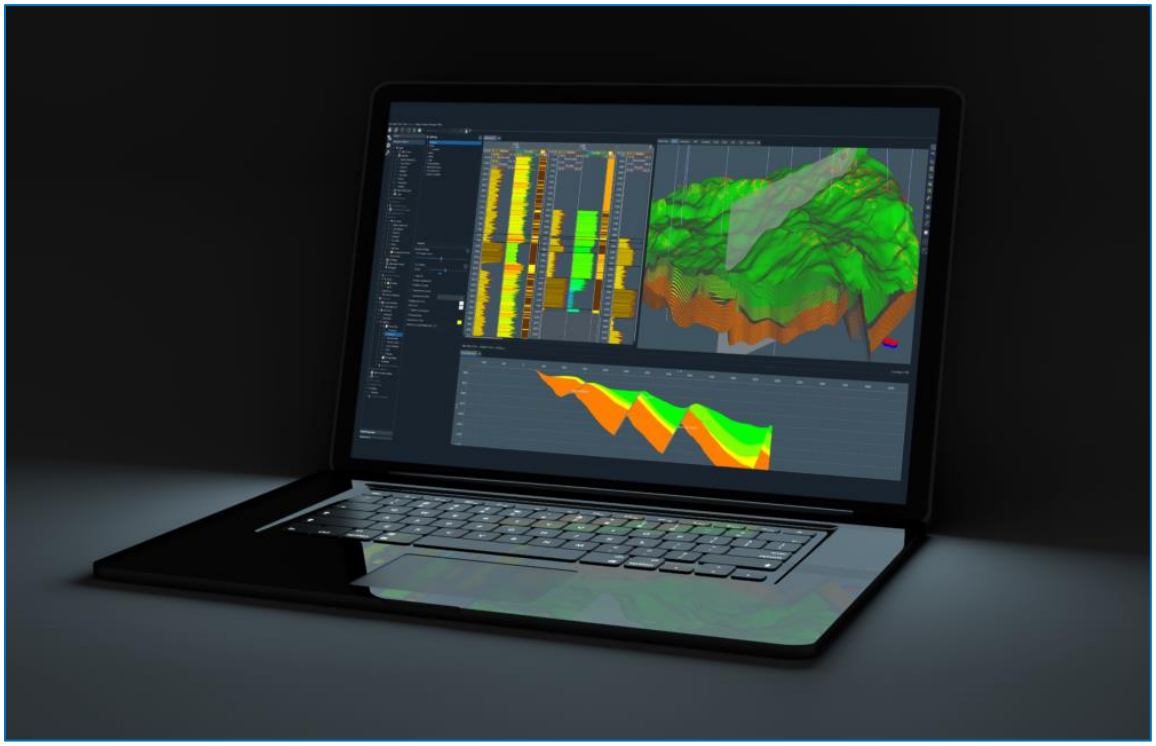

DE507:
tNavigator Reservoir Simulation

Training Description:

This training course is designed to provide reservoir engineers and simulation specialists with in-depth knowledge and practical skills in using TNavigator for reservoir simulation. TNavigator is a powerful reservoir simulation software renowned for its advanced capabilities in modeling complex reservoir behavior and optimizing production strategies. Through hands-on exercises, lectures, and case studies, participants will learn how to effectively utilize TNavigator to simulate various reservoir scenarios, analyze production performance, and make informed decisions for reservoir management and field development.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Gain a comprehensive understanding of reservoir simulation fundamentals and the role of TNavigator in reservoir engineering workflows.
- ✓ Learn how to navigate the TNavigator interface, access essential tools, and set up simulation projects effectively.
- ✓ Master the techniques for building accurate geological and reservoir models within TNavigator, including grid construction, property modeling, and fluid characterization.
- ✓ Explore advanced simulation workflows for modeling fluid flow, heat transfer, and chemical reactions in reservoirs.
- ✓ Understand different numerical methods and simulation algorithms used in TNavigator for solving reservoir equations.
- ✓ Learn how to interpret simulation results, analyze reservoir performance, and identify key reservoir parameters influencing production behavior.
- ✓ Apply optimization techniques and sensitivity analysis to enhance reservoir performance and maximize hydrocarbon recovery.
- ✓ Gain proficiency in model calibration, history matching, and uncertainty analysis to improve model reliability and accuracy.
- ✓ Work on real-world case studies and practical exercises to reinforce learning and problem-solving skills.
- ✓ Collaborate with peers and instructors to address challenges, share insights, and explore innovative simulation techniques.

Training Designed for:

This course is designed for or reservoir engineers, simulation specialists, petroleum engineers, and professionals involved in reservoir management, field development planning, and production optimization. Participants should have a basic understanding of reservoir engineering concepts and familiarity with reservoir simulation principles.

Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- Introduction to Reservoir Simulation and tNavigator
  - Overview of reservoir simulation principles and applications
  - Introduction to tNavigator software platform
  - Basic navigation and interface customization
  - Setting up a new project and data management in tNavigator

DAY TWO:

- Reservoir Modeling in tNavigator
  - Grid construction and reservoir discretization techniques
  - Property modeling for reservoir characterization
  - Fluid characterization and equation of state models
  - Model initialization and boundary conditions

DAY THREE:

- Fluid Flow Simulation
  - Introduction to fluid flow equations and reservoir flow mechanisms
  - Simulation setup for fluid flow in tNavigator
  - Reservoir simulation parameters and numerical methods
  - Running and monitoring reservoir simulation jobs

DAY FOUR

- Advanced Simulation Techniques
  - Modeling heat transfer and thermal effects in reservoirs
  - Simulation of chemical reactions and compositional variations
  - Advanced simulation workflows for complex reservoir scenarios
  - Interpretation and analysis of simulation results

DAY FIVE:

- Reservoir Management and Optimization
  - Reservoir performance analysis and production forecasting
  - Optimization techniques for reservoir management
  - Model calibration, history matching, and uncertainty analysis
  - Case studies and practical exercises
- Course Conclusion
- POST-ASSESSMENT and EVALUATION

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:
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