PRODUCT SHEET

TemisFlow™

Basin Modeling &
Petroleum System Analysis

With a long proven track record, TemisFlow™ is the ultimate solution for basin modeling and petroleum system analysis. It excels in assessing regionally-controlled hydrocarbon systems, identifying local drilling opportunities and quantifying the associated risks. Through its robust physics and versatility, TemisFlow™ capabilities also address emerging energy needs such as geothermal, natural hydrogen or CO2 storage.

Reducing the exploration risk

Basin modeling techniques are now the core of basin evaluation processes in many O&G companies. By integrating diverse geological, geochemical and engineering data in a consistent framework, TemisFlow™ dynamically simulates the evolution of a sedimentary basin through geological time, assessing generation, migration, trapping and accumulation processes, contributing thoroughly to play and prospect assessment. By predicting accumulated volumes in reservoir formations as well as the quality of trapped hydrocarbons through rigorous compositional modeling, TemisFlow™ is the ultimate solution for subsurface exploration teams to achieve prospect delineation and ranking.

Meeting today's exploration challenges

While meeting the continuous demand for higher performance, TemisFlow™ may be successfully applied in a wide range of challenging settings, including but not limited to:

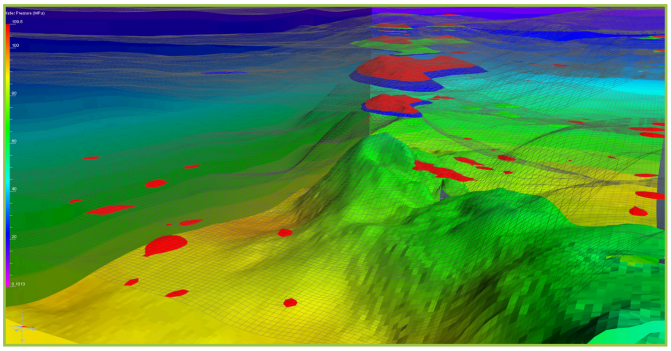
- Tectonically complex settings with salt and/or faults
- Severely overpressured or chemically compacted formations
- High-pressure/high-temperature reservoirs
- Thermogenic and/or biogenic hydrocarbon system
- Biodegraded reservoirs
- Unconventional resources
- Coalbed methane and heavy oil prone formations
- Intrusions (including salt, mud and thermal)
- Stratigraphic trapping
- Strong hydrodynamism (including flushing and OWC tilting)

A key tool for new energy exploration and CO2 storage

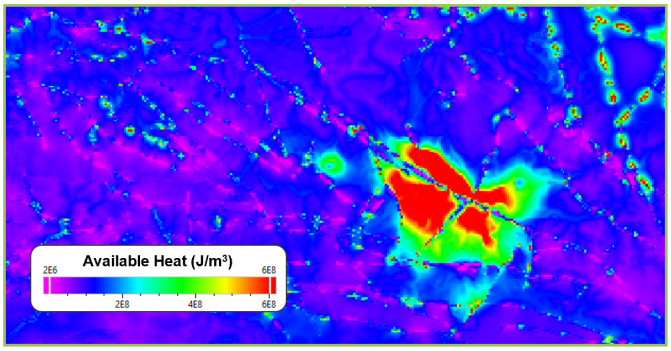
In addition to its proficiency in hydrocarbon assessment, TemisFlow™ has expanded its capabilities to address emerging energy needs. Through its robust modeling of deep hydrothermal processes, TemisFlow™ helps quantifying available geothermal energy for decision-making in the deployment of power stations. It also now enables the exploration of basins' potential for natural hydrogen by leveraging its capabilities for the modeling of hydrogen sources, migration and trapping. Finally, TemisFlow™ features dedicated functionalities to de-risk saline aquifers for CO2 storage. Through advanced workflows, the software assists in identifying suitable locations for CO2 storage, ensuring a secure, effective and sustainable sequestration.

Key benefits

- **Fully quantitative hydrocarbon play & prospect assessment**
- **Thermogenic, biogenic, unconventional resources appraisal**
- **Best-in-class pore pressure prediction**
- **Applicable to geothermal and natural hydrogen exploration, CO2 storage site screening**
- **Uncertainty and risk analysis**
- **Parallel computing for leveraging multi-core and cluster hardware**



Trap Charge Assessment: oil and gas accumulations in several reservoirs, pressure field in background.



Available heat in place at a 1000m depth for geothermal energy prospection.

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