

Unconventional plays

4 Geoscientist challenges shaping your success



Rapid evaluation
& acreage
prioritization

Challenges

Unconventional reservoirs span large areas with numerous drill locations, posing challenges for geoscientists. To maximize investment returns, they must evaluate geological characteristics, economic viability, and environmental factors while adhering to tight budgets and timelines.

Solutions

- **Data Integration for Rapid Prioritization:** Seamlessly integrates lease, well, and subsurface data to enable rapid prioritization of drillable locations and land holdings.
- **Advanced Visualization for Strategic Evaluation:** Supports the evaluation of multiple drilling scenarios, providing a holistic view of the basin and optimizing resource allocation.



Integrated
geological
& geophysical
interpretation

The subsurface in unconventional plays can range from highly heterogeneous to structurally and stratigraphically complex. Targeting the optimal stratigraphy requires integrating all relevant data to fully understand subsurface variations.

- **Advanced Interpretation Tools for Accurate Mapping:** Geophysical interpretation tools (featuring 2D/3D visualization and seismic attribute analysis like AVO and fault detection) enable accurate mapping of complex seismic signatures.
- **Dynamic Geological Modeling:** Geological interpretation and structural mapping tools generate integrated maps that update dynamically with new well data, highlighting essential geological trends for successful drilling.



Accurate
reservoir
characterization
& understanding

Tight unconventional reservoirs require precise predictions of rock properties to optimize hydrocarbon recovery and minimize the risk of costly dry holes.

- **Seamless Reservoir Modeling:** Integrates geological and geophysical interpretations with petrophysical attributes to analyze shale volume, Total Organic Carbon (TOC), and fracability.
- **Reliable Data for Smarter Decisions:** Provides clearer insights into reservoir behavior, supporting effective well planning and smarter resource allocation.



Real-time well
placement &
completions
optimization

In unconventional plays, even minor deviations in wellbore placement or completion design can lead to significant economic impacts. Optimizing lateral well placement and completions requires real-time adjustments based on the latest well and subsurface data.

- **Geosteering for Real-Time Decision Making:** Geosteering tools provide real-time wellbore tracking and dynamic depth conversion, allowing drillers to adjust trajectories and stay within the most productive zones.
- **Optimized Completions with Offset Well Data:** The completions optimization workflow leverages offset well data to refine stimulation designs, improving recovery and cost efficiency.

Kingdom™ Software key benefits



Increased Operational Efficiency

Accelerates subsurface interpretations with AI and automation for quicker decisions.



Holistic Data Management

Seamlessly integrates geological, geophysical, and engineering data into a single platform.



Enhanced Accuracy in Interpretations

Facilitates precise modeling and analysis for reliable, data-driven decisions.



Optimized Resource Allocation

Maximizes ROI by prioritizing the best drilling opportunities.



Affordable and Scalable Solutions

Offers cost-effective, scalable solutions for all play types and sizes.