



IHS Markit™

Geoscience

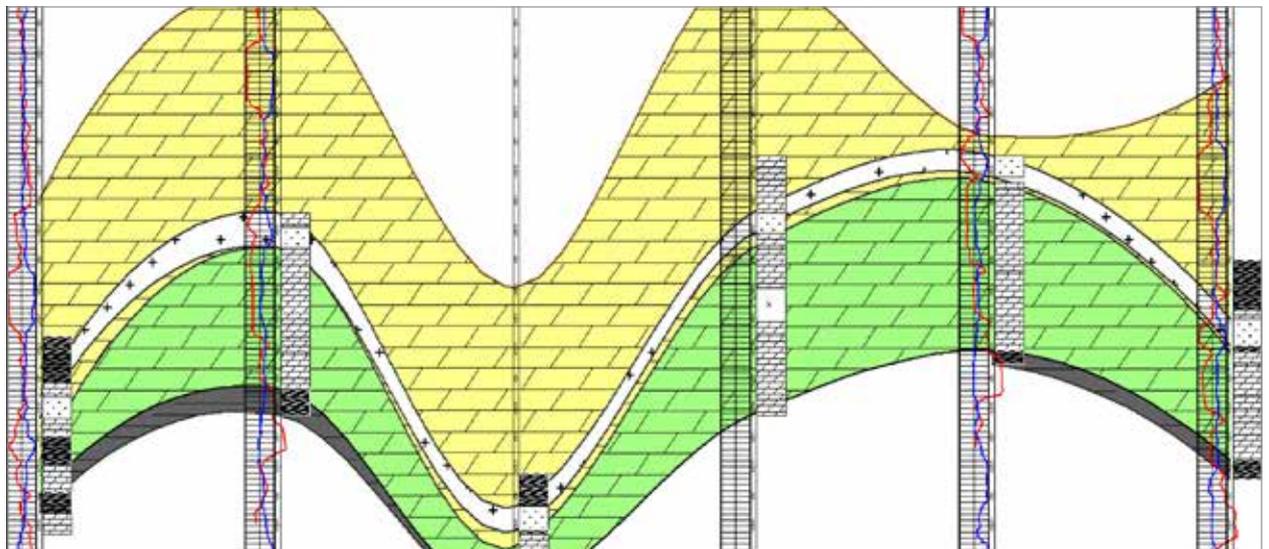
Higher productivity and better collaboration
through practical geoscience solutions

The IHS Markit geoscience platform is designed to deliver new levels of efficiency and collaboration for the geoscience workflow, ensuring the integration of work processes across the entire asset team with one key objective: to help you make more informed decisions.

Optimized for unconventional, conventional and deep water plays, our geoscience solutions help you assess the potential of regional geologic trends or discover where assets are underperforming, all within a singular, cost effective and easy to learn environment.

Today's interpreters have to focus on seeking efficiencies and reducing costs, is it any wonder they are demanding increased productivity in their day-to-day tools?

This is why our geoscience solution combinations are simplified, to give you access to advanced geoscience/scientific tools that are affordable, easy to learn and install, and come with excellent support and training.



IHS Markit offers a modern and streamlined toolkit capable of high performance results with the ability to support 1,000,000+ well environments.

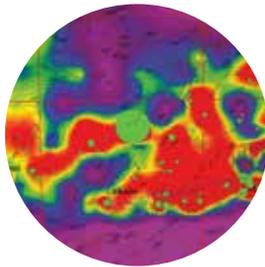
Geology

An integrated interpretation environment that unravels the complexities of subsurface reservoirs.

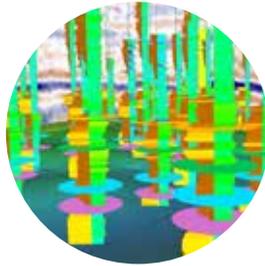
Our toolkit includes fit-for-purpose solutions that effectively integrate geology and engineering with mapping, well logs, cross sections, production analysis, directional drilling and 3D visualization.

IHS Markit supports multi-user environments that require integrated workflows, all within your budget.

Our comprehensive toolkit allows for integrated asset team collaboration, large data volume efficiency, and an integrated interpretation environment to evaluate well data that unravels the complexities of subsurface reservoirs, and plans where to target the next opportunity.



Petra Geology

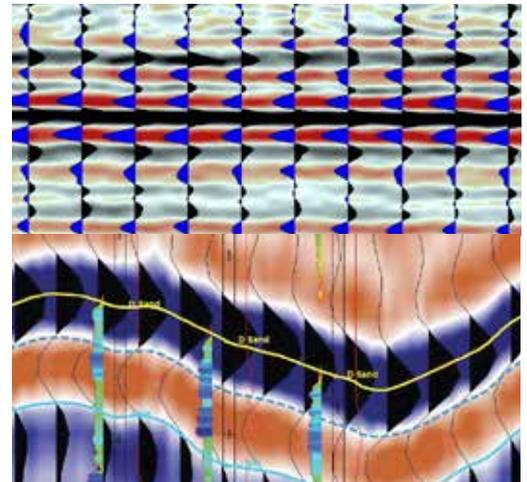


Kingdom Geology

For Petra users who want:

- Familiar Petra Workflows
- Integrated Geophysics

- Kingdom Geosteering
- Modern 64-bit Platform
- Multi-User SQL Database



Geophysics

Faster interpretation and data analysis through streamlined functionality from prospect to production, basic and advanced interpretation.

IHS Markit provides the most widely trusted geophysical interpretation solution in the world, from basic 2D/3D interpretation and prospect generation to advanced interpretation and seismic petrophysics.

Whether you are developing unconventional assets or exploring deep water environments, with our geophysics toolkit you can predict faults and fractures

with pinpoint accuracy, tie seismic as you geosteer or interpret tops, and quickly model and predict reservoir properties. Whether you need to visualize and interpret 2D and 3D seismic data, condition pre-stack gathers, analyze microseismic data, or model the effects of different porosity, lithology, or fluids on 1D, 2D and pre-stack seismic models, Kingdom has the tool for you.

Through our fit-for-purpose and affordable solutions, you have the freedom to choose what you need for each step of your geoscience and engineering workflow.

How IHS Markit's geoscience solutions helps separate you from your competitors.

Modern Data Management

- Enterprise data management with simultaneous multi-user collaboration and tools for large projects and numbers of users
- A high performing and scalable common database to load or interpret data once
- Avoid duplication, outdated or lost data, and waiting because of complex data loading

Collaborative Geosteering

- Improve drilling time and accuracy while managing risks
- Accurately predict and stay in pay zone
- Streamline collaboration for geoscience and engineering

Integration

- Compare data for geologic, analytic, economic or spatial relationships
- Make connections between data types and interpretations
- Analyze and improve the completion strategy by leveraging frac and completions data
- Connect to specialist tools and advanced 3rd party connections if needed
- Connect to IHS E&P data
- Access built-in functionality for land, engineering, production, economics, petrophysics and completions workflows and data analysis to gain faster insights without the hassle of export

GIS Integration & Presentation Mapping/Dynamic Integrated Mapping

- Provide quality presentation mapping including layer based mapping and montaging
- Access support for spatial database, SDE connectivity, file geodatabase, Esri map services and shape file exports

Advanced Fault Prediction

- Discover insights into fractures and fault systems with the industry's most advanced fault attributes
- Access more precise fault positions and better connect to fault segments due to industry leading fault algorithms and noise reduction
- Leverage a dynamic global fault engine that adapts to changing geology, dip and azimuth with our patented illuminator technology, mimicking how your brain perceives faults orientation patterns, and then applying this technology in a global 3D solver

Services, Support and Training

- Services for support including installation and start up, data loading, platform conversions, project repair and making assistance, or even migration services for existing projects and user settings
- Access to Kingdom MyAccount training videos and resource materials
- Access the online User Community, built for current customers and staff to exchange ideas and offer or receive support from your peers
- Access experienced trainers

Bundle and Save with Kingdom

Geoscience Bundles - All the technology you need at one low price

	2d/3dPAK	EarthPAK	VuPAK	AVOPAK	Rock Solid	1D Synthetics (GeoSyn 1D)	2D Seismic Petrophysics (GeoSyn 1D)	Geosteering	Microseismic	VelPAK	Inversion	Petra
Kingdom Geoscience	X	X	X	X	X	X	X	X	X			
SME	X	X	X	X	X	X	X	X	X	X	X	
Unconventional	X	X	X			X		X	X			
Interpreter	X	X	X					X	X			
Kingdom Geophysics	X		X			X	X		X			
Express+	X		X			X			X			
Express	X		X						X			
+ AVO & RSA				X	X							
+ AVO, Attribute & Inversion				X	X						X	
Kingdom Geology		X	X					X				
Petra Geology												X

Need both geological and geophysical toolkits? IHS Markit has the right combination of tools to create the solution best suited to your needs.

How IHS Markit's geoscience solutions benefit you



Better Collaboration

- Work collaboratively so geologists and engineers can avoid unproductive geology and make better predictions
- Share common applications across disciplines including links to 3rd party specialist applications
- Work in robust simultaneous multi-user environments
- Connect the geosciences with well, reservoir, land, drilling, production and completions data to gain unparalleled insight



Higher Productivity

- Work Smarter, not harder, and be the first to find new oil and gas opportunities
- A better intuitive interface and user experience means increased performance on large projects, reduced cycle times because of streamlined workflows, and reduced waiting and bottlenecks with shared data and workflows
- Access patented illuminator volumes that give crisp images of faults and fractures, seismic picking that delivers new levels of control and productivity for base on our patented seeker technology
- Estimates of improved interpretational efficiency gains are 20%+, equating to a minimum of one extra working day per week for each interpreter who uses our solutions





Ease of Use

- Our software solutions are simple, easy to maintain and takes little time to master; spend less time learning software and more time on geoscience and engineering
 - Simplify data connections to IHS Markit E&P data
 - Exceptional training and support through built-in videos, training and tutorials
 - Prevent errors and duplication
 - Streamline collaboration with workflow automation
- Important for smaller environments where one geoscientist must perform both geological and geophysical duties



Lower Cost of Ownership

- Perform 90% of your workflow in less of the time for half of the cost
- Increase performance and scalability while lowering the cost of high technology software and systems
 - **Enterprise** – control costs with pay for use, open access, and volume discount programs
 - **Teams** – save on bundled technology, combined software and data, and lower costs for IT and infrastructure
 - **Individuals/Contractors** – get only what you need to get the job done on a budget



The IHS Markit Advantage

We are the global leader integrating geoscience information, analytics and expertise.

We provide one solution to access and integrate our gold standard E&P Data with our flagship software solutions to gain valuable context and insight.



For more information www.ihsmarkit.com/geoscience

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About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.