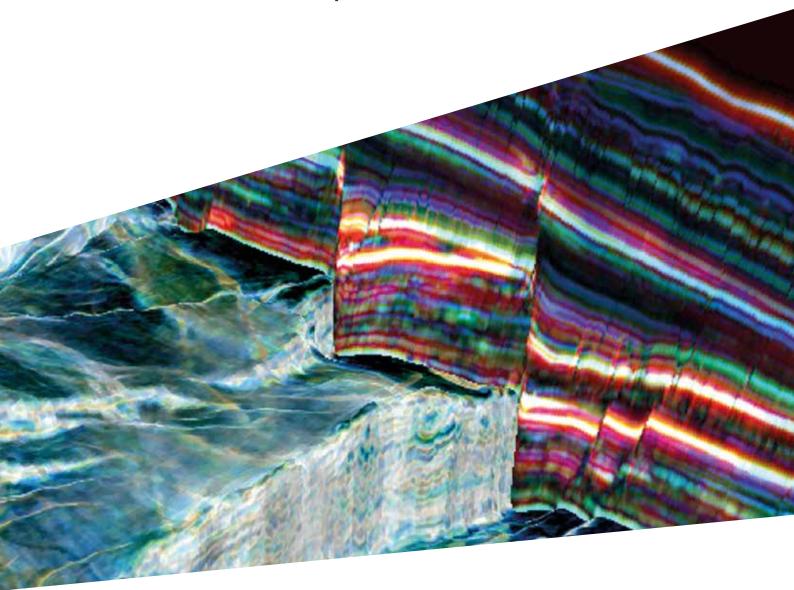


### Seismic Interpretation has Evolved





## What if you could see the geology and fluids in your seismic cube? Wouldn't that make life easier?

Working closely with our customers over the past few years, we have built a solid framework for our Cognitive Workflow, which is the ability to 'see' the actual geological features hidden in the data. We progressed the science of seismic frequency blending and were the first company to innovate and to lead the field in clearly visualising the internal reservoir geology. Using these methods we have helped companies find more oil and gas and assisted with defining better extraction strategies.

Having made that early step-change in visual interpretation, we are about to innovate once more by launching into the future with machine learning, integrated with new interpretation techniques based on high resolution data. Our vision is to help monitor fluid flow in the reservoir, to support decision making and productivity.

Supporting these ground-breaking new workflows are the tasks performed by Geoscientists. These are being introduced by GeoTeric; extracting the geology and building the reservoir framework, cross-section interpretation and map visualisation. Volumetric calculation based on fault segmented reservoir models will be released soon. Newly released processes verify interpretation and geological hypotheses against the original seismic to quantify the uncertainty and understand the risks. We want to work with you to realise our vision and help you focus on geological descriptions and fluid movements rather than data management. Please join us on our journey.

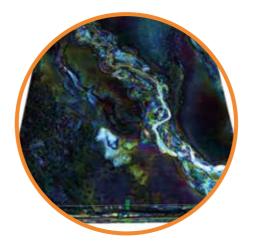


Jan Grimnes Chairman

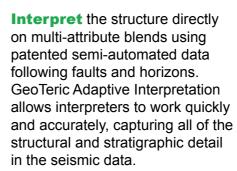


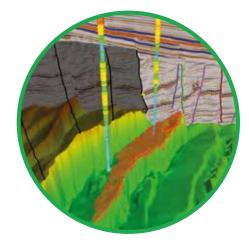
### **Reveal – Interpret – Validate**

GeoTeric develops software that extracts all of the information available in the subsurface data, in conjunction with artificial intelligence, to accelerate the geoscientists understanding of the greatest uncertainty present in an E&P company's business.



Reveal the geology in your asset using specifically designed intuitive attribute workflows to co-visualise multiple volumes simultaneously, each illuminating different geophysical responses in your data.





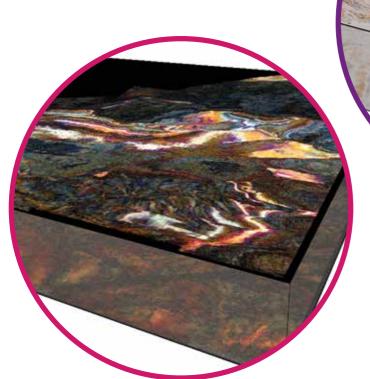


Validate your geological interpretation by automatically creating geological models, populated with rock properties directly from your well data to forward model synthetic seismic and Frequency Decomposition RGB blend responses. Quantitatively correlate geological properties to the colours in your blend, dramatically reducing geological risk in exploration and development wells.



# See Clearly

Expose and understand the geology before you interpret.



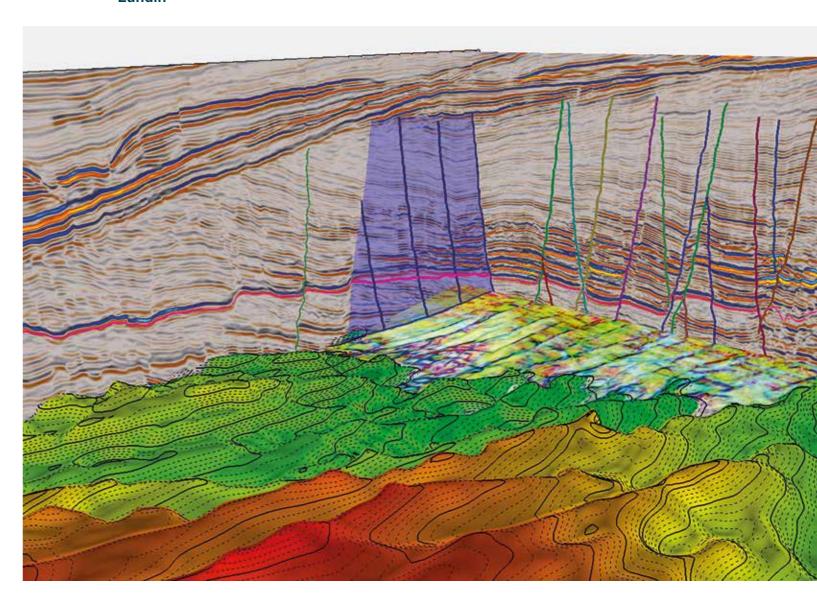
Quickly understand your structural framework with multi-layer attributes.

projects over the past years and we have found it to be a highly useful tool in our exploration workflow. Data enhancement and seismic attribute visualisation and extraction are straightforward; powerful structural and stratigraphic attributes enable both quick screening of a data set and detailed study of geological features. The RGB Blends really bring out the subtle details and facilitate a better understanding of the subsurface. 99

**Dana Petroleum** 

# **Accelerated Interpretation**

**66** The detail captured by the Adaptive Faults is incredible; being able to pick quickly and accurately in a few clicks is a game changer. This looks like the future of seismic interpretation. **99** 



Extracting information from your data is the key to generating value. GeoTeric is the only application to enable full horizon, fault and geobody interpretation directly on the RGB, CMY or HSV blends that most effectively reveal the geology.



# **Validate**

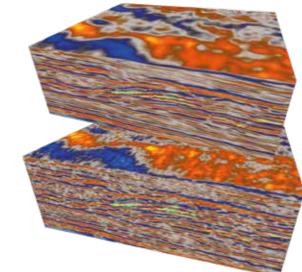
# Cognitive Workflow



### **Condition**

#### **Sharper and Clearer Images**

Improve signal to noise ratio for optimal structural interpretation and attribute analysis.

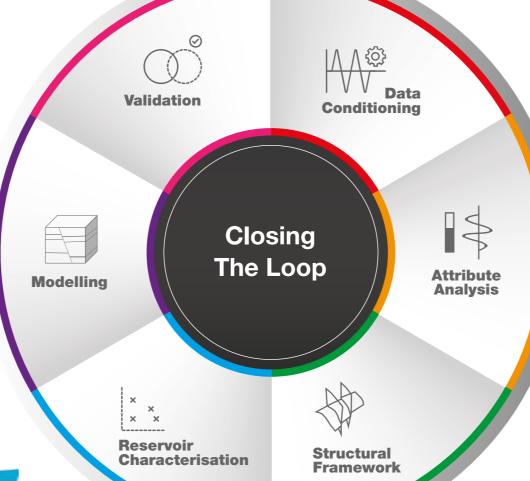




### Model

#### **The Seismic Grid** GeoModel

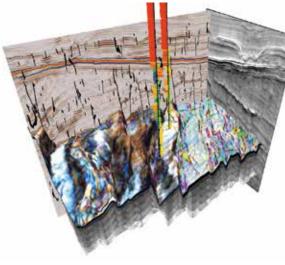
Coming soon. Preserve detail and save time. Break free from the GeoCellular domain.





#### **Reveal the Geology**

Intuitive colour blending of Seismic Attributes unlocks greater insights into the geology.







#### **Interactive Seismic Facies Classification**

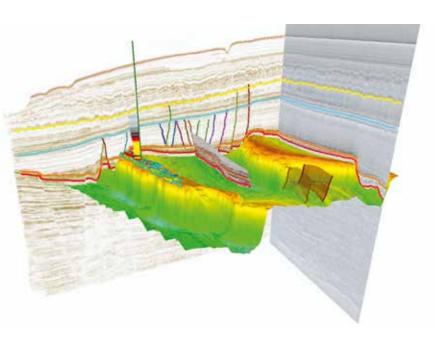
Capture geological features with precision. Guided by your geological insight and embedded machine learning.

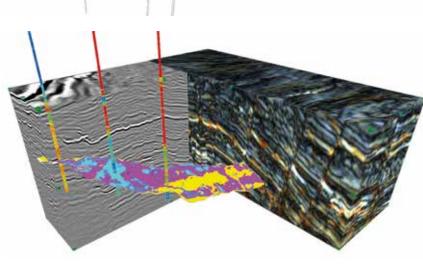


### **Interpret**

#### **Adaptive Interpretation**

Finally! New tools for more accurate interpretation in less time. Incorporating the building blocks of machine learning.

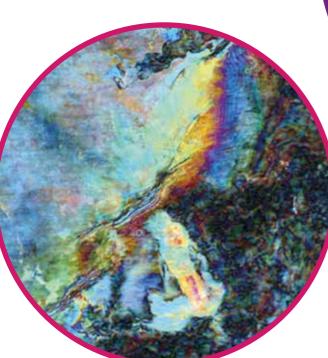




# Applicable to all Assets

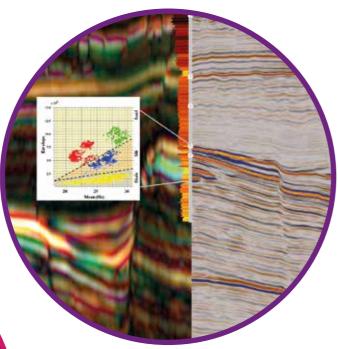
66 GeoTeric enables us to better integrate QI Geophysics with Project Geologist. Through this integration, our decision for well placement is faster.

**Petronas** 

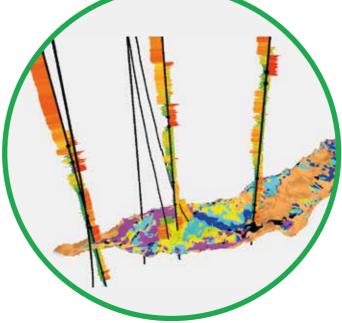


66 GeoTeric is a powerful exploration tool and has helped me to identify and validate prospects. Its visualisation potential has also enabled PGNiG to cross the communication gap between different disciplines in exploration and make sure that everyone understands the nature of the prospects. ??

**PGNiG Upstream International AS** 



Our patented and uniquely powerful tools enable you to accurately interpret exactly what you see using a data driven interpreter guided approach.

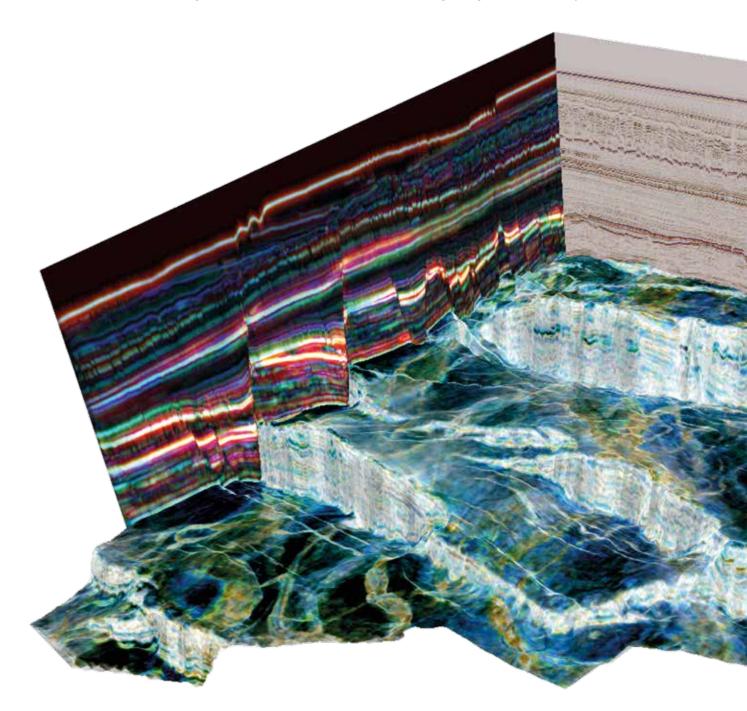


# A Case Study on Thebe Gas Discovery, Offshore NW Australia

Revealing geology by using GeoTeric's frequency blending algorithms ensured that realistic interpretations of regional, near field and inter-reservoir opportunities were completed efficiently.

By validating interpretations and geological assumptions with the use of well properties, we allowed for accurate detection of reservoir sweet spots for subsequent in-fill drilling plans.

Using all available data in an intuitive and conceptualising manner to constrain or expand and validate interpretations has led to greater confidence and a reduction in geological uncertainty.



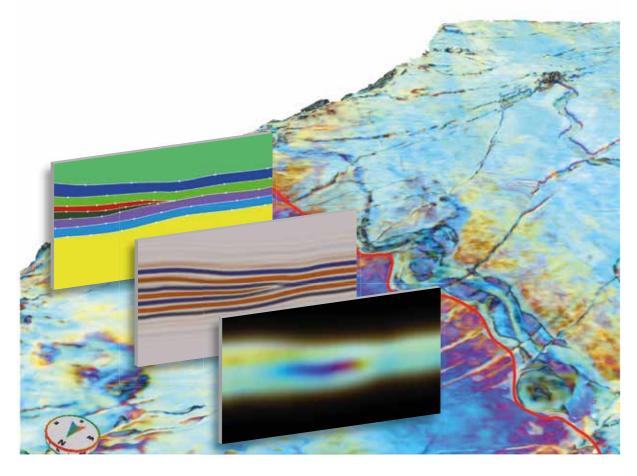


### Teric

# Research and Development

Our heritage in medical imaging enabled revolutionary techniques to be brought to the fingertips of geoscientists. Our industry supported consortiums exemplify the innovation and value to oil & gas companies in exploring and producing hydrocarbons.

**Validate** represents three years of industry led research and development. It is the first commercial product to help companies make better decisions by understanding geological rock properties derived from Frequency Decomposition.



GeoTeric and its R&D partners deliver commercial products

















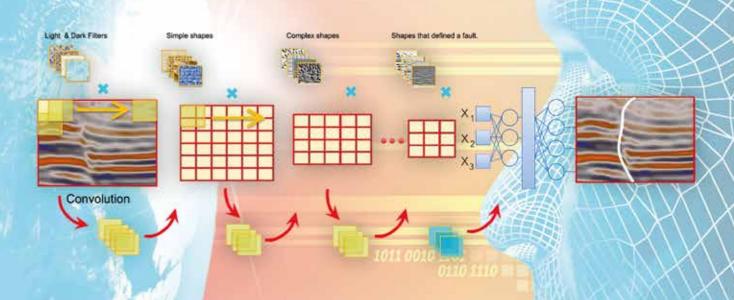


# Machine Learning

#### **Evolution of subsurface understanding**

GeoTeric has been utilising machine learning in its seismic facies workflows for nearly 10 years, and our innovation in this area has now extended into the field of Deep Learning, a far more advanced and detailed form of machine learning. This is a platform which allows real-time training, with architectures that require a minimal amount of data, a system that constantly learns from all its interpreters - essentially capturing "the interpretation brain" of that company.

This system will provide an augmented interpretation which will improve accuracy and efficiency, highlight interpretation contradictions and show alternative solutions, leaving the geoscientists free to think about the geology, and areas of uncertainty that the system highlights.

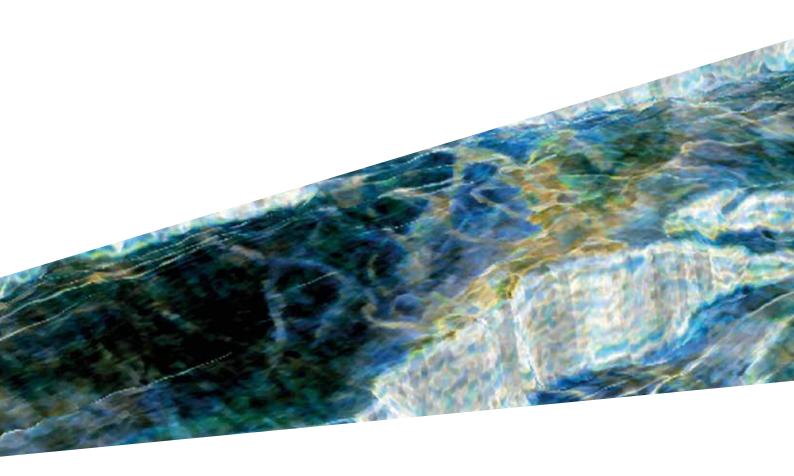


**66** We have worked together with GeoTeric on several research and development projects. We are impressed with the dedication and speed in which they can produce market leading technology. This gives us a competitive advantage. **99** 

Lundin



### It makes sense



Newcastle T: +44 (0) 191 4700 430

London T: +44 (0) 203 7577 750

Houston T: +1 832 426 3755 T: +61 8 6188 7551

Perth

**Kuala Lumpur** T: +60 3 2168 1921

Info@GeoTeric.com www.GeoTeric.com