

Defiant Resources matures well locations faster than ever with Geomodeling's Seismic Attribute Interpretation software.

Customer Defiant Resources
Deployment Country Canada
Industry Oil and Gas Exploration
Solution VisualVoxAt



"I have been looking for a comprehensive 3D interpretation package with enhanced visualization technology that runs on my existing PC workstation and easily integrates with my other software. Using VisualVoxAt has streamlined my interpretation process and allowed me to define subtle stratigraphic plays in a fraction of the time it would have taken with conventional 3D interpretation tools."

- Craig Coulombe, Chief Geophysicist, Defiant Resources

Overview:

Defiant Resources Corporation is a Calgary-based independent junior natural gas and oil producer in the exploration for, development and acquisition of petroleum and natural gas in western Canada.

Their focus is on building asset value by concentrating on long-life, liquids-rich natural gas and light oil reserves generally found west of the fifth meridian in Alberta. To accelerate growth they also pursue higher deliverability shorter life natural gas reserves typically found at shallower depths, with the objective of attaining an optimal reserves life index of 7 to 8 years.

Defiant's portfolio of assets is characterized by multi-zone drilling horizons, high working interests, natural gas rich in liquids which command a heating value premium, associated light oil reserves and control of plant and processing facilities.

Business need:

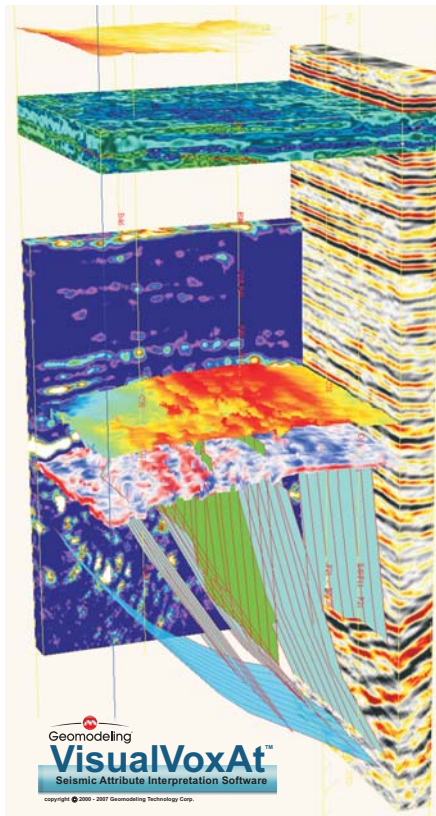
Part of Defiant's strategy is to go in and quickly mature locations that can be moved forward to the drilling stage. They operate in tough areas near Grande Prairie that have a long timeline between picking a location and getting a well drilled. Their primary need was to be able to pick well locations faster to stay competitive in the marketplace.

They need a software fit that could:

- a) work with existing software and hardware
- b) enhance interpretation techniques and increase efficiency measurably to justify the purchase price
- c) provide a fundamental uplift to the interpretation process and visualize 'true' 3D geology – and not just result in 'GeeWiz' images that may look interesting but lack any geological meaning.



Case Study



*example showing multiple attributes using VisualVoxat software

Solution:

Geomodeling's VisualVoxAt Seismic Attribute Interpretation software with the fastest picker in the industry and features like 3D color cube for clearer more complete interpretations, enhanced wizards, spectral decomposition and 3 fast-track workflows, allowed Defiant to take 5 3D surveys and interpret each of the surveys in a matter of days instead of weeks. The basic picking algorithms are so quick and robust that they result in breakneck interpretation of key horizons. The visualization tools allow the interpreter to rapidly evaluate subtle stratigraphic features. Adding facies classification and spectral decomposition, the interpreter can then throw a lot of leading edge interpretation techniques at an interpretation problem very quickly and easily.

Results:

The result for Defiant resources was a streamlined workflow that allowed them to expedite their winter drilling program and plan their land acquisition strategy faster than they ever have before.

The measurable impact was the maturation of 14 drillable locations that are now in the drilling program for the rest of this year and into next year. The largest realization being the speed at which they can mature locations to be moved forward to the drilling stage.

Benefits:

- Reduces seismic interpretation from weeks to a matter of days
- Allows for faster, clearer and more confident decision making
- Cost-effective interpretation tool that gives a true 3D geological view of the prospect
- Geophysical and technical support available from anywhere in the world
- Works on PC platform
- Training program gives interpreters the opportunity to get proficient with the software – thus shortening the growing pains common with learning new software.
- Streamlined workflows allows you to get to your answers in fewer mouse clicks

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