Applied Geophysical Solutions™

Quantitative Interpretation

EPI has over 20 years' of global experience in de-risking the subsurface through Quantitative Interpretation techniques across both conventional and unconventional plays.

Using our quantitative interpretation services, you can extract information about reservoir and fluid properties directly from your seismic data to reduce your exploration and development risk.

Services

- Supervised and unsupervised neural network inversions
- Fracture density & anisotropic inference
- Coloured, acoustic impedance & simultaneous inversions
- Seismic Spectral Blueing (bandwidth enhancement)
- Synthetic seismograms and AVO / AVA modelling
- Seismic overpressure studies
- Prestack data conditioning
- 1D Stochastic inversions for reservoir characterization









Why EPI? - Supervised Neural Networks

EPI advocates the use of supervised neural networks. Using this workflow, multiple seismic attributes are trained and tested with well logs to create seismic rock property volumes suitable for direct interpretation. Typical output attributes are seismic facies, porosity and volume shale.

Unlike unsupervised neural networks that return "classified but uncalibrated" results, supervised neural networks address non-linear/unique problems resulting in geologically meaningful answers that are calibrated against well data for improved subsurface decision making.



Global Experience



