# Geophysical Interpretation in IP

## Extract additional insights by incorporating seismic data

**Interactive Petrophysics (IP), our market leading subsurface data interpretation package, can be utilized by E&P operators and service companies alike throughout any basin thanks to it's selection of tools to incorporate geophysical data too.**

Our IP Geophysics bundle brings your petrophysics and geophysics teams together, helping them apply their knowledge across seismic and well log data to build the fullest possible interpretation.

Perform sophisticated fluid substitution modelling and predict key reservoir properties from minimal source data in one place. Creating Synthetic Seismograms to compare bed boundary depths with seismic data or reprocess and interpret vital acoustic logs can ensure more confident interpretations going forward.

Tightly integrated with the rest of the IP suite, IP Geophysics gives you the power to link your data – and your understanding.

"Maximise your understanding of the area with seismic and well log data using simple workflows. Create synthetic seismograms to compare and QC bed boundary depths with seismic data. Utilise sophisticated fluid substitution modelling and acoustic log re-processing to further your interpretation. These tools are all at your fingertips and tightly integrated with the rest of IP"

Ron Lowe
Technical Expert
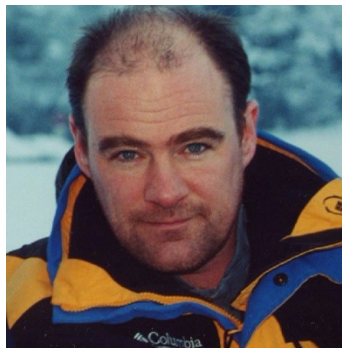
## Rock Physics

Rock Physics offers an innovative way to depth-match bed boundaries and other markers from log traces to seismic data.

By calculating acoustic impedance from density and sonic logs, then combining it with check-shot (VSP) data, you can create a Synthetic Seismogram. Using different input data and filters, you can recompute the synthetic trace to optimise the match with seismic.
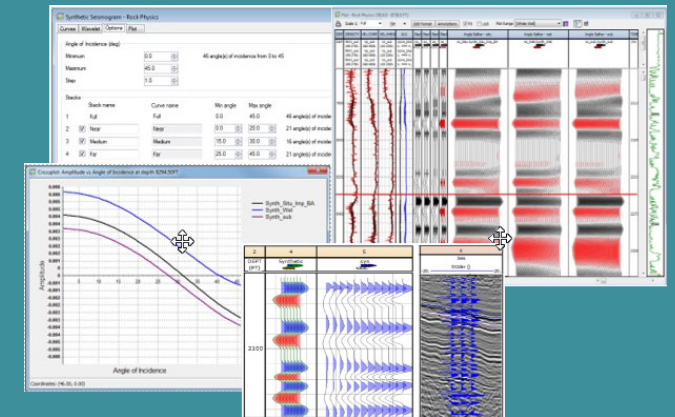


Modelling fluid saturations is one of the fundamental objectives in Rock Physics. The Rock Physics module allows you to compute the seismic response for each fluid substitution case, including in-situ fluids; permitting in depth analysis of fluid variations **and how such changes would be reflected in the seismic.**

Geoactive

Interactive **Petrophysics**

## Curve Prediction

Applicable at any stage of a well's life, Curve Prediction enables advanced interpretations from minimal source information. Employing several statistical methods, these tools help you to generate new curves from offset wells, repair existing data, or even make continuous curves from discrete data.

Predict key reservoir properties including porosity, permeability and saturation from log curves and core data and infer missing data or repair incomplete well data from bad hole intervals. Plot your predicted results against your measured data to visualise the relationship.
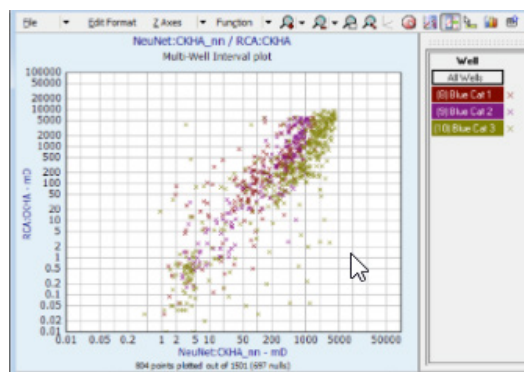


## Acoustic Waveform Processing

Acoustic data is fundamental to reservoir characterisation, however as a result of tool limitations and difficult acoustic environments, sonic logs can be challenging to interpret. Acoustic Waveforms helps you assess input raw data quality and adjust re-processing parameters to optimise output quality quickly.

Designed by experienced industry specialists, these tools allow you to rapidly re-process raw waveforms with your own filters and semblance parameters to derive slowness curves. You are able to QC your raw input data and build confidence in your analysis results.
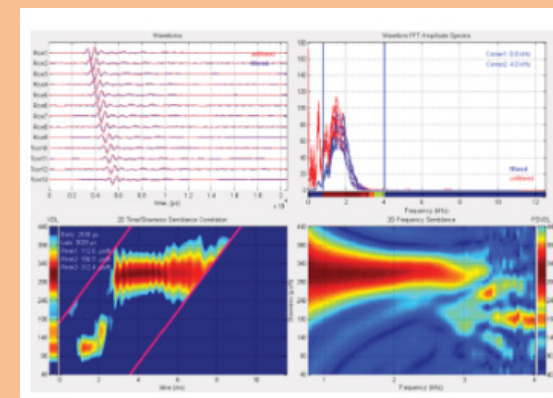
View each tool mode in detail to differentiate genuine and spurious arrivals and process and interpret any wireline or LWD acoustic log directly with simple workflows for identifying borehole stress and anisotropy.



## Get in touch

Please visit www.geoactive.com for more information
Email IPsupport@geoactive.com
Or call
USA: +1 713 489 3995
UK: +44 203 608 8024

Geoactive Limited.
Aberdeenshire
United Kingdom

IP_Flyer_Geolphysics_V1.1.pdf

Updated: 8.October.2022

**Geoactive**

Interactive **Petrophysics**