

# InverSeis/An3<sup>H</sup>TI™

Full Waveform Elastic Inversion

With InverSeis/An3<sup>H</sup>TI you'll have a clear idea where your prospects lie.

InverSeis/An3<sup>H</sup>TI can:

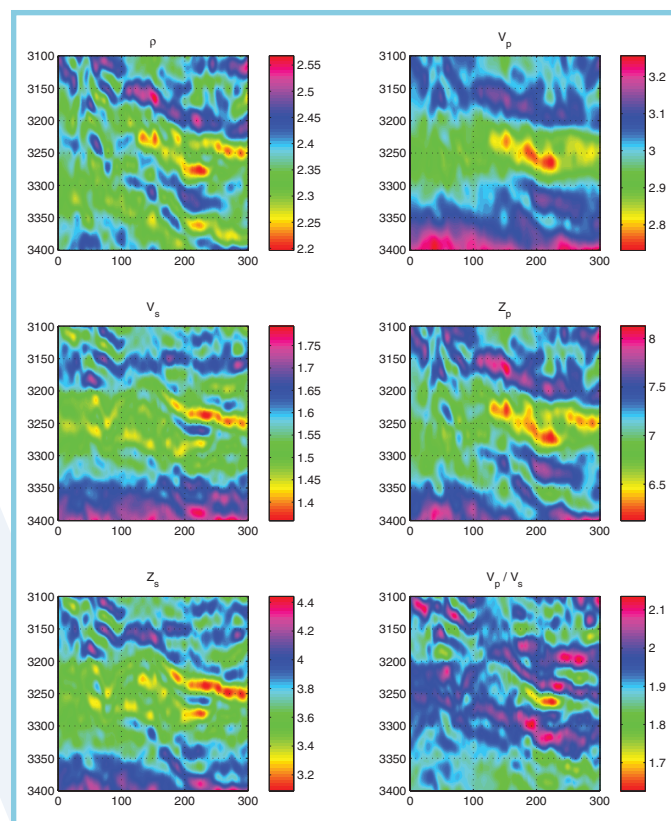
- Work directly on non-NMO-corrected gathers
- Handle primaries and multiples
- Offer a complete elastic solution including  $V_p$ ,  $V_s$  and density
- Offer a complete elastic solution of  $V_{p_v}$ ,  $\delta$ ,  $\epsilon$ ,  $V_{s_v}$ , density for VTI and HTI media
- Provide robust separation of lithology and fluid

## TECHNOLOGY

Wave equation based seismic inversion is a new technology employing robust wave equation modeling and hybrid optimization techniques for the inversion of prestack migrated data. InverSeis/An3<sup>H</sup>TI employs wave equation modeling and works directly on prestack migrated data which have the NMO removed, thus honoring the physics of the problem. In addition, InverSeis/An3<sup>H</sup>TI can work with only primaries or with primaries and multiples. The computed elastic parameters from prestack migrated gather inversion are P-wave velocity, S-wave velocity and density. For VTI and HTI media, the elastic parameters estimated are  $V_p$  vertical ( $V_{p_v}$ ),  $\delta$ ,  $\epsilon$ ,  $V_s$  vertical ( $V_{s_v}$ ) and density. For each computed elastic parameter a probability density or simply minimum and maximum values are also computed. The use of the inverted elastic parameters provides a robust, new method for lithology/fluid discrimination, porosity estimation and net to gross estimation.

## SERVICES OFFERED

- Prestack migrated gather elastic inversion
- Porosity estimation
- Net to gross estimation



*Example of elastic parameters output from InverSeis/An3<sup>H</sup>TI when run on real seismic data.*



Get the Clear Picture