



LandTech was the first company to apply passive seismic services to the oil industry since its establishment in 1998 and has become the leader in High Resolution 3-D Passive Seismic Tomography surveys worldwide. By using innovative in-house designed seismometers and recording all little cracks and groans of the earth (microearthquakes) we use them as seismic sources (similar to the way a medical CAT-scan uses X-rays) to derive high resolution 3D seismic tomography images of compression, shear-wave, Poisson's ratio and quality factor for the whole of an exploration block no matter how difficult the topography is and at a fraction of the cost of conventional seismic. Patented neural technology provides lithological information and direct hydrocarbon indication.

## SERVICES



### PASSIVE SEISMIC TOMOGRAPHY

Passive Seismic Tomography (PST) is a new revolutionary geophysical exploration technique utilizing the natural microseismicity, (microearthquakes with magnitudes of -1 up to 2.0 Richter) which occur almost everywhere, as seismic sources and a portable specially designed network of seismometers on the surface to record continuously for a period of a few months.

LandTech was the first company which introduced the method of high resolution passive seismic tomography for hydrocarbon exploration at a local scale, back in 1998. In addition to the specific hardware it has designed new inversion algorithms and neural network or fuzzy procedures for the reliable processing of the acquired passive data.

After determining the hypocenters of microearthquakes we use them as seismic sources embedded within or below the target of interest and perform 3D seismic tomographic inversion of the P- and S-wave travel times to the surface recorders.

Other services:

1. **SPECIAL SEISMIC**
2. **RESERVOIR MONITORING**
3. **GRAVITY**
4. **MAGNETOTELLURIC**
5. **COAL AND LIGNITE EXPLORATION**
6. **SEISMIC RISK**