

2D Seismic

Definition

Scanning for acoustic properties of rocks along a certain straight line on the surface by generating a low frequency noise at central point of the line and capturing the acoustic response in array set of sensors along the selected survey line (see Fig. 1).

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Fig.1. Seismic reflection schematic

The result of the survey is pictured as vertical profile (see Fig. 2) with:

- Horizontal axis showing a distance along the seismic line
- Vertical axis showing
 - either a [TWT travel time](#) of acoustic wave towards the seismic reflection boundary at normal-incidence
 - or a depth at which the seismic reflection boundary is found (which is related to [travel time](#) via [p-wave velocity](#))
- Colour is showing the [Reflection Coefficient](#) at inter-bed boundary

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Fig. 2. Sample of seismic reflection profile in TWT format.

See Also

[Petroleum Industry](#) / [Upstream](#) / [Petroleum Exploration](#) / [Reflection seismology](#)