

DISPLAY VE**Deconvolved Upgoing Wavefield at two-way time before enhancement**

This display describes the primary reflection response of the subsurface at the borehole location, within the depth range of the VSP, and below the deepest VSP level to the limit of the deconvolution window.

It shows the data from Display VC after application of deterministic deconvolution using operators derived from the downgoing wavefield on a trace by trace basis.

The effect of the deconvolution is to remove all reverberants associated with at least one reflector above the geophone position from which the downgoing wavefield has been extracted.

The deconvolution is applied in spiking mode, unless otherwise stated, and the phase of the resulting data will be a function of the filter applied after deconvolution. This is normally a zero phase filter giving a zero phase result and maximum resolution of the lithology within the band limits.

This data is filtered using the 'maximum bandwidth' filter.

Dip can be recognised from this display as described for Display VC and can be calculated using the method described in the Appendix contained in this report.

DISPLAY VE(FK)**F-K Display of Deconvolved Upgoing Wavefield at two-way time before enhancement**

This display is used in the design of the 'maximum bandwidth' filter in conjunction with the F-K display of the upgoing wavefield and filter trials.

It shows the data from the deconvolved upgoing wavefield at two-way time transformed into F-K space.

Any filter applied to the data before transformation is noted on the display.

The same analysis window is used as in the production of VC(FK). VC(FK) and VE(FK) will differ mainly in areas of low amplitude on VC(FK) which will be boosted during deconvolution.