

### 3.16 FINAL STACK

Stack is the summation of traces within each CDP producing a single stacked trace for each input gather record. The stack is normalised and mute zone compensated to account for the smaller number of live traces in the mute zone and for uneven fold of coverage. The data was recorded with a nominal fold of 51.

### 3.17 DECONVOLUTION AFTER STACK

Digicon's DECONA module uses the Wiener-Levinson algorithm to design filters which effectively extract the predictable signal from the total data spectrum. This algorithm assumes the input wavelets are minimum phase, the input reflectively spectrum is white and the wavelet is stationary across the inverse filter design window.

The objectives of predictive deconvolution are two fold and described below :

#### 1a SPIKING MODE

In spiking mode ( gap of one sample ) the data's amplitude spectrum is whitened from 0Hz through to the Nyquist frequency. A percentage white noise is added to the spectrum prior to inverse operator design to maintain stability. A value of 1% white noise is considered normal, however the effective whitening is inversely proportional to the percentage of noise added.

#### 1b. GAP MODE

A gap deconvolution operator will reduce the whitening effect of the deconvolution operator. The gap length can be taken as the second zero crossing from the peak value on the data's autocorrelation function thus avoiding changing the input wavelet's phase.

### 2. MULTIPLE ATTENUATION

The operator length is selected after studying the autocorrelation function. The combined length of the gap plus operator will attenuate multiple energy up to that period.

For this survey the selected parameters where :

White Noise Percentage	: 1%
Gap Length	: 36 msec.
Operator Length	: 200 msec.

