

3.14 NORMAL MOVEOUT CORRECTION AND FRONT END MUTE

The stacking velocity functions derived from the final velocity analysis are used to compute the normal moveout [NMO] corrections to be applied to the traces in the final CDP gathers.

The NMO is performed assuming that the energy travels in a straight raypath and utilizes the following equation :

$$TT = (T0^{**2} + (X^{**2}/V^{**2})) **0.5$$

where

TT = Total recorded travel time in seconds

X = Offset

T0 = Time of reflector at zero offset in seconds

V = RMS velocity

**N = raise to the power N

Velocity-time knee points are honoured on adjacent control points prior to interpolation of the temporal velocity field. The space variant velocity function is then derived by linear interpolation between control points.

3.15 MUTE

A front-end mute (or ramp) is applied to the shallow and far offset data to remove any undesirable, excess stretching after NMO application. As the start time of the mute is from zero time it will also remove non-compressional background noise recorded above the first breaks. The mute pattern is either determined from comparative pre-stack mute tests or from NMO corrected gathers.

The mute pattern applied to this survey is described below;

Offset	Time (in msec.)
300	0
440	300
2658	2600

