



Velocity filtered pie-slice traces from 3 depth points at shotpoints 5327½, 5328½, and 5329½ on line M44B Extension (approximately ¼ mile north-east of the Marlin No. 1 well) were filtered with a 5-100 cps digital filter and a 10-55 cps digital filter and displayed on individual paper records with an average trace deflection of ½ inch at a scale of 3.75 inches per second. The All-Multiple and Multiple-Free synthetic traces from Marlin No. 1 were similarly filtered and displayed for analytical comparison.

In the pie-slice process, each input data trace is passed through a separate velocity filter. The filters are so designed that all coherent events with a moveout from trace to trace within a specified range are uniformly preserved over a wide frequency range, and further, all coherent events with a moveout outside the specified range are uniformly attenuated about 20 db. During the pie-slice process each input trace from a common-depth-point is filtered, summed and output as a single stacked trace.

The pie-slice applied to the 3 depth-points, on Line M44B Extension had an aperture of 4 msec., and a tilt of 0 msec.

5. Experimental Velocity Filtering

On portions of several lines in the area a strong second bounce from the water bottom occurs at the same record time as primary events from horizons of interest. In an attempt to eliminate or attenuate the second bounce, Line M45A was reprocessed with pie-slice velocity filtering