

EDIT-SUM

This program is divided into three phases and combines editing, summing and gain application into one operation. The edit phase includes the demultiplexing of the data into a serial by trace format and an analysis of the binary gain information. In the summing phase, the traces are restored to geophone amplitude by applying the inverse of the gain changes. Each trace is then binary point normalized and the requested number are then summed together. In the gain application portion of this program, a theoretical decay function is computed from each geophone amplitude, summed trace, and the inverse of this curve is then applied to the data to produce a balanced output trace. In addition the data was subsampled at this stage so that the processing would be at a sample rate of 4 ms.

The input parameters to this program are determined by running test edits of the data at selected locations over the area. The results are quality checked by the visual inspection of the output at specified intervals along each line.

DECONVOLUTION

An iterative time variant deconvolution was performed on the data after editing. This deconvolution utilized operators of between 30 and 128 ms in length. Each operator was used only