

APPENDIX B

PLAYBACK PROCEDURES

The analog processing was done by GSI at their Perth Playback Center. The equipment consisted of:

1. SIE MS-600 Series Tape Transport
2. SIE Model 606 4 Channel Magnetic Delay Line
3. Single Channel MAE Unit
4. SIE PL-600 Series Cross-Section Plotter

The computation of the T-delta-T curves required for applying the NMO corrections to the data was done by GSI mostly by a trial and error method. That is, if the velocity function with its corresponding T-delta-T curve indicated improper move out correction on a trial run of a singlefold section, then the residual moveout was computed and a corrected T-delta-T curve used to obtain an improved correction. This procedure worked reasonably well for the most part. Difficulties were experienced by GSI in areas of considerable reverberations and shallow basement reflections, in sorting out the events to be used for computation of proper NMO corrections. This, at times, resulted in several re-runs to obtain the proper NMO correction.

For processing sixfold CDP, the same procedure was followed to obtain the required T-delta-T curves from a singlefold presentation, and then using the T-delta-T curves thus established for the sixfold stack. As a further check on the validity of the stack, periodically four sets of six common depth point traces were extracted from the memory drum and plotted.

Both the final corrected singlefold and sixfold stacked tapes were MAE processed, which did a reasonably good job of removing water reverberations on most sections.

The final plotting was done on variable density film. GSI was supplied with a densitometer to help keep the neutral density of the developed film at a reasonable level. The only plotter scale available for the major portion of the survey was 7.5 inches/sec. so that the negatives had to be reduced photographically in Sydney to the required 3.75 inches/sec. A gear was finally obtained by GSI to provide the 3.75 inches/sec. scale. The signal to noise ratio of the plotter was barely at the 40-db level due to problems in the drive system. In an attempt to obtain the best processing available at the GSI center in Perth, numerous supervisory visits were made by Esso personnel.