

basin the line of demarcation is fairly clear and often accentuated by diffraction pattern. In the deeper areas, however, it is often sketchy. The map Structure Top Basement, fig. 11, gives a somewhat idealized picture of the basement surface, but there is evidence of several prominent highs. These are discussed under Drape Structures.

From regional considerations and from the magnetic data the basement would appear to be primarily granite and Palaeozoic metamorphics.

Under the southeastern 30 mile portion of the Tertiary basin sparse, though supposedly valid reflections are recorded, extending to about 20,000 feet. (Cross section B-10 and Figs. 11 and 1). Little can be conjectured about this because only lines B-10 and B-18 pass into the area. It is thought, however, that the mass may be the extension of the Devonian-Silurian Mathinna Beds from Tasmania which is in trough development, the dominant structures being asymmetrical folds. The uniform slope of the reflections suggests that they are from dolerite sills rather than from folded sediments. Whatever the thick mass may be, it is well stabilized, for the Tertiary that spreads over it is structurally featureless. From the magnetic data it is mapped as basement. It is possible that patches of the supposed Palaeozoic are present under the deeper portion of the Tertiary basin as well.

Unit I:

Very little has been determined concerning the nature of the sediments that were deposited in Unit I. It may be conjectured that inasmuch as the seismic characteristics of Units I and II are somewhat comparable, the rock types should not be greatly dissimilar. That is,