

As mentioned before the magnetic data tend on occasions to be noisy, however, at the locations where estimates have been made the respective anomalies are well defined. All estimates from such anomalies appear to agree well with the approximate depth of the Basement reflection, and can be considered reliable within the limitations of the method. The method used was to equate magnetic depth to the horizontal length of the constant gradient of a total magnetic intensity positive anomaly.

Depths to basement vary from approximately 3,500 ft. in the region of lines M-12-0, M-30-0, M-15-0, M-27-0 and M-18-0 increasing to approximately 6,000 to 7,000 ft. at the arc NNW-W-S-SSE at approximately 10 miles from these lines and then plunge rapidly to depths in excess of 10,000 ft. over the remainder of the permits. Water Depths over the same limits vary from 400 ft. to 3,500 ft. to 7,500 ft. giving total sediment thickness of 3,000 ft. to 4,000 ft. to well in excess of 7,000 ft. respectively.

TERTIARY BEDS (Plate 2)

Results on the horizon approximating Base of Tertiary were good over all the area except the shallow water areas. It is felt this event arises from some unit within the lower Tertiary and very close to its base. Examination of several of the sections show that small amounts of Tertiary sediments may exist below this very strong event.

Except for the region immediately below the sea bed surface, where events follow the shape of the sea bed, most of the section to the Base Tertiary event appears to be conformable with that event and is probably all of Tertiary age. These beds appear to have been deeply eroded prior to the deposition of recent sediments and have been cut by several deep channels (Plates 5 - 10).

Generally speaking the interval Base Tertiary to Sea Bed is thinning fairly rapidly to the west. In addition, it is much thinner in the south than the north (Compare Plates 5 and 6 with 7, 8 and 10).