It is customary in geologic literature to use the word reef without quotation marks for both true reefs, and for in situ organic banks and bioherms, even when the author clearly recognizes that the structure being spoken of is not a barrier or wave-resistant reef. This same policy will be followed in this review.

2See the following for a description of barrier reefs, coral atolls, and pinnacle

reefs (and item # 5 of this review):

and G. E. Chin, Langton, J.R., 1968, "Rainbow Member Facies and Related Reservoir Properties, Rainbow Lake, Alberta": Am Assoc Petrol Geologists Bull, V. 52, No. 10, pp. 1925-1955.

Hriskevich, M. E., 1970, "Middle Devonian Reef Production, Rainbow rea. Alberta Canada": Am. Assoc Petrol Geologists Bull, V. 54, pp. 2260-2281.

Area, Alberta Canada": Am. Assoc Petrol Geologists Bull, V. 54, pp. 2260-2281.

Barss, D. L., A. B. Copland, and W. D. Ritchie, 1970, "Geology of the Middle Devonian reefs, Rainbow area, Alberta, Canada," in M. T. Halbouty, ed.,. "Geology of Giant Petroleum Fields": Am Assoc Petrol Geologists Mem. 14, pp. 19-49.

Also, N. D. Newell, et. al., in their The Permian Reef Complex of the Guadalupe Mountains Region, Texas and New Mexico: W. H. Freeman and Co., p. 236, cites ancient reefs in northern England, eastern Greenland and the Italian Tyrol, which are very similar to some of the reefs in oil fields of the United States (p. 14).

Newell, N. D., Ibid., p. 9 (for length of the reef).

For depth of the reef see various vertical section maps (also called "cross section maps"), such as the following:

Roswell Geological Society, 1958, "North-South Stratigraphic Cross Section, Delaware Basin to Northwest Shelf, Southeastern New Mexico."

West Texas Geological Society, 1963, "Cross Section Through Delaware and Val Verde Basins From Lea County, New Mexico to Edwards County, Texas."

Other vertical section maps which are helpful in showing the position and form of several of the underground parts of the Capitan and Goat Seep reefs are found in A/ A/ Thirt, and N. M. Third, "Petrital Chille B. A. Silver and R. G. Todd, 1969, "Permian Cyclic Strata, Northern Midland and Delaware Basins, West Texas and Southeastern New Mexico": Am Assoc Petrol Geologists Bull, Vol. 53, No. 11, pp. 2223-2251 (pp. 2232-2235).

All of the above maps are based on drilling records, with the wells together with the drilling companies being shown on the map.

- Achauer, C. W., 1969, And Attoc Vettol debitotital Voll "Origin of Capitan Formation, Guadalupe Mountains, New Mexico and Texas": Am Assoc Petrol Geologists Bull, V. 53, No. 11, pp. 2311,-2323 (pp. 2315, 2317, 2319, and 2321).
- 5 The literature of petroleum geology (e.g., the article by Achauer being here discussed) is remarkably free from references to evolution or arguments for evolution or extreme age. Petroleum geologists are usually not concerned with trying to prove evolution, but rather with gaining a better understanding of the underground sedimentary deposits and faunal and floral associations, so as to locate oil reservoirs.