

8. Multilayered deposits of sandstone and shale. An example of this is the flysch sediments of the Haymond Formation in the Marathon region of Texas. There are approximately 15,000 thin sandstone layers alternating with contrasting shale layers in this formation. The study of such a deposit requires that we carefully consider the length of time required for the clay particles, which formed each layer of shale, to settle out of suspension. Clay particles are extremely small, thus settling very slowly, and only under conditions of non-turbulence. 8

9. The algal banks and mounds which sometimes lie at considerable depths in oil fields, together with a study of the thickness and nature of the fossil-bearing strata which lie above and beneath them. 9

10. The thicknesses of modern coral reefs, as related to the growth rates of reef-forming organisms. The thickest deposit of this kind measured to date is that of the Eniwetok atoll, where the test drill penetrated 4,610 ft. of coral deposit in order to reach the volcanic seamount on which the reef was built. 10

11. Ancient coral reefs, such as the atolls found in the oil fields of Canada, together with the evaporite deposits which frequently cover them. This is a geographic area where the process of comparing modern reefs and other modern carbonate deposits with the ancient has yielded spectacular results in predicting the best drilling sites. 11