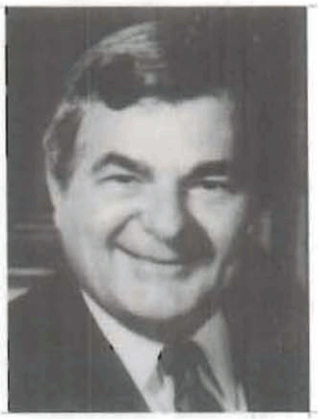
INTERNATIONAL EXPLORATIONISTS

INTERNATIONAL EXPLORATIONISTS DINNER MEETING—NOVEMBER 15, 1989

THEODORE C. BARTLING—Biographical Sketch



Theodore C. Bartling received his B.S. from Ohio State University.

Mr. Bartling was employed by Pittsburgh Plate Glass Co. from 1947 to 1949, and by W. C. McBride from 1949 to 1955. From 1955 to 1968 he was Senior Vice-President in charge of exploration and production for Apache Corporation, and president of Ada Oil Exploration from 1968 to 1971. From 1971 to the present he has been president of his own company, Bartling and Associates.

He has presented papers to many professional societies.

PETROLEUM EXPLORATION AND GEOLOGY OF THE AEGEAN

The present day Aegean Sea covers several graben and/or half-graben basins that are filled with over 12,000 feet of sedimentary rocks. The normal faulting that is observed on seismic record sections indicates a tensional tectonic regime. There is a marked coincidence of modern basins and bathymetric highs with paleo basins and highs. A stratigraphic section of marine clastics of Eocene through Mio-Pliocene age have been encountered in the seven wildcat wells that have been drilled.

Cretaceous age rocks must be considered basement for petroleum exploration because, except for an area in the Eastern Aegean, Cretaceous and older rocks were metamorphosed during the Alpine orogenies. The Eocene is a transgressive clastic sequence. The Oligocene is conformable with the underlying Eocene. The Miocene is predominantly a regressive clastic sequence. This series ended with evaporitic conditions. The Messinian evaporite is an excellent seismic marker, and is the seal for the one producing field in the Aegean Sea. Source rocks and reservoir rocks are found in both the Eocene and the Miocene.

Four of the seven wildcats that have been drilled have encountered shows of hydrocarbons. Prinos Field, discovered in 1974, was put on production in 1981, and is currently producing at design capacity of 25,000 to 28,000 barrels of oil per day. Cumulative production is approximately 50 million barrels. Prinos Field is only seven miles distant from metamorphic basement outcrop, yet field wells have penetrated over 10,000 feet of Tertiary marine clastics.

An electric log cross section and a series of paleogeographic maps will be used to demonstrate the geologic history. Several seismic record sections and seismic time maps will be shown to illustrate the type of stratigraphic and structural features that make up the subsurface of the Aegean Sea.