

covers 80,000 square miles and contains up to 30,000 feet of Late Proterozoic and Early Paleozoic marine and continental sediments. These sediments are unusual to most North American-trained geologists in that the unconformity common at the base of the Paleozoic is conspicuously absent; the Late Precambrian sediments are not metamorphosed; they contain indigenous hydrocarbons and thick salt deposits, the latter having flowed and acted as lubricating layers during a mid-Paleozoic orogeny.

The speaker discussed exploration problems encountered in the basin since 1960 by Magellan Petroleum Corporation, whom he serves as technical advisor.

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March 7, 1967

HOWARD R. GOULD

Esso Production Research Company,
Houston, Texas

*"Sedimentary Facies and Their
Importance in Oil Finding"*

In today's search for oil, industry has become increasingly aware of its need for information that will permit more accurate prediction of porous and permeable facies. Such information is important in exploring for both structural and stratigraphic accumulations.

To obtain the data desired, research geologists have directed their efforts to modern ocean basins and contiguous land areas where both sedimentary facies and the environments that produced them can be studied in detail. Through investigations of Recent sediments in the Gulf of Mexico and elsewhere, it has been possible to define the major types of potential reservoir facies, including alluvial, deltaic, shoreline, shelf, and turbidite deposits in the deeper parts of modern basins. Each of these facies can be readily distinguished by a combination of features, including composition and lithology, sedimentary textures and structures, fauna and flora, lateral and vertical facies relationships, and geometric form.

Knowledge of these characteristics, when applied to ancient rocks, provides information of value not only in recognizing facies but in locating porous facies and in predicting their probable trends, shapes, and dimensions.

March 20, 1967

DONALD D. ANDERSON

Mesa Petroleum Company, Amarillo, Texas
"Gageby Creek Gas Field, Anadarko Basin"

Gageby Creek, in northwestern Wheeler County, Texas, is the location of what has been described as one of the biggest gas wells in the World. The Phillips Petroleum Company's Dyson A-1 was completed in 1966 for a calculated open flow potential of 1.74 billion cubic feet of gas daily from Silurian Hunton Dolomite perforations between 14,836 and 15,009 feet, and 2.45 million cfd from Simpson Dolomite perforations between 15,520 and 15,795 feet. The huge find has set off a 100 mile wave of deep Anadarko Basin drilling in the Texas Panhandle and eastward into Oklahoma.

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March 27, 1967

CLYDE G. STRACHAN

Gulf Oil Corporation, Retired

"Geologist Reforests Grand Lake Tract"

The speaker described his effort of reforestation of 20 acres on the east side of Oklahoma's Grand Lake. Using colored slides he discussed the geologic, physiographic, and economic factors involved in this experimental pine seedling plantation which is now 3 years old.

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March 30, 1967

JOHN M. HUNT

Department of Chemistry and Geology,
Woods Hole Oceanographic
Institution, Massachusetts

"Geoscience Research in the Oceans"

Modern oceanographic research involves geological, geophysical and geochemical studies of the earth's crust from the continental margins to the deep ocean floor. Geological studies of Woods Hole Oceanographic Institution have centered on the topography, structure and sedimentology of the Atlantic Coast shelf and slope from Maine to Florida. Geophysical work has been concerned with structures of deep basins, trenches, and rift zones of the Atlantic Ocean and Mediterranean and Red Seas. Geochemical research has investigated the organic compounds including hydrocarbons of marine organisms and both near shore and deep sea sediments. Inorganic studies have been concerned with the origin and nature of mineral deposits on the sea floor. Although past studies have concen-