

## LUNCHEON AND EVENING MEETINGS— APRIL 20, 1982

### ROBERT R. BERG—Biographical Sketch



Robert R. Berg is Professor of Geology and Director of the Office of University Research at Texas A&M University. His academic experience was preceded by industrial experience totaling 16 years. From 1951 to 1956, he was employed as a geologist by the California Company (Standard Oil Company of California), and from 1957 until 1966 he was a consulting geologist in the Rocky Mountain area. His industrial experience was primarily exploration

for oil and gas which included interpretations from subsurface data and geophysical surveys. In 1967 he became Professor and Head of the Department of Geology at Texas A&M University, and in July, 1972, he was named Director of the Office of University Research. Berg's research studies have included petroleum geology, subsurface stratigraphy and sedimentology. Publications describe geophysical interpretations and origins of Rocky Mountain structures; studies of reservoir sandstones in California, Montana, Wyoming, Mississippi, West Texas, and New Mexico, and in the Texas Gulf Coast; and the role of hydrostatic and hydrodynamic pressures in oil accumulation.

As Director of Research, his chief function is coordinating the research programs of the University with its affiliated units, including the Texas Agricultural Experiment Station, the Texas Engineering Experiment Station, and the Texas A&M Research Foundation. The Director is responsible for generating and implementing effective research policies for the University, for maintaining a continuing evaluation of the University's research activities, and aiding the Deans of the Colleges in the development of successful research programs. These duties include monitoring the total research program of the Texas A&M University System; this program had a total expenditure of \$63 million in 1978-79. The Director also monitors the operations of other research facilities such as the Electron Microscopy Center, the Nuclear Science Center (research reactor), Radiological Safety Office, and Laboratory Animal Facilities.

Dr. Berg received his B.A. and Ph.D. degrees in Geology from the University of Minnesota (1948, 1951). He has served as President of the Rocky Mountain Association of Geologists (1966) and as Secretary-Treasurer (1969) and President (1971) of the American Institute of Professional Geologists. He is Fellow of the Geological Society of America, a member and Certified Petroleum Geologist of the American Association of Petroleum Geologists, and Certified Professional geologist of the American Institute of Professional Geologists. He has been Distinguished Lecturer (1972) of the AAPG, has received the Association's A. I. Levorsen Memorial Award, and is currently a lecturer in the Continuing Education Program of the AAPG. He has also been a consultant for more than twenty corporations, both major companies and independents, for evaluation of sandstone reservoirs.

## DEEP-WATER RESERVOIR SANDSTONES OF THE TEXAS GULF COAST\*

Core studies have revealed that many downdip sandstones in the Texas Gulf Coast are turbidites. These sandstones are found in several distinct depositional settings, and each is characterized by different reservoir morphologies. Submarine fans are present in the upper Wilcox at Katy field, and bed associations observed in cores show stacked-channel, middle-fan, and outer-fan facies. Fans also are represented in the upper Wilcox at Northeast Thompsonville field. Constructional channel-fill sandstones are found in the lower Vicksburg at McAllen Ranch field. Submarine canyons in the outer shelf are shale-filled and form truncation traps at Yoakum and Valentine fields. Channel sandstones within canyon fill are reservoirs in Oligocene Hackberry fields. Channel sandstones on unstable slopes are found in the Upper Cretaceous Woodbine in Seven Oaks field and in a slumped, lower Wilcox section at South Hallettsville field. In both areas, slope instability was controlled by Lower Cretaceous carbonate-shelf margins. Turbidite deposition was controlled by growth faults in Frio sandstones at Nine Mile Point field and by a shale diapir in lower Vicksburg sandstones at McAllen Ranch field.

Recognition of turbidite reservoirs, and their different modes of occurrence, is important in exploration. Abundant evidence for turbidity current transport indicates that even the deepest parts of the Gulf Coast basin may contain reservoir sandstones.

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