LUNCHEON MEETING-OCTOBER 30, 1985

DAVID B. MEYER-Biographical Sketch



David B. Meyer is currently in the Exploration Geologist Training program with Chevron U.S.A. Inc. He ioined Chevron in 1981 after earning a B.S. degree in Geology from the University of Wisconisn - Eau Clair in 1977 and a M.S. degree in Geological Oceanography from the Florida Institute of Technology in 1981, David spent his first two years at Chevron in the Development Geologist Training program and then another two years

in the Geophysical Training program.

David is a member of the American Association of Petroleum Geologists and the New Orleans Geological Society. The paper he is presenting was a runner-up to the Matson Award winner at the 1985 A.A.P.G. Convention in New Orleans.

GEOLOGY AND EXPLORATION HISTORY OF SOUTH MARSH ISLAND BLOCK 9 FIELD OFFSHORE LOUISIANA

South Marsh Island Block 9 Field, a piercement salt dome, is one of the older oil and gas fields in the Gulf of Mexico, yet significant exploration continues in the field to the present day. Through acquisition of new geological data and use of advanced geophysical techniques, recent exploration of this dome has more than doubled field reserves since 1980.

The field is located 20 miles offshore in 60 ft. of water. Domal growth occurred from Miocene through Pleistocene times; the salt plug truncates objective Pliocene and Miocene deltaic sands from 9,000 to 18,000 ft.

Early exploration beginning in 1962 found limited reserves but established the presence of thick prospective sand-shale sequences. The dome was believed to be overhung, making definition of the salt-sediment interface difficult when using conventional seismic techniques.

Through custom geophysical data acquisition and processing, Chevron was able to improve definition of the salt profile. Subsequent drilling discovered significant accumulations of hydrocarbons and led to successful second-generation drilling on previously tested and abandoned domal flanks. These new wells have resulted in the discovery of over 400 ft. of hydrocarbons per well in multiple pay sands updip from previously drilled dry holes. This success, occurring 18 years after initial testing of the dome, illustrates that significant new reserves may be found in old salt dome fields through the use of modern exploratory methods.