NOON MEETING—SEPTEMBER 28, 1977

JAMES O. LEWIS—Biographical Sketch

James O. Lewis received a BS degree in mechanical engineering in 1945, after his studies had been interrupted by service in the U. S. Navy from 1943 to 1947. Upon receiving his BS degree from the University of Kentucky, he immediately entered graduate school there and was awarded an MS degree in geology in 1949.

Upon graduation, Mr. Lewis was employed by Magnolia Petroleum Company. In 1950 he joined Pat R. Rutherford, Independent Producer. In 1955 he opened his offices as an Independent.

Mr. Lewis was certified as a Petroleum Geologist by the American Association of Petroleum Geologists. He has served on numerous committees and councils as both member and chairman. He toured as Distinguished Lecturer for the 1969-70 AAPG Distinguished Lecture Series, served as President of the Technical Division of Professional Affairs in 1971-72, and has participated as a Visiting Petroleum Geologist since 1974. In 1963 Mr. Lewis became a member of the Society of Independent Professional Earth Scientists; he served as President of the Houston Chapter for the 1964-65 term and as President of the Society in 1967-68. He was President of the Houston Geological Society in 1968-69, after having served as both First Vice-President and Treasurer, as well as chairman of various committees.

Mr. Lewis has published several papers on geology of the Gulf Coast and has given numerous lectures to various Gulf Coast geological societies.

STRATIGRAPHY AND ENTRAPMENT OF HYDROCARBONS IN THE SAN MIGUEL SANDS OF SOUTHWEST TEXAS (Abstract)

by James O. Lewis

The San Miguel section of the middle Taylor in the Maverick Basin of the Rio Grande Embayment is a series of overlapping sand bars striking NE-SW. Grain-size plots and core descriptions indicate that these bars developed in a shallow-marine shelf environment. There are as many as five cycles of sand sedimentation, all but one of which is producing. These sands have produced a cumulative of over 50 million bbl of oil since 1948. Over 30 million bbl of oil has been produced from stratigraphic-type fields discovered since 1970. Stratigraphic-type fields have produced over 90% of the total production. Structural traps resulting from differential compaction over volcanic necks account for the remainder.

Torch Field in Zavala County, where the trap is formed by a volcanic neck, and Sacatosa Field in Maverick County, where production is from a stratigraphic trap, are typical examples.

The depth and density of control as well as the subtle expression of the traps suggest that many prospective areas remain.