

place in petroleum exploration.

There are very likely many times more hydrocarbons remaining to be discovered than are presently being predicted. Only the stratigrapher who understands the habitat of oil and gas and knows the depositional environment of each productive and presently unproductive layer has an understanding of the magnitude of the undiscovered accumulations.

The depositional and tectonic history of the Gulf Coastal Plain, and the oil and gas occurrences in this petroliferous basin, are presented to illustrate the stratigraphic principles and the methods discussed.

April 23, 1962

J. K. Morgan, Skelly Oil Company

"Geologic Setting for Oil Production, Southwestern Nebraska and Northwestern Kansas"

#### Abstract

Regional geology Southwestern Nebraska and Northwestern Kansas and relationships between the Cambridge Arch, Las Animas Arch, Salina Basin, Anadarko Basin, and Denver Basin are presented. Trapping mechanisms for oil fields in the area are discussed with emphasis on Sleepy Hollow field. An estimate of future oil possibilities is made.

May 7, 1962

Robert Biberman, Assoc. Pet. Geologist, State Bureau of Mines & Mineral Resources, N. Mex.

Frank Kottowski, Economic Geologists State Bureau of Mines & Minerals Resources, N. Mex.

"Activities of the New Mexico Bureau Pertinent to Petroleum Geologists"

#### Abstract

The New Mexico Bureau of Mines has no regulatory functions. Services maintained for the benefit of the petroleum industry include a well sample library, well data files, electric log collection, and some sample descriptions and plotted logs. Facilities are available in Socorro for the use of visitors who wish to make use of these services. County dry hole maps and yearly drilling data reports are regular publications.

The geologic research program of the New Mexico Bureau of Mines and Minerals Resources must be diluted among the many branches of the mineral industry -- oil and gas, metallic mining, producers of industrial rocks and minerals, users of ground water, and metallurgical processors. Projects of aid to the petroleum geologist are chiefly areal geologic mapping and stratigraphic studies of a local or regional nature. Reports published during this biennium include areal geologic studies of the southeast Chama Basin, Luna County, and the Alum Mountain, Las Cruces, and Tres Hermanas Mountains quadrangles, as well as stratigraphic articles on the Sacramento Mountains, Montoya Group, Pennsylvanian and Mississippian rocks in southwestern New Mexico, and Cretaceous and Tertiary palynology of the eastern San Juan Basin. Areal mapping is in progress on the Ojo Caliente, Cebolla, and Brazos Peak quadrangles, and in the Truchas Peaks area of northern New Mexico, and the Carrizozo, Capitan, Winston, Sugarloaf, Big Hatchet, Pelona, San Diego Mountain, Walnut Wells, and Mimbres quadrangles in southern New Mexico. Stratigraphic studies are those of clays in the Cretaceous strata of the southwestern San Juan Basin, Pennsylvanian and Early Permian beds in the Zuni Mountains area, Mississippian and Pennsylvanian rocks in the southern Sangre de Cristo Mountains, and Mesozoic and Paleozoic strata in south-central and southwestern New Mexico.