discovery with estimated reserves of 20 to 100 million barrels in Cretaceous sandstones. The high finding costs experienced by the Navy tended to discourage industry exploration.

In 1963, several wells were drilled by BP Exploration Company (Alaska) Inc. and Sinclair Oil and Gas Company, in an attempt to extend the Navy foothills Cretaceous play. BP-Sinclair and Union Oil Company of California each later drilled unsuccessful Paleozoic tests near the Arctic coast.

In 1964 Humble Oil and Refining Company joined Richfield Oil Corporation (now Atlantic Richfield) in evaluation of Federal acreage south of Prudhoe Bay. Regional seismic data and Federal leasing policy in existence at that time caused Humble to shift the exploration effort from the Federal acreage to the eastern Arctic coastal area. The major portion of the Prudhoe Bay structure was leased jointly by Humble and Richfield, and by BP at the State of Alaska Sale in July 1965. The ARCO-Humble Prudhoe Bay No. 1 State was completed as the discovery well in June, 1968.

*Humble Oil and Refining Company, Los Angeles, California

HILIGHT OIL FIELD

Campbell County, Wyoming

TOM SPRINKLE*

October 12, 1970

Hilight Oil Field, located on the east flank of Powder River Basin, was discovered in February, 1969. Development of the field has been rapid and continuous until now there are about 240 producing wells spaced on 160 acre tracts. Oil and gas are produced from an isolated body of Lower Cretaceous Muddy sandstone penetrated at an approximate average depth of 9700 feet. Contours of Muddy marker indicate regional basinward or southwestward dip without structural anomalies. Isopachous analyses indicate an average net effective reservoir of 9 feet. This relatively low pore volume reservoir surprisingly has a history of high productivity. Original reservoir limit tests and recent pressure interference tests indicate a per well drainage area greater than 320 acres and that the field production boundaries are not established. No free formational waters have been produced from the Muddy reservoir.

*Apache Corporation, Tulsa, Oklahoma

OMEGA OF HYDROCARBONS

MERRILL J. REYNOLDS

Omega of Hydrocarbons is a history of the development of thought on the origin, environment, geochemistry, migration and and accumulation of hydrocarbons and documented by thoughts of those who have made important contributions.

During the last twenty years the knowledge of the genesis of hydrocarbons has greatly improved. This knowledge, when completely integrated into our thinking, will enable us to become more sophisticated in our search for new reserves of hydrocarbons.

*Ceja Corporation, Tulsa, Oklahoma

THE CAPABILITY OF THE OFFSHORE OIL INDUSTRY AND THE MARINE ENVIRONMENT

BURVON B. TETTLETON*

February 2, 1971

The strong feeling against the oil industry's offshore operations by the general public is basically unjustified. The general public has based its opinion on inaccurate reporting and this is what must be corrected. The offshore oil industry and the industries which derive their livelihood from the sea are actually allies in the common pursuit of the ocean's natural resources. The offshore oil industry does strive to be, and is, more than compatible. It is, on the other hand, inherently beneficial to most of these opposing interests. Personal observations over the past several years, beneath platforms in the Gulf of Mexico, show that each production platform be-