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The Art of Exploration

by John A. Masters, Anschutz Exploration Corporation

More is involved in exploration than mere technology. Line up 100 geologists and you will not find very much difference in their ability to do sequence stratigraphy, structure contouring, isopaching, electric log evaluation, etc. Why, then, is there such an enormous difference in exploration results? We all know that only a few people find oil.

Most geologists know "how" to look for oil. Only a few know "where" to look. If most geologists have equal technical qualifications, the one who is working in the best area has substantially more leverage. Choosing the best area is a function of regional understanding, sensible prioritization, and creative imagination. Creativity is a right brain function. Relatively few people are gifted with the imaging, visionary, creative talents of a great explorer.

The most important thing in the oil business is the idea. Wallace Pratt said, "Oil is first found in the mind."

Biographical Sketch



John Masters was born in Iowa in 1927 and raised in Tulsa. He was educated at Yale with a B.A. in Economics and Colorado Geology. His

University with an M.S. in Geology. His first experience as a field geologist was with the U.S. Atomic Energy Commission in northern Arizona, where he discovered the south-side uranium deposits of the Lukachukai Mountains. He joined Kerr-McGee Industries in 1953, was named Chief Geologist in 1960, and President of Kerr-McGee Canada in 1966. He discovered Ambrosia Lake, still the largest uranium deposit in the world, Dineh-Bi-Keyah, the largest oil field in Arizona, and two salt dome oil fields in Ship Shoal, Gulf of Mexico.

In 1973, John formed Canadian Hunter Exploration and became president. There he altered the conventional hierarchical organization into the modern team system. John's writing and speaking on the subject in the 1970s set the stage for significant management change in the industry. By 1976, he had discovered Elmworth, the largest gas field in Canada and later published his deep basin theory of gas entrapment downdip from water. Canadian Hunter reached a production of 350 MMCFD and became the 12th largest gas producer in Canada.

The AAPG recognized Masters as an outstanding explorationist by presentation of the Distinguished Service Award, and the Canadian Society made him the first recipient of their highest award, the Stanley Slipper Gold Medal. At the San Diego meeting in May, John received Honorary Membership, which is the AAPG's highest award. He retired from Canadian Hunter in 1993 and promptly began again with Anshutz Exploration Corporation as President.