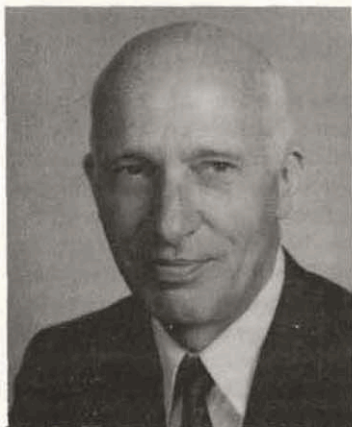


NOON MEETING—FEBRUARY 25, 1981

W. H. (BILL) ROBERTS III—Biographical Sketch



W. H. (Bill) Roberts was born in Moorestown, New Jersey. He attended Amherst College, Wyoming University, and finally the Colorado School of Mines, where he received a degree in geological engineering under F. M. Van Tuyl and completed extra work in geophysics under Carl Heiland.

During World War II he controlled air traffic for the FAA and served as an engineer in the Maritime Service. For the next 12 years Bill worked up and down the Rocky Mountains from Albuquerque to Edmonton for Union of California, National Petroleum Corp. Ltd., and Gulf Oil. He has spent 27 years with Gulf, including 8 years at the research center in Pittsburgh. He has been in Houston for 13 years with the Houston Technical Services Center of Gulf Research and Development Company.

With Gulf's blessing, Bill has been devoting some time to AAPG committee work. He organized the Short Course and the Research Symposium on "Problems of Petroleum Migration" for the annual meeting in Oklahoma City in April 1978. In that symposium he presented one of the key papers: "The Design and Function of Oil and Gas Traps." That paper, which introduced a number of new concepts in support of the anticlinal theory, was later presented to several local geological societies including the HGS, where it won the annual best-paper award for 1977-78. For the 1979 AAPG meeting in Houston, he was chairman of the AAPG Technical Program Committee.

In September 1979, Bill gave a paper on "The Use of Temperature in Petroleum Exploration" at Symposium II, Unconventional Methods of Exploration for Petroleum and Natural Gas, held in Dallas.

COMMON FACTORS AMONG ATYPICAL FIELDS (Abstract)

Certain factors are functionally relevant to the occurrence of *typical* as well as *atypical* oil and gas fields. Consideration of such factors leads us to regard the distinction between typical and atypical fields as a matter of degree. For purposes of discussion, however, attention is focused on the more clearly atypical fields.

In a study of the workings of oil and gas fields, it is quite possible to reach the right conclusions for the wrong reasons. In other words, we may observe an apparent relationship between the presence of oil or gas and certain geological or geochemical factors without determining the true causality of that relationship (which could involve other vital factors unperceived). Thus, our conclusions can be founded on mere coincidence; and once reached, those conclusions may carry a lot of conceptual momentum.

At this stage in our knowledge of petroleum origin we probably stand to learn more from the "atypical" than from the "typical." Why? Because some of our tacit assumptions are challenged. The atypical situation forces us to answer new

questions. The new answers then may enable us to fine-tune the search for more dependable oil and gas prospects—typical or otherwise.

Some pertinent criteria of effective entrapment which can be examined in both typical and atypical fields are: upward reservoir convergence, stratigraphic shunting, structural coherence, local cover weakness, near-vertical faulting, differential compaction, deep-water discharge, minimum potential energy, hydrothermal chimneys, and hydrochemical plumes.