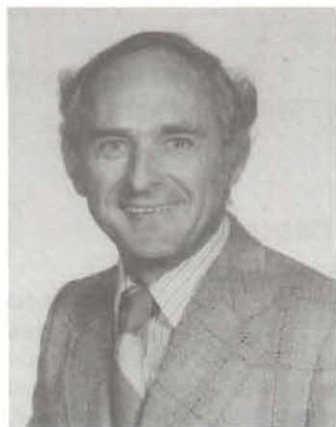


EVENING MEETING—MARCH 11, 1985

PAUL S. HORVATH—Biographical Sketch



Paul S. Horvath joined Gulf's research division in Pittsburgh in 1952. He transferred to Gulf Exploration and Production Company in 1955 where he has held a number of exploration positions and gained experience in exploration research, development work and exploration in the Mid-Continent area of the U.S., the Rocky Mountains, Southeast Asia, the Eastern Seaboard and the Gulf Coast.

Mr. Horvath assumed his present position, Manager of Exploration, in January, 1981. He is responsible for Gulf's exploration and development activities in South Louisiana and the Offshore (OCS) from Maine to Mexico.

Mr. Horvath received his B.S. degree in Earth and Planetary Science from the University of Pittsburgh in 1971. He is a member of the S.E.G., A.A.P.G., Southeastern Geophysical Society, New Orleans Geological Society, Petroleum Landman's Association of New Orleans, Mid-Continent Oil and Gas Association and the New Orleans Chamber of Commerce.

THE EFFECTIVENESS OF OFFSHORE 3-D SEISMIC SURVEYS: CASE HISTORIES

Gulf began to investigate 3-D seismic in the mid-sixties through Gulf Research and Development Company located in Harmarville, Pennsylvania. During the late sixties, modeling was used to simulate acquisition and processing. By the early seventies, Gulf had completed its first offshore 3-D seismic project.

Some of the advantages 3-D seismic has over 2-D are: It can help with the refinement of the structure and stratigraphic interpretation; it helps define the paleogeology; it can reveal details that otherwise are not apparent; it can help define reservoir limits through improved interpretation of the structure and hydrocarbon indicators; it is a means of obtaining subsurface control under surface obstructions, such as platforms, rigs, etc.; it provides the opportunity to construct profiles in any direction desired; and it lends itself to interactive interpretation.

Most certainly 3-D seismic should improve resolution. This in turn helps define the best possible location for both wildcat and development wells. Developing additional reserves with outpost wells and finding new reserves in untested fault blocks are also benefits of the improved and detailed seismic control. Utilizing 3-D provides a basis for making the development drilling program efficient—that is, only drilling the wells needed to drain the reservoirs efficiently. For these reasons the, the usage of 3-D seismic can be a cost-effective way of finding and developing hydrocarbons.

The results achieved in fifteen (15) 3-D seismic surveys that cover twenty-eight (28) blocks in the offshore Gulf of Mexico are reviewed.