
INTERNATIONAL EXPLORATIONISTS

INTERNATIONAL EXPLORATIONISTS DINNER MEETING—FEBRUARY 21, 1990 HARRY E. CHRISTIAN, JR.—Biographical Sketch



Mr. Christian retired from Amoco Production Company in August, 1989, after 38 years. At that time he was Exploration Superintendent of the China Group. He is a native of Oklahoma and received a BS in 1949 and a MS in 1953, both geology degrees from the University of Oklahoma.

Mr. Christian joined Stanolind Oil and Gas Company (Amoco) in 1952 and spent his first five years

exploring in southern Oklahoma and the Arkoma basin. He transferred to the International Company in 1957. He has lived and worked in Venezuela, Argentina, England, Trinidad, Egypt, and Algeria prior to returning to Chicago in 1976 and then Houston in 1978. Harry was involved in some of Amoco's early discoveries in Trinidad, Egypt, and the North Sea. He joined the China Group in 1980 and supervised Amoco Orient's geological effort until retirement.

WILLIS W. TYRRELL, JR.—Biographical Sketch



Mr. Willis, Senior Consulting Geologist, Amoco Production Company, retired in August, 1989, after 34 years. He is a native of Pensacola, Florida, and received a BS degree in geology from the Florida State University in 1952. He received a MS degree in 1954 and a PhD in 1957 from Yale. He began work for Stanolind Oil and Gas Company (Amoco) in 1955. The first 22 years were

involved mostly in exploration in the USA with emphasis on stratigraphic analysis of subsurface data in the Four Corners area, East Texas, Permian basin, and Gulf Coast, and seismic stratigraphy in preparation for the first MAFLA and Baltimore Canyon OCS sales. From 1964 to 1968 he supervised the Sedimentary Petrology Group at Amoco's Tulsa Research Center.

Willis joined Amoco International in 1978, working in Chicago and Houston on various basin analysis projects in

the Europe, Latin America and the Far East region. Much of 1980-1982 involved stratigraphic analysis of seismic data in the Pearl River Mouth and Beibu Wan basins offshore south China. Since 1987 he was involved in regional studies with Amoco's Worldwide New Ventures group.

EXPLORATION HISTORY OF THE LIUHUA 11-1-1A DISCOVERY, PEARL RIVER MOUTH BASIN, CHINA

Stratigraphic analysis of sparse seismic data in 1981 indicated the presence of a carbonate bank complex over the western part of the Dongsha Massif, 220 kilometers southeast of Hong Kong. Two Lower Miocene shelf edge trends were recognized and a large carbonate bank closure mapped on the axis of the massif. The study also predicted the presence of a widespread, thick basal sandstone below the carbonate complex that could serve as a conduit for long distance migration of hydrocarbons. Although the prospect was a high risk play in deep water 38 kilometers south of the most probable Paleogene source basin, it was intriguing because of its size and similarity to the giant Bombay High Field offshore India.

After drilling by other companies demonstrated that oil had migrated well out of the source basin (Huizhou Sag), Amoco negotiated for Contract Area 29/04 and was awarded the area in November 1985. The first well, Lihua 11-1-1A, tested 2,240 BOPD of 21 degree API oil from a 76 meter pay section in a carbonate bank sequence topped at 1197 meters. A 400 meter lower carbonate section and a 150 meter sandstone sequence resting on basement were water bearing. Additional drilling has confirmed a giant in place accumulation, but commerciality is yet to be determined. The carbonate complex consists of a leached limestone bank with a reefal margin, and has excellent porosity and permeability. The oil is less waxy and heavier than other Huizhou Sag sourced oils because of biodegradation after migration.