amples of surface reflections of deep structure. These are the (1) Cement, (2) Apache (3) Gageby Creek, and (4) Washita Creek fields.

The close correlations between surface and subsurface structure in these and several other areas reviewed indicate that the surface should no longer be ignored as a source for clues to potential oil/gas traps.

15. DONALD C. SWANSON, Esso Production Research Co., Houston, Tex.

GEOLOGIC DEVELOPMENT OF ANADARKO BASIN AND ITS DEPOSITS OF HYDROCARBONS

In the Anadarko basin, economic deposits of oil and gas are found in strata which range in age from Cambrian-Ordovician through Permian. The reservoirs range in composition from siltstone to dolomite and represent environmental facies as diverse as alluvial-stream deposits and shallow-marine carbonate banks.

A progressive analysis—through time—of the depositional and structural events which formed and filled the basin demonstrate the major factors controlling the occurrence of hydrocarbon deposits and how these deposits relate both to regional geologic phenomena and to local environmental events.

Comparisons made with the Anadarko basin could help exploration and exploitation in similar basins throughout the world.

16. DAN E. FERAY, Texas Technological College, Lubbock, Tex.

NATURE OF MARGINS OF SEDIMENTARY BASINS

Sedimentary basins, a subject of vital interest to economic geologists, differ to such a large degree that consideration of the origin of the variations is significant to economic geologists. The margin of the sedimentary basin, being the most variable part, merits special consideration.

Several factors control the nature of a sedimentary basin and its geologic history. Primary among these factors are (1) the tectonic history, including the intensity of uplift of the adjacent source area and subsidence of the depositional site, (2) the physiography of the basin and adjacent source area, (3) the climate of the basin and adjacent source area, (4) the eustatic conditions of sea level during the basin's history, and (5) the biological activity, faunal and floral, in the basin and adjacent source area. Secondary factors, controlled by the interplay of the primary factors, are (1) nature of terrigenous clastics produced in the source area, (2) rate of influx of terrigenous clastics into the basin, (3) energy relations in the depositional site related to transport and deposition of sediments, (4) stage of evolution of flora and fauna, and (5) the amount of time involved in the basin's history.

These factors, if evaluated in regard to basins of different ages and geographic locations, demonstrate why both modern and ancient basin margins are highly variable in regard to (1) thickness of sediment, (2) type and sequence of sediment, (3) facies relations of the sediment, and (4) tectonic history. In addition, this type of evaluation demonstrates the need for regional analysis as a framework for local analysis of any basin.

17. CHARLES E. MEAR, Louisiana Land and Exploration Co., Midland, Tex.

STRATIGRAPHY OF PERMIAN BASIN

(No abstract submitted)

17TH ANNUAL MEETING, ROCKY MOUNTAIN SECTION, AAPG, CASPER, WYOMING, OCTOBER 8–11, 1967

Approximately 800 geologists and their wives attended a very successful and thoroughly enjoyable 17th Annual Meeting of the AAPG's Rocky Mountain Section in Casper, Wyoming, October 8–11, 1967. The weather was warm and sunny and the 3-day program, whose theme was "Breaking Barrier Boundaries," was superb. AAPG National President, J. BEN CARSEY, gave a timely talk on AAPG affairs. Governor STANLEY K. HATHAWAY presented an enthusiastic Address of Welcome. THOMAS D. BARROW, Senior Vice President and Director, Humble Oil & Refining Co., Houston, Texas, delivered a thought-provoking Keynote Address on the responsibilities of a geologist to his management as well as to his profession. Retiring Rocky Mountain Section President, JOHN B. CARRIER, gave an extremely pointed and