

- 1:55 M. C. BROUSSARD, A. W. CLEAVES: Upper Mississippian Deltas in Black Warrior Basin of Mississippi and Alabama
- 2:20 W. H. FERTL: Interpretive Well-Logging Concepts Solve South Texas Formation-Evaluation Problems
- 2:45 R. R. BERG, W. D. MARSHALL, P. W. SHOEMAKER: Characteristics of Lower Vicksburg Reservoirs, McAllen Ranch Field, Hidalgo County, Texas
- 3:10 B. E. HUNTER, D. K. DAVIES: Distribution of Volcanic Activity in Time and Space in Gulf Coastal Province
- 3:35 F. H. HENK, JR., E. J. LOUDON, S. N. RASCHILLA, J. L. WALPER: Sedimentation of Trailing Plate Margin—Northern Gulf of Mexico
- 4:00 P. J. ROPER: Evidence for Post-Jurassic Tectonism in Eastern North America

SEPM Session

Surface and Subsurface Stratigraphy of Gulf Coast Region

- 1:05 E. A. MANCINI: Eocene-Oligocene Boundary in Southwest Alabama
- 1:30 C. SWANN, J. M. POORT*: Early Tertiary Lithostratigraphic Interpretation of Southwest Georgia
- 1:55 W. A. MCCracken: Field Relations and Petrology of Catahoula Formation in Parts of Lavaca, Gonzales, and Fayette Counties, Texas
- 2:20 D. W. HARRELSON, A. R. BICKER, JR.: Petrography of Some Subsurface Igneous Rocks of Mississippi
- 2:45 R. W. LAUDERDALE, W. C. WARD, A. E. WEIDIE: "Carrillo Puerto Formation" of Northeastern Quintana Roo, Mexico
- 3:10 D. M. PECK, D. H. SLATER, S. W. WISE, JR.*: Stratigraphy and Paleocology of Tamiami Formation in Lee and Hendry Counties, Florida
- 3:35 M. W. CLARK, R. C. WRIGHT: Subsurface Neogene Stratigraphy of Bay County, Florida
- 4:00 K. C. KING, R. C. WRIGHT: Revision of Tampa Formation, West-Central Florida

Abstracts of Papers

ALMON, WILLIAM R., Cities Service Co., Tulsa, Okla., and ALVIN L. SCHULTZ, Petrolero Corp., San Antonio, Tex.

Impact of Diagenesis on Log Interpretation

Significant problems arise in the interpretation of wire-line logs from diagenetically altered rocks. How does one interpret a zone that on the logs appears water filled or noncommercial? Is the zone truly water filled? If the zone is water filled, does it serve as a seal for a downdip hydrocarbon accumulation?

An understanding of the degree of diagenesis and its timing will allow the wire-line logs to be interpreted in the proper manner and will prevent the abandoning of potentially productive wells and lead to the discovery of hydrocarbons held in diagenetic traps.

BEBOUT, D. G., R. G. LOUCKS, and A. R. GREGORY, Bur. Econ. Geology, Austin, Tex.

Testing Geopressed Geothermal Resource, Frio Formation, Texas Gulf Coast

Drilling of the first well designed to test geopressed geothermal resource for a sustained period of time was initiated in July 1978. Regional and site-specific geologic and engineering studies supportive of this site were conducted by the University of Texas Bureau of Economic Geology and Department of Petroleum Engineering/Center for Energy Studies with funds from the U.S. Department of Energy. The area sought during these studies needed reservoir volume of 3 cu mi (12.5 cu km), minimum permeability of 20 md, and fluid temperatures of 300°F (149°C). The Brazoria fairway, Brazoria and Galveston Counties, Texas, best met these specifications and the Austin Bayou Geothermal Prospect was developed in this fairway. Funds for drilling the Nos. 1 and 2 Pleasant Bayou geothermal test wells in the Austin Bayou Prospect were provided by DOE; the operator of the wells is General Crude Oil Co.

The geopressed sandstone reservoirs are in the lower part of the Frio Formation between the depths of 14,000 and 17,000 ft (4,200 and 5,100 m). The sandstone units are at the top of at least seven progradational deltaic cycles; cumulative thickness of all permeable sandstone units is 250 to 300 ft (75 to 90 m). Each deltaic cycle is composed of a gradational vertical succession characterized by low-permeability prodelta and distal delta-front sandstone and shale at the base grading to permeable distributary-mouth-bar and delta-plain sandstone and shale at the top.

Fluid will be produced from the 2 Pleasant Bayou well, stripped of methane and heat, then injected into Miocene sandstones at 6,000 to 7,000 ft (1,800 to 2,100 m) depth in the nearby 1 Pleasant Bayou disposal well. The produced water is expected to have salinities ranging from 50,000 to 80,000 ppm, temperature from 300 to 350°F (149 to 177°C), pressure from 10,000 to 15,000 psi (68,950 to 103,425 kPa) and 40 cu ft (1.2 cu m) of methane per barrel. The 2-year test period will evaluate the feasibility of long-term production of large quantities of water (ultimately 40,000 bbl/day) from geopressed reservoirs.

BERG, ROBERT R., Texas A&M Univ., College Station, Tex.

Characteristics of Lower Wilcox Reservoirs, Valentine Field, Lavaca County, Texas

In the Valentine field, Lavaca County, Texas, sandstones of the lowermost Wilcox Group produce oil at depths of about 9,100 ft (2,776 m) in a stratigraphic trap from two sandstones locally called the "Technik" and "Kubena" zones. Full-diameter cores from the Technik zone show that it consists of thin-bedded turbidites. The Technik reservoir is 25 ft (8 m) thick in a core from the Harkins 1 Mikulenska well. The upper part is composed of thicker beds on the order of 2 to 4 ft (0.6 to 1.2 m), and each displays sequences of massive or massive-to-laminated bedding. These sandstones represent turbidite sequences of the AE and ABE types and were prob-