

- ronmental observations in Grande Isle-Grande Terre area of south Louisiana 25 min.
Delta Study Group: HOUSTON GEOLOGICAL SOCIETY
Presiding: J. BEN CARSEY, MARTHA LOU SHIRLEY
 WALTER A. ANDERSON: Introduction to Delta Symposium 20 min.
 CHARLES R. KOLB AND JACK R. VAN LOPIK: Depositional environments of Mississippi River deltaic plain—southeastern Louisiana 20 min.
 JACK L. GREGORY: Study of Vicksburg delta of Harris and Ft. Bend Counties, Texas 20 min.
 A. H. WADSWORTH, JR.: Recent deltation of Colorado River delta, Texas 20 min.
 WILLIAM F. TANNER: History of Apalachicola River delta area, Florida 20 min.

ABSTRACTS OF PAPERS

1. M. KING HUBBERT, U. S. Geological Survey, Washington, D. C.
 HISTORY OF PETROLEUM GEOLOGY AND ITS BEARING ON PRESENT AND FUTURE EXPLORATION
 (No abstract)
2. JAMES E. FINLEY, Continental Oil Company, Houston, Texas
 EXPLORATION OPPORTUNITY—THE PRODUCT OF APPLIED TECHNOLOGY
 (No abstract)
3. DANIEL A. BUSCH, Consulting geologist, Tulsa, Oklahoma

A.A.P.G. CONTINUING EDUCATION PROGRAM

The A.A.P.G., in recognition of the constant and rapid changes occurring in the art of oil exploration, is initiating a program of continuing education to affiliated and cooperating societies, oil companies, and university departments of geology. A series of 12-hour courses will be presented by the top authorities in this country on the following subjects: Stratigraphic Principles and Practice, Structural Geology, Petroleum, Economics, and Electronic Data Processing. It is anticipated that some local geological societies might wish to schedule lectures on only several course offerings, whereas others might wish ultimately to schedule the entire program over a period of years. Two lecture series per year are considered to be a realistic course offering for local geological societies, whereas only one per year might be all that a university geological department can justify. Oil companies might find it more expedient to sponsor three or four topics in concentrated fashion all within one week. The entire program is designed to update the technical background of practicing geologists.

4. MICHEL T. HALBOUTY, Consulting geologist and petroleum engineer, Houston, Texas
 ECONOMICS—THE NEW DIMENSION IN GEOLOGICAL THINKING¹

The current problems of expensive exploration, imports, overcapacity in production and refining, and the continued loss of investment capital through increased government control have brought about reduced margins of profits and steady declines in drilling, discoveries, reserves, and employment to the United States petroleum industry in recent years. The average petroleum geologist knows little about these matters. He has limited his interest to geology—period! The geologist

has not concerned himself with these complexities and, therefore, knows very little of the many difficulties the petroleum industry continually faces.

The geologist must come out of hibernation and look at the industry as a whole. His knowledge must expand beyond his own science. He has to broaden this thinking into the area of economics more than ever before. The geologist must keep up with the changes in every phase of the industry.

The geologist must look outward—not just straight ahead, but in all directions. He must be aware of what is happening in today's new technology, the ever-changing economic conditions, new political concepts, the intense fuel competition, world petroleum outlook, and world markets—but above all, he must learn what significance these things have on his industry, his company, and on his own future as an explorationist.

The geologist should realize that the petroleum industry must prosper within all of its phases if he, himself, is to prosper. He, therefore, must take a more direct and positive interest in the four dominant problems which constantly confront the industry: geological, technological, economic, and political. The geologist has an inherent knowledge of the first, knows a little about the second, and is completely oblivious of the third and fourth. To become more effective as an explorer or developer he must become more involved and astute in all of these challenges.

The economic factor is the most important to management; therefore, the geologist must begin to make economics the new dimension in his geological thinking. The growing pressure on management to produce profits demands that the geologist prepare a comprehensive economic assessment of his exploratory planning, efforts, and recommendations. Such appraisals surely will sharpen and upgrade the exploratory effort and will do much toward bringing about greater success in the explorer's search for petroleum to meet the demands of the future.

5. E. RALPH DANIEL, Vice president, Bank of Southwest, Houston, Texas

BANKING YOUR OIL INTERESTS

This paper deals with bank financing of oil and gas properties. It concerns, principally, the conventional production loan which is a loan to an individual, partnership, or corporation that is secured by interests in oil- and (or) gas-producing properties; this loan will be liquidated out of the income from the properties. The ramifications of this type of loan from the standpoint of both the banker and oil man are reviewed. A method of determining the loan value of oil and (or) gas properties is presented as well as the information needed to negotiate an oil loan.

6. WALLACE SCOTT, JR., Lawyer, Austin, Texas
 GEOLOGIST AS AN EXPERT WITNESS IN TEXAS RAILROAD COMMISSION HEARINGS
 (No abstract)

7. LEONARD C. BRYANT,¹ Cities Service Oil Company, San Antonio, Texas
 SOUTH COPANO BAY FIELD, ARANSAS COUNTY, TEXAS²

An extensive province of upper and middle Frio production exists along the Gulf Coast of Texas, and in this province the Melbourne Sand is one of the prime reservoirs for oil and gas.

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