HOUSTON REGIONAL MEETING, DECEMBER 2–3, 1948

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Houston, Texas

The Houston regional meeting of the Association was held on December 2 and 3, 1948, at the Rice Hotel, Houston, Texas. There were 1,050 registrations, making it one of the largest regional meetings yet held. In fact it was larger than the national meetings until recent years.

The meeting was devoted exclusively to the study of problems of stratigraphy, sedimentation, and tectonics of the salt-dome region of the Texas and Louisiana Gulf Coast. There were no field trips.

A breakfast was tendered to authors of all papers given at the meeting on the morning of the opening day. In addition to the Friday night dance which was semi-formal, there were a style show and luncheon for the ladies and a stag luncheon on Friday.

All of the officers and members of the executive committee of the Association were present: Paul Weaver, president; C. E. Dobbin, past-president; Roy M. Barnes, vice-president; J. V. Howell, secretary-treasurer; C. L. Moody, editor. The local arrangements were in general charge of George S. Buchanan of the Sohio Petroleum Company and A. F. Childers, president of the Houston Geological Society.

Abstracts are attached, descriptive of some of the papers presented at this meeting.

Abstracts

1. Recent Sediments of Mississippi Deltaic Mass, H. N. Fisk, Humble Oil and Refining Company, Houston.

The Recent deltaic mass of the Mississippi River is a huge pile of seaward-thickening deposits which underlies the deltaic plain and continental shelf. It rests upon and buries a rugged surface sculptured during the last ice age when sea-level was 450 feet lower than at present. The sediments were deposited as the last Pleistocene ice sheets melted and sea-level rose, and their main lithologic characteristics reflect the gradual lowering of stream gradients. The mass can be divided into a substream of permeable, gravel-bearing sands and a finer-grained topstratum of relatively impermeable, more heterogeneous sands, silts, and clays. Lithologic, textural, and faunal characteristics of depositional units within the topstratum are similar to those of sediments now accumulating within depositional environments of the region.

These environments are mainly marshland and pro-delta marine, but they also include more restricted ones such as the fluviatile and brackish-water channels, bay and lake bottoms, and local beaches and spits. Interfingering and overlapping relationships of the various facies in the topstratum show that the Mississippi River changed its position many times while sea-level was rising. That active subsidence accompanies the deltaic accumulation is shown by the seaward tilt of mappable marine beds within the mass and by the slope of the late Quaternary surface underlying the Recent deposits.

2. Stratigraphy of Frio Formation. Orange and Jefferson Counties, Texas, Frank Reedy, Jr., division geologist, Crown Central Petroleum Corporation, Houston.

Recent developments in the Gulf Coast of Texas have indicated the productive possibilities of many of the sands composing the lower part of the thick Frio formation of Oligocene age. Exploration to the deeper sands of the Frio discloses facts of depositional conditions of this formation, which are as critical as structure for the accumulation of petroleum.

The area comprising northern Jefferson County and Orange County is herein considered as a stratigraphic unit. Electrical-log, strike, and dip sections have been constructed indicating the basis for the correlations, the lithologic character of each of the zones of the Frio formation, and the calculated isopach interval of each zone. Diagrammatic dip sections have been drawn showing the relationship of lithology with microfauna occurrence. To interpret accurately these correlations and apply the zonation for a structural basis, three isopach maps have been constructed. These isopach

[1] Consulting geologist.