and Cretaceous of the eastern Llano uplift, was held on Saturday. Transportation by bus was quite satisfactory. A paper-covered 8½ by 11 guidebook of 10 pages and 8 maps, together with a Cities Service road map of Texas gave a foretaste of future publications by the University of Texas Bureau of Economic Geology.

The A.A.P.G. executive committee was in session at the Commodore Perry Hotel on Saturday and Sunday.

Officers of the South Texas Geological Society are: president, John R. Sandidge; vice-president, James K. Rogers; secretary, Lloyd J. Ryman; treasurer, C. M. McDaniel, Jr. The convention committee included the following chairmen: general chairman, Byron Rife; field trip, Robert G. Kurtz; program, Robert S. Mann; entertainment, Leavitt Corning, Jr.; business, Ed. W. Owen; Austin representative, John T. Lonsdale.

ABSTRACTS

FRANK A. MORGAN, Richfield Oil Corporation, Los Angeles, California.

Geological Fact Finding *versus* Prejudice.

The oil industry has attained its growth in a span of 90 years, during only half of which geology has been an effective tool. Technology has advanced since the time when Leland Stanford dug a slightly inclined drift into a California hillside to drain off the oil below an outcropping oil sand. Statisticians measure exploratory results in units of barrels per foot of hole, barrels per ton of steel, dollars spent per barrel of reserves discovered, and other relationships; however, it is impossible to reduce to statistics the product of the ingenuity of geologists and allied technicians, which has resulted in the continual development of new tools for finding oil. The results of the application of this talent are illustrated by the fact that during periods of oversupply exploration has stagnated and geological departments have been decreased; this has always been followed by a period of low reserves and even shortage which are remedied by a rapid build-up of the organization and increase in exploratory effort.

For finding new oil it is necessary to search in new areas as well as to explore known producing provinces more intensively. Oil men have too often exerted all their efforts only in known producing basins, being blinded by prejudice to the possibilities of new areas until these are proved productive by others. There is a need for more intensive field work of the old-fashioned variety. Most of all it is necessary to have more exploration by the drill. Present subsurface control is largely random; strategically placed holes should be drilled at places where the maximum needed control may be obtained, to depths as great as 12,000 feet, and complete information obtained on each well. Much greater efficiency in drilling is possible. If done like shot-hole drilling instead of with large rigs under production department supervision, the cost may be reduced to $7.00 per foot, thereby doubling the footage of exploratory holes at an increase in cost of only about 18%. If accounting methods should be changed so that these drilling costs are expensed rather than capitalized they could be absorbed currently as exploration expense instead of burdening future earnings of the company. It is recognized that a great obstacle to such a program is the land and lease problem, which may prevent well sites from being obtained at reasonable cost.

JOHN T. LONSDALE, Bureau of Economic Geology, University of Texas, Austin.

Preservation of Well Samples and Cores.

The Association Committee on Preservation of Samples and Cores found that there is need for improvement in this matter. Valuable samples and cores are being discarded. Preservation of samples presents no really difficult problem. Closer cooperation between industry and the repositories will result in a marked improvement.

Because of their weight and bulk, cores present a difficult problem not yet solved. The situation can be improved by closer cooperation, but a completely satisfactory solution probably is not possible at the present time.

PAUL B. HINYARD, Shell Oil Company, San Antonio, Texas.

Big Foot Field, Frio County, Texas.

The Big Foot oil field is in northeast Frio County, Texas, slightly downdip from the Balcones fault trend. Discovery was based on detailed subsurface stratigraphic studies supplemented by seismic and core-test data. The field produces from a stratigraphic trap type reservoir formed by the updip pinch-out of the Upper Cretaceous Olmos sands against a southeast-dipping unconformity. The producing zone occurs at about 3,500 feet. Production is near the marginal level; wells vary from 5 to 35 barrels of oil per day.