Abstract

In these days of stringent proration, oil finding price-cost squeeze, and threats of increased taxation, the Geologists of American have a challenge which they must accept. They should no longer remain in the background as pure scientists, but must be willing to speak up and publicize honestly the hazards and opportunities of the oil business. They should speak as citizens and scientists about taxation, depletion, and government paternalism.

(See entire talk at the end of this section)

November 6, 1961

V. Brown Monnett, Oklahoma State University, Stillwater, Oklahoma

"The Status of Geological Education in the U. S. Today"

Abstract

The demands being made today of schools offering degrees in geology are to deliver a "dedicated" young college graduate with a "working" knowledge of mathematics, physics, chemistry, and engineering, and the ability to present clearly and concisely the results of his work either orally or in writing. In addition he should have a good comprehension of the basic concepts of geology, a good background in the areas of social science and the humanities, and be personally acceptable.

The response to these demands by geology departments varies greatly. A questionnaire was sent to 100 academic departments covering most of the United States. The responses indicate that almost 50% of the departments have increased in approximately 35% of the departments. Additional classwork in English composition and social studies is now required in many departments. Departmental expansion includes more work in geophysics, geochemistry, sedimentation and ground water geology.

The employment situation, and to a lesser extent, the additional coursework requirements, have had three major effects:

The employment situation, and to a lesser extent, the additional coursework requirements, have had three major effects:

(1) a four-year program is no longer considered adequate for geology students,

(2) the number of students choosing geology for their vocation has greatly decreased, and

(3) as a general rule, the best students are entering other fields.

The emphasis on graduate work and the reduced number of students in undergraduate courses have enabled many departments to expand their graduate programs and research activities during the past three years. However, the tremendous drop in the number of undergraduate majors is beginning to affect some of these expanded progress. There will be an insufficient number of capable graduates to support all of these graduate schools in the next few years. Even this year, a number of graduating Seniors had their choice of several Graduate Fellowships and Assistanships.

Corrective measures for the situation which we are rapidly approaching are not easily defined. It is apparent we can learn from the other sciences, for desirable positions for the recent recipients of the Bachelors' Degree in Zoology, Botany, Physics, Chemistry and Mathematics have been meager for many years. Graduate work in these fields is essential, and yet today there are more undergratuates in these sciences than at any time in history. Obviously, the first step in the recovery of geology as a major university cur-

riculum which attracts a fair share of the more intelligent students is the general recognition that employment prerequisites in geology are no different from those in other sciences. The four-year program offers a broad education which is superior to many fields of academic work. If an individual desires to become a capable, up-to-date, biologist, chemist, physicist or employed geologist, he must spend from one to three years in graduate studies.

November 13, 1961

Leo R. Newfarmer, Shell Oil Company, Houston, Texas

"On Economic Cycles and Permanent Decline"

Abstract

It is generally accepted that some fundamental changes may be taking place in the oil business which are operating to decrease per capita demand; therefore, the current "recession" in the domestic oil business might have greater significance than an ordinary downturn in a fluctuating economic cycle. The idea that our fuel and energy products are so essential that growth will be automatic is a demonstrable fallacy, and we are quite justified in looking behind superficial factors for evidence of permanent decline in the use of our products. on the other hand, per capita consumption statistics from 1900 to 1960 indicate a steady upward trend, with 1960 an all time high of $57.54 per capita at crude prices and measuring all years with 1960 dollars. True, a slight decline would have occurred between the years 1955 and 1960, had it not been for the rapid expansion of the natural gas market; but taken as a whole, the market for our products and by-products is by long odds the best in the world, and the prospect of large new domestic reserves in the four million cubic miles yet to be adequately explored on this continent is great enough to justify confidence that the industry has a long-term future and that continuation of the profession of petroleum geology is assured.

November 20, 1961

Mike Monroney, U. S. Senator from Oklahoma

"Oil Depletion Allowance"

(Entire paper included at end of this section)

November 27, 1961

Burton J. Scull, Sun Oil Company Research Laboratory, Richardson, Texas

"A Comparison of the Plio-Miocene Sedimentation of the Gulf Coast with the Atokan Sedimentation of the Arkoma Basin"

Abstract

The Plio-Miocene sediments and the Atokan sediments represent similar stratigraphic sequences deposited in quite different tectonic settings. The Plio-Miocene units are associated with the organically placid Gulf Coast geosyncline. The indicated pattern of deposition is development of load-produced basins (depocenters) during cyclic offlap. The Atokan units are associated with the Quoachita orogan and represent shelf and through suites. Certain aspects of these stratigraphic sequences are comparable to the modern sediments of the northwestern Gulf of Mexico.

The depositional patterns of the Plio-Miocene and the Atokan sedimentary prisms reflect structural-sedimentation interrelationships. In each prism, flexure zones demark abrupt thickening of the sedimentary units. The Atoka was deposited on more competent sub-strata than was the Plio-Miocene so that