The year 1930 was one of economic depression with jobs scarce or practically nonexistent. However, Fred fortunately obtained an assistantship in the School of Geology at the University of Virginia in Charlottesville, where he received his master's degree that year. He received an instructorship at Yale University, along with a job for summer work with the Connecticut Geological Survey, mapping the marbles and limestones of Connecticut. After completing his graduate academic training, letters were sent to many colleges and universities for instructorships, but in 1933, colleges were deeply affected by the depression. However, through a connection with a friend, he obtained a job with the U.S. Gypsum Company as geologist at their gypsum mine in Oakville, New York. This position was his first entry into the field of commercial geology. After a year, he learned that the Magnolia Petroleum Company, a predecessor of Mobil Oil Corporation, was planning to hire their first geologist after a long time. Fred went to Dallas where he got a job with Magnolia as a field geologist, thus beginning a working relationship that lasted for 40 years.

His first assignment was in Oklahoma as geologist on wildcat wells, and after a year, he was transferred to Midland, Texas. In 1937, the company decided to place a resident geologist at a company production camp in the developing oil field in Winkler County, Texas, to study the well samples. Fred was assigned to this job, which lasted 3 years and was followed by a transfer to eastern Kansas, for surface geological mapping in the Forest City basin. An oil discovery was made as a result of this work.

In 1940, the company opened an exploration office in Youngstown, Ohio, to handle exploration for the eastern United States. After only 1 year in Youngstown, Fred was recalled to Dallas and assigned to take over the north Texas geological district for Magnolia. In 1942, he was again transferred, this time to Mount Vernon, Illinois, to supervise oil exploration in the country east of the Mississippi River. The time was in the midst of the "second Illinois boom" with the discovery in the Illinois basin of deeper production in the Mississippian and Devonian reservoirs. An intensive drilling activity extended over several years, and Magnolia developed sizable oil production in this area during these years.

Meanwhile, the buildup of exploration in southeastern New Mexico brought a new assignment for Fred—in Roswell, New Mexico, in 1947, to organize an oil exploration division for the state. This was his first time to organize a company exploration division, and during his tenure there, the company discovered considerable oil and gas, much of which is still being produced today. In January 1949, Fred was called into Magnolia's headquarters office in Dallas as a staff geologist, a position he held for 1 1/2 years. In September 1950, he was promoted to assistant to Magnolia's president, J. L. Latimer. Here he assumed widespread responsibility in company operations. In 1951, he attended the Advanced Management Program at the Harvard Business School in Boston—the first person to be sent by Magnolia or the parent company, Socony-Vacuum Oil Company, to attend this program.