
A GEOLOGIST LOOKS AT PIPELINES

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Most geologists have little understanding of the important function of pipe lines in the oil and gas industry. Two broad classes of pipe lines exist, interstate and intrastate, whether these lines carry crude oil, gas or refined products. Interstate crude and products lines are regulated by the Interstate Commerce Commission, while interstate gas lines are regulated by the Federal Power Commission. Intrastate lines are subject only to the various state commissions which regulate such matters in the respective states.

In spite of close regulation, the pipe line phase of the industry has grown in mileage, in traffic, and in revenue each year since World War II, though rates for this type of transportation have been continually lowered due to intense competition and increased technical efficiency, even in the face of increased prices for labor and equipment, and even though charges for other types of transportation have been spiralling upwards. It costs more to mail a postcard than it does to transport a gallon of crude 2,100 miles from Montana to New York through seven different connecting pipe lines.

The geologist has a place in the pipe line industry. He can assist in determining routes to take advantage of the most favorable terrain; however, his most important function is in the evaluation of oil fields which a pipe line may be requested to connect. This evaluation must show the total recoverable oil which the field holds; the maximum daily production which may be attained when the prospect is fully developed, in order that ample pipe line capacity may be provided; the approximate productive life of the field; and the probable daily rate of production during this span of life. Only when all these factors are estimated as closely as possible can the economics of building a pipe line be determined. And who can make such an evaluation as well as a competent geologist.