

## Abstract of a paper entitled Petroleum Conservation—A Case Study of Oklahoma<sup>1</sup>

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Conservation of Oklahoma's petroleum resources is the responsibility of the Oklahoma Corporation Commission, a constitutionally created body composed of three elected officials who serve six-year overlapping terms, so staggered as to have one term expiring every two years. The commission is an agency subject to many pressures. It must attempt to reconcile the conflicting interests of royalty owners, major oil companies, non-integrated firms, and consumers of petroleum products.

Production of liquid hydrocarbons and natural gas is concentrated in a few states. In 1953 eight states produced 2,131 million barrels of liquid hydrocarbons—the total for the United States being 2,314 million barrels. Texas alone accounted for 50 per cent of the natural gas produced in the United States in 1953.

Proven reserves of petroleum are also concentrated in a few states. As of December 31, 1953, eight states held 94% of the liquid hydrocarbon reserves and 93% of the natural gas reserves.

In view of this concentration of production and reserves, the state conservation programs appear quite important. The major problems appear to the author to be (1) the determination of the optimum rate of use of existing petroleum reserves, (2) the creation of an economic and legal climate favorable to the discovery and full development of new reserves, (3) the treatment of the petroleum reservoir (not the lease) as the minimum engineering unit, and (4) control of well spacing so as to maximize the output of petroleum for any given input of capital and labor resources.

Petroleum conservation must also be regarded as part of the larger problem of conservation of fuel and of raw materials in general. The United States, with 9½ per cent of the free world's population and 8 per cent of the land area, is consuming more than half of the world's materials. In 1950, the United States consumed 2.7 billion tons of materials, an average of 36 thousand pounds per citizen. Conservation, by which we mean efficient use of resources, is the issue of the day.

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