goes one step further in the technique, in that it allocates to the various fields of the States and various wells in each field their proportion of the total allowable by the State. I mention that so that the various terms may be understood.

The CHAIRMAN. I do not want to violate the rule by interrupting you, but will you state whether that is a Federal or State regulation?

Colonel THOMPSON. It is based upon the State constitution and the police powers of the State of Texas. In our constitution, we have a requirement that the natural resources of the State shall be conserved. Our conservation authority is under that constitutional provision. We are, however, assisted by the Federal Government through the office of the Petroleum Coordinator, formerly through the Bureau of Mines, which furnishes us each month an estimate of the required production. That is furnished for each succeeding month. Then we have a hearing after that figure is received on the 20th of each month, at which time we listen to all the purchasers. When we get the figure from the Coordinator, we proceed to allocate that figure among all the various fields and pools in the State, there being 522 in our State, with 90,288 producing wells. To give you an example of how the prorationing system works, there are 27,000 wells in East Texas fields. That field is now 12 years old, and out of the 27,000 wells, 17,000 are still flowing naturally, from their own energy pressure within the reservoir. That is what we call bottom-hole pressure. They have kept that pressure constant and preserved it by having 96 key wells, and once each month they put pressure bombs down at the bottom of the wells. They stay down for a short time, and record the pressure at the bottom of the well. As that pressure is taken from the key wells in the field, they average it up. If the pressure declines to a certain point, it reduces the rate of the flow, and there is a lot of water that comes in from, say, 100 miles away, from Woodbine sand outcroppings. By keeping the pressure constant and by observing methods of conservation we have been able to keep the wells flowing for a long time before they go to pumping.

In the old days, an oil well went into pumping within a few months. We learned the hard way, through dire necessity, to limit production. As an oil field comes in it produces with terrific ability, and in those days, a well producing 50,000 barrels a day would swamp the country. So I frankly say that through dire necessity we learned to limit production. We had to deal with both consumption and production, and we had to have a legal basis on which to do the thing that was desirable to everybody concerned. I mean by that statement that conservation came about as a result of necessity.

Anyhow, out of that came the method of conservaion that I have just explained to you, which has preserved that pressure at the bottom of the wells, to the end that we have already recovered from the East Texas field 1,780,000,000 barrels of oil from that one field alone. The experts in the beginning estimated that only 1,000,000,000 barrels would be recovered from that field through controlling this oil level. Now, those same experts have revised their estimates so that they say at least 2,000,000,000 more barrels will be recovered from that field, making 3,780,000,000 barrels from that field if their estimates are correct, as against the original estimate of 1,000,000,000 barrels, which would be a dividend of 2,780,000,000 barrels of oil just by going