The Pettet lime lenses of the Sligo formation first produced oil in Producers Oil & Gas Company #1 Mrs. G. F. Pettet located in the Sligo Field, Bossier Parish, Louisiana. The "Dillon Sand", which has since been identified as Pettet, previously produced gas in the Pine Island Field. The cumulative production from this zone through 1949 is 65,000,000 barrels of oil and 1,150,000,000 MCF gas in South Arkansas, North Louisiana and East Texas.

The Sligo formation is a subsurface wedge of alternating limes and shales overlying the Hosston clastics. The Pettet members are the result of rapid accumulation of lenses of reeflike limes within the Sligo. These lenses have an alinement approximately at right angles to the depositional strike.

It is the authors' opinions that structural position has had little effect on the development of Pettet porosities in the Sligo formation. This paper deals with factual evidence based upon a detailed study of electric logs with the intention of showing explanations for accumulation of oil and gas in the Pettet lime members.