

32. I've seen some drilling rigs operating near my land. What company is doing the drilling and why?

Industry newsletters report current drilling activity in Oklahoma.

Active drilling is reported in industry newsletters such as PI/Dwights Plus Drilling Wire, which is published daily, weekly, and monthly by IHS Energy Group (Appendix 5). Drilling Wire lists all petroleum wells that have been formally located (i.e., proposed), are currently drilling, or are awaiting completion. The drilling reports locate wells by county and by the section, township, and range system. The reports typically include company, well name, exact location, spud date, expected productive zone and depth, planned depth of well, and kind of well (exploration, development, water injection, etc.). After the well has been drilled, logged, and completed, the report may include information such as total depth, log tops, and initial production.

PI/Dwights Plus Drilling Wire may be found at some public and university libraries. The Oklahoma Marginal Wells Commission (Appendix 1) has current and back issues available for examination at its office.

33. Can you tell me the production potential of a particular zone in this well log?

Possibly. Well-log interpretation is a highly specialized field and typically requires experience in the geographic area of the well.

Well-log interpretation, also known as formation evaluation, is extremely important in the petroleum industry. Poor interpretations can result in the abandonment of potentially successful wells or the expensive completion of a well with little potential for commercial production.

Good well-log interpretation requires extensive training and years of experience, but in many cases the techniques or "tricks" used to evaluate wells in one area or of one formation cannot be used in another area or with a different formation. One technique used by formation-evaluation specialists is to compare the logs of a new well with those of nearby wells that have known production histories. Resistivity and porosity logs are essential for proper interpretation, and many other special logs are helpful (Fig. 9). Computers with highly sophisticated software are increasingly being used.

All major petroleum companies have formation-evaluation specialists on their staffs. Smaller companies and individuals may hire consulting geologists (see question 28) as needed. In some cases, petroleum geologists at the OGS will interpret well logs and estimate the qualitative production potential of a particular zone in a well.

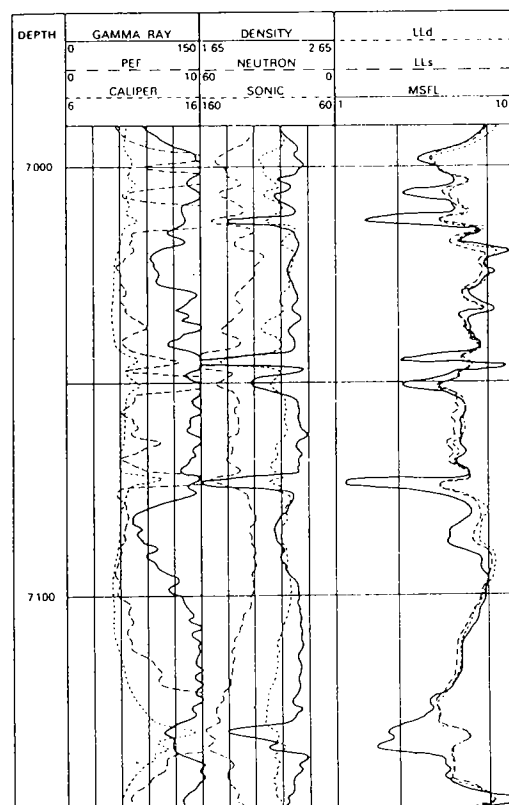


Figure 9 (question 33). Example of a modern petroleum well log. (Modified from Serra, 1985.)

34. How much oil or gas has this particular well produced?

In Oklahoma, production is reported by lease, and a single lease may have many wells. Therefore, figures for an individual well may not be available, but they can be estimated.

Oil and gas producers report petroleum production to the Oklahoma Tax Commission (Appendix 1) by lease, and a lease may have one well or many. Production on single-well

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