

Because most of Oklahoma is well explored, the first step in determining whether petroleum is present *in paying amounts* is to find out whether nearby wells, if any, are productive. Active wells can generally be identified by pump-jacks (oil wells) and "Christmas trees" (gas). Published maps such as OGS map GM-28, "Map of Oklahoma Oil and Gas Fields with Field Supplements," shows the location of hydrocarbon-producing areas (see question 7).

Another source of information is the Natural Resources Information System (NRIS), a database that contains information from all well-completion reports (Form 1002A) that have been filed with the Oklahoma Corporation Commission. For a small charge you may access the NRIS database at the OGS Computer Facility (Appendix 1).

Some commercial firms have maps showing the locations of oil and gas wells in Oklahoma. Geo Information Systems, Herndon Map Service, IHS Energy Group, and PennWell Corp. (Appendix 5) are among the more widely known.

Another way to learn about producing oil and gas wells in Oklahoma is to examine scout tickets; these are 4- x 6-inch index cards containing much of the same information as in the NRIS database. Scout tickets for all of Oklahoma may be examined at the Laurence S. Youngblood Energy Library (Appendix 5) on the University of Oklahoma campus (there is no fee). They may also be examined at the Oklahoma City Geological Society Library in Oklahoma City and at the Oklahoma Well Log Library in Tulsa (Appendix 3).

Even if producing wells are, or once were, nearby, the only way to determine whether oil or gas is present on your property is to drill. And before a company will commit to drilling a well, many exploration, land, geological, and engineering issues must be addressed.

Of course, it is always possible that oil or gas will be found where none was previously known. But these kinds of discoveries are made only after extensive and expensive exploration (see question 35).

28. I think I may have some valuable minerals/oil/gas on my land. How can I evaluate the mineral potential of my land?

Mineral evaluation requires an expert—most likely, a geologist. Ultimately, however, a well or core hole must be drilled.

Evaluating the mineral or petroleum potential of a property must be done by a trained geologist. Even then, the evaluation is an interpretation based on *available* data. Ultimately, the mineral potential of a property must be tested with a well or, in the case of minerals or coal, with one or more core holes.

Mineral evaluations can be done by an independent consulting geologist. Names of consulting geologists are listed in the yellow pages of the telephone directory under "Geologists." The Ardmore, Oklahoma City, and Tulsa Geological Societies (Appendix 3) are professional organizations that have the resumes, special qualifications, and areas of geographic expertise of consulting geologists.

29. A company wants to lease the mineral rights to my land. How much should I lease it for?

Lease rates are based on several factors, including past production, current activity, and trade secrets.

The value of mineral rights for petroleum is related to nearby drilling and/or production, or the exploration potential of an area. For example, if there are no

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