APRIL 13, 1989
NARRATIVE FOR
JONES COUNTY, SOUTH DAKOTA
OIL AND GAS DEVELOPMENT POTENTIAL MAP

INTRODUCTION:

Jones County is located in the southcentral part of the state. It covers T. 2 N., through T. 3 S., Rgs. 26-31 E.. The topography is rolling hills and open grasslands. The drainage system is divided by a topographic high centered in an east-west direction across the county. One system flows to the Bad River to the north, and the other flows to the White River that forms the south county line.

Regional geology shows the Cretaceous age Pierre Shale to cover the entire surface of the county. Structurally the Pre-Cambrian basement rock varies from 500 to 1500 feet below mean sea level across the county. A major fault system has been mapped in the northeast corner of the county by Houser (1987). The system strikes in a northeast direction and is related to basement faulting. The regional dip in the county varies considerably because of the fault system.

There have been only 11 wells drilled in the entire county, and only one in the past 15 years. Currently there is no production in the county.

There are no Indian lands within Jones County.

OCCURRENCE POTENTIAL:

All of Jones County is classified as moderate occurrence potential. This is based on the presence of a sedimentary package of Paleozoic and Cretaceous age rocks that are only 2,000 to 5,000 feet thick with no established production in the county.

There is no type log for this county.

DEVELOPMENT POTENTIAL:

All of Jones County is classified as moderate development potential. This is because the sedimentary package that is known to exist in this county contains potential source and reservoir rocks that produce elsewhere in the state, and possibile structural or stratigraphic traps. Because there is no production or no significance shows in the drilling that did occur, this county has only a moderate development potential.

Based on the past and current drilling in the county, activity is expected to remain the same, with only one or two wells being drilled in this county in the next 15 years.

REFERENCE CITED

Houser, B. B., 1987, Southwestern bounding fault of the Sioux Quartzite, South Dakota: U. S. Geological Survey, Open File Report 87-626, 11p.