

WELL PROPOSAL

FOOR RANCH PROSPECT

YATES ENERGY CORPORATION
Seymour State Com #2
660' FSL & 1300' FWL
Section 18, T9S, R27E
Chaves County, New Mexico

GEOLOGY

Commercial quantities of hydrocarbons (primarily gas) are trapped within the prospect area mainly because of intense Pre-Pennsylvanian structural activity and subsequent erosion. Montoya Rocks were up-lifted to form a relatively sharp fault-bounded structure. The structure was then subjected to a long period of erosion which completely removed the Montoya from the apex (Montoya Structure Map). The result was a central core of Pre-Cambrian aged rocks that was encircled by a rapidly outward thickening Montoya section (Montoya/Isopach Map and Structure Section A-A'). The gas reserves are trapped within the Montoya Dolomite and against the Pre-Cambrian forming a "doughnut" shaped reservoir that is overlain and sealed by the unconformable Pennsylvanian shales.

The proposed location is within the "doughnut" reservoir and on structural strike to the Fred Pool #2 Eastland State which is located approximately 7/8 mile west in Section 13, T9S, R26E. That well has produced 1.2 BCFG (cum to 01-01-89) from the Montoya since its completion in March, 1982 (Structure Section A-A'). The Seymour State Com #2 is also a direct North offset to the two Montoya producers located in Section 19, T9S, R27E. The Elk Oil Co. #2 Viking State Com. located approximately 2/3 mile Southeast has produced 1.4 BCFG and is currently delivering 840 MCFGPD. The Elk Oil Co. #1 Meredith located approximately 3/4 mile South has produced 2.3 BCFG and current rates of production are in excess of 1.5 MCFGPD (see production on Montoya Structure Map).

The proposed proration unit for the Seymour State Com #2 is the W $\frac{1}{2}$, Section 18, T-9-S, R-27-E. This proration unit is the same one that is assigned to the Yates Energy Corporation Seymour State Com #1 (1980' FNL & 660' FWL) which is currently a dual completion from the Atoka (Penn) and ABO. The Montoya was structurally low in that borehole and production tests yielded water along with gas at non-commercial rates (Structure Section A-A'). The proposed location will be up-structure from the Seymour #1 and within the Montoya "doughnut" reservoir (Montoya Structure Map). It is my opinion that a Montoya completion at the proposed location will effi-

<p>BEFORE EXAMINER STOGNER</p> <p>Oil Conservation Division</p> <p><i>Yates Energy</i> Exhibit No. <u>5</u></p> <p>Case No. <u>96 95</u></p>

Montoya Structure Map

ciently drain the Montoya gas reserves under the W½ of Section 18, T-9-S, R-27-E and, therefore, is in the best interests of conservation and prevention of waste.


Curtis A. Anderson
Geologist
Yates Energy Corporation

Exhibits: Montoya Structure/Production Map
Montoya Isopach Map, Net Clean Dolomite
Structural Cross-Section A-A', Montoya Interval