MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986

YATES PETROLEUM CORPORATION

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
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RANDY G. PATTERSON
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TREASURER

GEOLOGICAL CONDITIONS FOR UNORTHODOX LOCATION OF THE YATES PETROLEUM CORP. - WITZ "VN" STATE #2 660' FNL & 660' FEL, SECTION 26-9S-26E CHAVES COUNTY, NEW MEXICO

Yates Petroleum Corporation respectfully requests approval for the unorthodox location of its proposed Witz "VN" State #2 to be drilled 660 feet from the north line and 660 feet from the East line of Section 26, Township 9 South, Range 26 East, Chaves County, New Mexico. The north half of section 26 would be dedicated to the well.

The necessity for this unorthodox location is based upon geological conditions.

Exhibit #1 is a land plat showing the proposed location and its relationship to the surrounding acreage in which Yates has full or partial operating rights. The proration unit is outlined in red.

Exhibit #2 is a map depicting the subsurface structure on top of the Pre-Penn unconformity. The contour interval is 50'. Datum points are noted by circles and the appropriate datum is listed. Well spots colored in red indicate Ordovician producers. The red outline and the green outline marks the termination of the Mississippian formation and the Ordovician respectfully.

The structure shows a horst block which is completely fault bounded. Throw on the bounding faults varies from over 200 feet to a slight displacement of less than 100 feet. Erosion on the uplifted area has resulted in areas where Mississippian and Ordovician sediments have been completely stripped away leaving Pennsylvanian sediments lying unconformably on the Precambrian. The Pre-Pennsylvanian section on the remainder of the horst block consists of Ordovician on Precambrian. A normal sequence of Pennsylvanian resting unconformably on Mississippian occurs on the downthrown side of the bounding faults.

Gas production from the uplifted fault block results from porosity development along the unconformity surface (Karst topography) of the Ordovician which is truncated against the Precambrian. The overlying Pennsylvanian provides the source. The bounding faults serve as a trapping mechanism that place the tite Mississippian limestone in juxtaposition with the porous Ordovician dolomite.

It is the intention of the proposed unorthodox location to penetrate a remnant section of the Ordovician in a structurally high position between the granite knob and the bounding fault which is downthrown to the west.

Exhibit #3, crossection A-A', shows the pertinent well tops and intervals picked by the correlation. The mapped subcrop patterns and fault locations are further documented.

The first well, located west of the proposed location on the downthrown block, shows the Pennsylvanian resting on the Mississippian. The Ordovician tested water in this borehole.

The proposed location is shown to be in an upthrown position, but should encounter a porous Ordovician section in a structurally advantageous position.

The center well, the Ibis "XU" State #2, penetrated the high granite knob. However, it should produce from the arkose section as well as the Wolfcamp formation.

The final well, the Dragonfly State Unit #1 is producing from the Ordovician. It has been connected to a pipeline within the last month and is producing at a rate of 600 MCFGPD.

In summary, the proposed unorthodox location is the best allowable location in the north half of Section 26 which would enable the borehole to encounter the structure at its highest point possible and still encounter a productive Ordovician section. It is anticipated that structurally high penetration of the Ordovician formation would enhance earlier and greater recovery of gas reserves. The well will be drilled through to the Precambrian to ensure that the complete section is tested.