STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF YATES PETROLEUM CORPORATION FOR APPROVAL OF A UNIT AGREEMENT. CHAVES COUNTY, NEW MEXICO.

CASE NO. 13915

AFFIDAVIT OF H. TIM MILLER

STATE OF NEW MEXICO)	
)	SS
COUNTY OF EDDY)	

- I, II. Tim Miller, being first duly sworn on oath, states as follows:
- My name is Tim Miller. I reside in Carlsbad, New Mexico. I am the petroleum geologist employed by Yates Petroleum Corporation ("Yates") who is responsible for the formation of the proposed Pigskin State Exploratory Unit ("the Unit") comprised of 1280 acres, more or less, of State lands situated in Chaves County, New Mexico. The horizontal limits of said Unit Area are described as follows:

Township 12 South, Range 26 East, N.M.P.M.

Section 13: All Section 14: All

- Yates, the designated Unit Operator in the Pigskin State Exploratory Unit Agreement, proposes the formation of the Unit to test all formations from the surface to the base of the Pre-Cambrian formation.
- The initial unit well will be drilled at a standard gas well location 660 feet from the North line and 1650 feet from the East line of Section 14, Township 12 South, Range 26 East, NMPM, Chaves County, New Mexico with a proposed total depth of 6,760 fcet.
- Attachment A to this Affidavit is a copy of the Unit Agreement for the proposed Pigskin State Exploratory Unit. This agreement is on the New Mexico State Land Office State/Fee Unit Agreement form.
- Attachment B is the plat to the Unit Agreement that shows the boundaries of the Pigskin State Exploratory Unit.
 - 6. Attachment C to this Affidavit is a copy of Schedule B to the Unit

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico Case No. 13915....Exhibit No. 1 Submitted by: YATES PETROLEUM CORPORATION

Hearing Date: May 10, 2007

Agreement for the Pigskin State Exploratory Unit that identifies the working interest ownership in the Unit Area. 100% of the working interest in the Unit Area is owned by Yates and its affiliated companies and is committed to the Unit.

- 7. The schedule under Attachment C also identifies the royalty interest in the Unit Area. 100% of the royalty interest is owned by the State of New Mexico and under Attachment D to this Affidavit is a letter from the New Mexico Commissioner of Public Lands giving preliminary approval of the State Land Office to the proposed Pigskin State Exploratory Unit.
 - 8. All of Yates' interest in the Unit Area has been committed to the Unit.
- 9. Attachment E is a Seismic Wolfcamp Time Structure Map and shows Yates proposed well location is on a northeast to southwest trending buildup which 2-D seismic lines reveal. The well location is structurally 30 feet lower than the Basketball well to the north in Section 12 but is still around 40 feet higher than the Football well to the north in Section 1 which should enable the proposed well to have production from the Wolfcamp Dolomite Pay similar to the Basketball well. The map also shows the Basketball well is 70 feet higher structurally to the Football well on top of the Wolfcamp. This has enabled the Basketball well to produce almost as much gas as the Football well in a much shorter time.
- Attachment F is Structural Cross-Section A-A'. The Wolfcamp Dolomite is designated as the Wolfcamp Dolomite Pay which is highlighted in lavender on the cross-section. The Wolfcamp Dolomite Pay produces from three wells which are the Sonar BGO State Com No. 1 in Section 36, the Football BCF Federal Well No. 1 in Section 1, and the Basketball BBI Federal No. 1 in Section 12. The Sonar well has produced 103 MCF from February 2006 to February 2007. The Football well has produced 191 MMCF from November 2004 through February 2007. The Başketball well has produced 163 MMCF from June 2006 through February 2007. Yates believes the reason that the Wolfcamp Dolomite produces much better in the Football and Basketball wells is that these two wells overlie a very thick carbonate buildup which is labeled on the cross-section as the Wolfcamp/Cisco Carbonate (highlighted in pink) whereas the Sonar well does not overlie this buildup and thus has produced very little gas. This carbonate buildup is dramatically shown on the cross-section and probably has contributed to some fracturing in the Wolfcamp Dolomite Pay which would enhance the production from this interval. This buildup is non-existent in the Sonar well on the northern end of the cross-section and the John Trigg Federal Well No. 1 in the southern end of the cross-section.
- 11. Attachment G is Structural Cross-Section B-B'. The Wolfcamp Dolomite Pay is also shown in lavender and the Wolfcamp/Cisco Carbonate is shown in pink. This cross-section also shows very little of the Wolfcamp/Cisco Carbonate Buildup in the Atlantic Richfield Morrison Federal Well No. 1 in Section 10 to the west and the Supron Energy Amoco State Well No. 1 in Section 16 to the southwest. However, there is a dramatic thickening once again under the proposed location.

- A secondary objective is the Basal Abo Dolomite which is highlighted in turquoise in the two cross-sections. This interval was perforated in the Football wells because of mudlog shows and perforated in the Basketball well as a look alike as this well was originally drilled by Marathon Oil Corporation and their mudlog had no shows in the Basal Abo or Wolfcamp Dolomite. Also, the Basketball well is 70 feet higher structurally than the Football well. Yates believes that the bulk of the gas is coming from the Wolfcamp Dolomite Pay because of higher shows on the Football mudlog in this interval. Other secondary objectives would be the Cisco limes, Strawn Sands and the Fusselman Dolomite. These formations had some DST's and tests conducted in surrounding wells which are shown on the cross-sections.
- 13. The unit covers an area that can be reasonably developed under a unit plan.
- 14. Yates is attempting to develop the Wolfcamp Dolomite as the main objective. The Basal Abo Dolomite is the secondary objective.
- 15. If the initial unit well is successful, additional wells will be drilled in the Unit Area. Accordingly, approval of the unit agreement will result in the efficient recovery of hydrocarbons.
- Approval of the Pigskin State Exploratory Unit and the development of the Unit Area pursuant to a unit plan is in the best interest of conservation, the prevention of waste and the protection of correlative rights.

FURTHER AFFIANT SAYETH NOT.

H. Jim Meller

SUBSCRUBBLANDISWORN before me on this $8^{+1/4}$ day of May, 2007.

NOTARY PUBLIC-STATE OF NEW MEXICO

My commission empires: 10-17-09. Voncex Elbel Notary Public (

My Commission Expires: 10-17-09