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, LEA COUNTY, NEW MEXICO.

CASE NO. 13611

AFFIDAVIT OF JOHN AMIET

STATE OF NEW MEXICO)) ss. COUNTY OF EDDY

I, John Amiet, being first duly sworn on oath, states as follows:

1. My name is John Amiet. I reside in Artesia, New Mexico. I am the petroleum geologist employed by Yates Petroleum Corporation ("Yates") who is responsible for the formation of the proposed Pitney State Exploratory Unit ("the Unit") comprised of 12,400 acres, more or less, of State of New Mexico lands and 80 acres, more or less, of Fee lands situated in Lea County, New Mexico. The horizontal limits of said Unit Area are described as follows:

Township 12 South, Range 35 East, N.M.P.M.

Section 1:	All
Section 2:	All
Section 11:	All
Section 12:	All
Section 13:	All
Section 14:	All
Section 15:	All
Section 21:	All
Section 22:	All
Section 23:	All
Section 24:	All
Section 25:	All
Section 26:	All
Section 27:	All
Section 28:	All
Section 29:	N2
Section 33:	All
Section 34:	All
Section 35:	All

BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Case No. <u>13611</u> Exhibit No. 1 Submitted by: <u>YATES PETROLEUM CORPORATION</u> Hearing Date: <u>January 5, 2006</u>

Section 36: All

2. Yates, the designated Unit Operator in the Pitney State Exploratory Unit Agreement, proposes the formation of the Unit to test all formations from the surface to the base of the Mississippian formation.

3. The initial unit well will be drilled at a standard location 1980 feet from the East line and 660 feet from the South line of Section 23, Township 12 South, Range 35 East, NMPM, Lea County, New Mexico to an approximate depth of 13,700 feet. A second well will be drilled upon the successful completion of the first well. The estimated costs for these wildcat wells are \$2,904,300 million (AFE attached as <u>Yates Exhibit 2</u>).

4. <u>Attachment A</u> to the Affidavit is an original copy of the Unit Agreement for the proposed Pitney State Exploratory Unit. This agreement is on the New Mexico State Land Office State/Fee Unit Agreement form.

5. <u>Attachment B</u> to the Affidavit is the plat to the Unit Agreement that shows the boundaries of the Pitney State Exploratory Unit.

6. <u>Attachment C</u> to this Affidavit is a copy of Schedule B to the Unit Agreement for the Pitney State Exploratory Unit that identifies the working interest ownership in the unit area. 89% percent of the working interest in the Unit Area is committed to the Unit. 80 acres of the proposed unit are is both leased and unleased Fee land. <u>Yates Exhibit 3</u> are copies of the notice letters that were sent to all owners with unleased mineral interests in the proposed Unit area.

7. The schedule under <u>Attachment C</u> to the Affidavit also identifies the royalty interest in the Unit Area. 99% percent of the royalty interest is owned by the State of New Mexico. <u>Attachment D</u> 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 Pitney State Exploratory Unit.

8. All of Yates' interest in the Unit Area have been committed to the Unit.

9. <u>Attachment E</u> to this affidavit is a Top of Structure Map for the Austin formation. Yates is attempting to locate channel sands by utilizing seismic, log correlation, and regional mapping. Although these gas sands can be very productive, the channels are narrow and limited in aerial extent. Basal Morrow sand channels have proven to be good reservoirs several miles to the west. The productive Atoka-Morrow wells are highlighted with purple circles on the map. Yates is attempting to extend this Atoka-Morrow trend across a major north-south fault into the deeper part of the basin. The interpreted Morrow channels are shown in blue on the Austin structure map. Structure is very important in this are since a major north-south fault cuts across the west side of the proposed unit. The faults are shown by heavy black lines. All of the Atoka-Morrow production is located on the west side of the map. There are two EOG Resources Inc. Empanada wells located on an intermediate step down block in the southwest corner of the map. These two wells have good lower Morrow sands and should produce.

10. Attachment \underline{F} is a Structural Cross Section A-A' which shows the proposed well location in relation to the surrounding wells. The Empanada well is shown on the cross-section. Even though this well is on the down side of one fault, the cross-section shows this well to be several hundred feet higher than the three wells in the deep basin due to a second fault. There are numerous channel systems throughout the deep basin. In fact, all three wells in the basin have varying amounts of sand. There may be fans or turbidity deposits of sands covering much of the basin. Drill stem tests on these 3 wells were either wet or tight. The Yates well on the right side of the cross-section found think Atoka sands which tested water. The concept for the first Pitney well is to find sands on subtle structural highs which were uplifted after deposition of the sands.

11. The unit covers an area that can be reasonably developed under a unit plan. Although this unit covers a large area, no productive wells have been drilled inside the proposed unit area. In addition, finding a channel does not guarantee a good well. The Arrington Sprouting well (Section 28) drilled a seismic channel, but found a clay filled channel.

12. The primary target is the Atoka-Morrow formation with Austin (upper Mississippian) and upper Pennsylvanian production possible.

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.

16. Approval of the Pitney 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.

SUBSCRIBED AND SWORN before me on this 4 day of January, 2006.

