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. 13403

AFFIDAVIT OF JOHN AMIET

STATE OF NEW MEXICO)	
)	SS
COUNTY OF LEA)	

- 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 Fender State Exploratory Unit ("the Unit") comprised of 5442.24 acres, more or less, of State of New Mexico lands situated in Lea County, New Mexico. The horizontal limits of said Unit Area are described as follows:

Township 10 South, Range 32 East, N.M.P.M.

Section 3: All
Section 4: All
Section 5: All
Section 8: All
Section 9: All
Section 10: W2, N

Section 10: W2, NE4, N2SE4

Section 15: W2, W2SE4

Section 16: All Section 17: All

- 2. Yates, the designated Unit Operator in the Fender 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 the re-entry of the Sohio State #1 Well at a gas well location 1980 feet from the South line and 1980 feet from the West line of Section 9, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico to an approximate depth of 11,700 feet to test all formations from the surface to the base of

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Case No. 13403 Exhibit No. 1

Submitted by:

Yates Petroleum Corporation

Hearing Date: February 3, 2005

the Mississippian formation. The estimated costs for this well are \$912,800. The location of the second well depends on the results of the Sohio re-entry, but would probably be located in Section 9. The second well will cost an estimated \$1,765,000.

- 4. Attachment A to this Affidavit is a copy of the Unit Agreement for the proposed Fender State Exploratory Unit. This agreement is on the New Mexico State Land Office State/Fee Unit Agreement form.
- 5. Attachment B is the plat to the Unit Agreement that shows the boundaries of the Fender State Exploratory Unit and the location of the initial unit test well.
- 6. Attachment C to this affidavit is a copy of Schedule B to the Unit Agreement for the Fender State Exploratory Unit that identifies the working interest ownership in the unit area. 100% percent 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. One hundred percent 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 Fender State Exploratory Unit. There are no overriding royalty interests in the Unit Area.
 - 8. All interests in the Unit Area have been committed to the Unit.
- 9. Attachment E is a Net Atoka Sand Isopach Map. Yates is attempting to locate channel sands by utilizing log correlation, old sample description logs, drill stem test information, and regional mapping. Although these gas sands can be very productive, the channels can be very narrow and limited in aerial extent. Although these gas sands can be very productive, the channels are often narrow and limited in aerial extent. The targeted sand channels are shown on the map. The Sohio State #1 Well was drilled in 1959 and targeted Devonian oil. Yates believes there may be by-passed Atoka gas sand in this well.
- 10. Attachment F, is Structural Cross Section A-A', and shows the Atoka gas sand in the Sohio well and the offsetting wells at the proposed Fender location. There have been only four deep Atoka penetrations in the proposed unit and none of these wells had any production (wells shown by open red circles), thereby emphasizing the risk involved. The only Atoka producers are located in the northeast corner of the map in Section 36 and in the southwest corner of the map in Section 19. The first well has a cumulative Atoka production of 160 MBO and 1481 MMCF and the second has produced 2 MBO and 449 MMCF. There has been shallow San Andres and Upper Pennsylvanian production on the extreme east edge of the unit outline on an uplifted fault block. There is a major fault running north-south through the middle of Sections 3, 10, 15 and 22. Except for the extreme eastern edge of the proposed unit, there has been no production inside the unit.

- 11. The unit covers an area that can be reasonably developed under a unit plan.
- 12. Yates is attempting to develop deep Atoka production in the center of a structural low on acreage where there has been no Atoka production. Yates believes there is potential for channel sand development in this proposed unit.
- 13. This is a high risk project, but 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.
- 14. Approval of the Fender 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.

John Amiet

SUBSCRIBED AND SWORN before me on this 3\(\frac{5}{4}\) day of January, 2005.

Notary Public

My Commission Expires: