

**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. 13536**

**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 Van Dyke State Exploratory Unit ("the Unit") comprised of 9880.53 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 33 East, N.M.P.M.**

Section 11:	All
Section 14:	All
Section 15:	All
Section 16:	All
Section 17:	All
Section 19:	S2
Section 20:	All
Section 21:	All
Section 22:	All
Section 23:	All
Section 26:	All
Section 27:	All
Section 28:	All
Section 29:	All
Section 30:	E2
Section 34:	N2
Section 35:	N2

BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Case No. 13536 Exhibit No. 1  
Submitted by:  
Yates Petroleum Corporation  
Hearing Date: September 8, 2005

2. Yates, the designated Unit Operator in the Van Dyke 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 660 feet from the South line and 1980 feet from the East line of Section 17, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico to an approximate depth of 11,750 feet. The estimated costs for this well are \$2,230,300 million. (The AFE is attached as Yates Exhibit 2). A second well will be located in either Section 11 or 15.

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

5. Attachment B to the Affidavit is the plat to the Unit Agreement that shows the boundaries of the Van Dyke 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 Van Dyke State Exploratory Unit that identifies the working interest ownership in the unit area. 92% percent of the working interest in the Unit Area is owned by Yates and its affiliated companies and is committed to the Unit. Yates Exhibit 3 are copies of letters that were sent to all working interest owners.

7. The schedule under Attachment C to the Affidavit also identifies the royalty interest in the Unit Area. 100% percent of the royalty interest is owned by the State of New Mexico. 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 Van Dyke State Exploratory Unit.

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

9. Attachment E to this affidavit is a Basal Morrow Net Sand Isopach Map. 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 erratic and limited in aerial extent. Basal Morrow sand channels have proven to be good reservoirs in channel systems found several miles east of the proposed unit. Yates recently drilled the Gosden well (in Section 1) immediately northeast of the Unit. This well has recently been completed and has not stabilized, but the Gosden well appears to be a very good well. Yates is attempting to extend this Morrow trend to the proposed Unit. This interpreted Gosden channel is shown on the map.

10. Attachment F is a Middle Atoka Net Sand Isopach Map showing an interpreted second channel system from 3-D seismic. This system is a series of meandering middle Atoka sand channels. A well location has been picked on a point bar (in Section 17) in this meandering channel system. Structure is very important in this area since a major north-south fault cuts across the center of the proposed Unit. The faults are shown by the heavy black lines on the map. These are pre-existing faults, but much of the structural movement seems to have occurred after deposition of the basal Morrow sands, so these faults are not on the Morrow map.

11. Attachment G is Stratigraphic Cross Section A-A' which depicts a southwest to northeast stratigraphic section and shows the proposed middle Atoka sand target. Both the Continental well and the Haskins & Knickerbocker well had 20% sand in the middle Atoka on old strip log descriptions. A drill stem test in the Continental well over this sand interval recovered 150 feet of mud. The basal Morrow sand is shown by the Gosden well which is located on the right side of the cross section. There are two Devonian producers in the southeast corner of the proposed Unit, which are surrounded by five Devonian dry holes. There is only one other deep penetration (in Section 14) which has been drilled within the proposed Unit. There are a number of dry holes surrounding the proposed Unit. The gas well shown in Section 36 immediately southwest of the Unit outline produced only 12 MMCFG from the Atoka.

12. This acreage has had production from numerous Bough C wells (Upper Pennsylvanian) which are not shown on the sand isopach maps. All these wells are plugged except for one well located in the SE/4NW/4 of Section 22 which is currently making 10 BO/D and 35 MCF/D. The 40 acre proration spacing for this well will be excluded from the Unit.

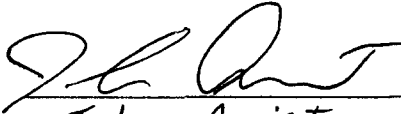
13. The unit covers an area that can be reasonably developed under a unit plan.

14. The primary target is the Atoka-Morrow formation.

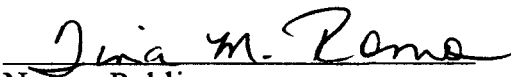
15. If the initial unit well is successful, additional wells will be drilled in the Unit Area. Accordingly, approval of the unit agreement will result in the efficient recovery of hydrocarbons.

16. Approval of the Van Dyke 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.

  
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John Amiet

SUBSCRIBED AND SWORN before me on this 6<sup>th</sup> day of September, 2005.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

1/25/07