1

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. 14113

AFFIDAVIT OF H. TIM MILLER

STATE OF NEW MEXICO)) ss. **COUNTY OF EDDY**

- I, H. 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 Boomerang State Exploratory Unit ("the Unit") comprised of 1920 acres, more or less, of State and Fee lands situated in Chaves County, New Mexico. The horizontal limits of said Unit Area are described as follows:

Township 8 South, Range 33 East, N.M.P.M.

Section 23: S2 Section 25: W2 Section 26: E2 Section 35: E2 Section 36: All

- Yates, the designated Unit Operator in the Boomerang State Exploratory Unit Agreement, proposes the formation of the Unit to test all formations from the surface to the base of the Canyon formation.
- The initial unit well will be drilled at a location 1650 feet from the South line and 990 feet from the East line of Section 26, Township 8 South, Range 33 East, NMPM, Chaves County, New Mexico with a proposed total depth of 9,750 feet.
- Attachment A to this Affidavit is a copy of the Unit Agreement for the proposed Boomerang 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 Boomerang State Exploratory Unit.

BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Case No. 14113..... Exhibit No. 1
Submitted by:
YATES PETROLEUM CORPORATION
Hearing Date: April 17, 2008

- 6. Attachment C to this Affidavit is a copy of Schedule B to the Unit Agreement for the Boomerang 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. More than 90% 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 Boomerang State Exploratory Unit.
 - 8. All of Yates' interest in the Unit Area has been committed to the Unit.
- 9. Attachment E is a Net Porosity Isopach Map and shows good production when the net porosity is 5 feet or better. The Big Sky ABY #I has 5 feet of net porosity and has produced 105,000 barrels of oil. The Tres Canal BAL State #I has 6 feet of net porosity and has the capability of similar or better production than the Big Sky ABY State #1. The Tres Canal is currently producing from a deeper formation. The Boomerang State Unit #1 is positioned to encounter 8 feet or better of net porosity in the Bough C formation with the possibility of producing equal amounts of oil or better than the Big Sky ABY State #1.
- 10. Attachment F is a Top of Bough C Structure Map. The Bough C formation has produced in four wells on the east and west sides of the proposed unit. On the west side, the Enstar ACW State # 1 (Section 27) has produced 1,876 barrels of oil and 20,128 barrels of water. The Flying WV #1 (Section 34) has produced 13,562 barrels of oil, 22 MMCF of gas and 68,333 barrels of water. The Big Sky ABY State #1 (Section 26) has produced 105,000 barrels of oil, 88 MMCF of gas and 190, 637 barrels of water. On the east side, the Gato Loco BFT Com #1 has produced 4,505 barrels of oil, 6 MMCF of gas and 3,785 barrels of water. Since the Big Sky well has produced 105,000 barrels of oil from the Bough C with 5 feet of net porosity as opposed to the Enstar, Flying W and Gato Loco which have 4, 3 and 2 feet respectively, Yates believes that the Big Sky well is producing from a more expansive Bough C reservoir to the east and northeast. The Boomerang State Unit #1 at the proposed location will test this concept. The Boomerang State Unit #1 will also be structurally higher than the Big Sky and Tres Canal wells which possibly will enhance production along with the thicker net porosity.
- Attachments G and H are Structural Cross-Sections A-A' and B-B'. The plugged McAlester AAH State #1 in Section 34 as shown on the cross sections and the Top of Structure Map is on or near the crest of a structure. The two things that prevented this well from Bough C production were no net porosity and possibly a small reservoir on this high. Yates believes the proposed well will encounter a more extensive reservoir with 8 feet or better of net porosity and at a higher structural position. The proposed well has the capability of producing 105,000 barrels of oil or more from the target formation.

- 12. The unit covers an area that can be reasonably developed under a unit plan.
- 13. Yates is attempting to develop the Bough C formation as the main objective.
- 14. 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.
- 15. Approval of the Boomerang 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. Tim Miller

SUBSCRIBED AND SWORN before me on this 14 day of April, 2008.

Dina M. Romo Notary Public

My Commission Expires: