

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

APPLICATION OF RUBICON OIL & GAS, LLC  
FOR APPROVAL OF A UNIT AGREEMENT,  
LEA COUNTY, NEW MEXICO.

CASE NO. 13645

AFFIDAVIT OF MICHAEL D. HAYES

STATE OF TEXAS            )  
                                  ) ss.  
COUNTY OF MIDLAND    )

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Case No. 13645 Exhibit No. 1

Submitted by:

RUBICON OIL & GAS, L.L.C.

Hearing Date: January 5, 2006

I, Michael D. Hayes, being first duly sworn on oath, states as follows:

1. My name is Michael D. Hayes. I reside in Midland, Texas. I am the petroleum geologist employed by Rubicon Oil & Gas, LLC ("Rubicon") who is responsible for the formation of the proposed Hightower State Exploratory Unit ("the Unit") comprised of 2080 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 12 South, Range 33 East, N.M.P.M.

Section 15: All  
Section 22: All  
Section 23: NW4  
Section 27: All

2. Rubicon, the designated Unit Operator in the Hightower State Exploratory Unit Agreement, proposes the formation of the Unit to test all formations from the surface to the base of the Devonian formation.

3. The initial unit well will be drilled at a standard location 660 feet from the North and East line of Section 27, Township 12 South, Range 33 East, NMPM, Lea County, New Mexico to an approximate depth of 10,600 feet. The estimated costs for this well are \$2,000,000. (The AFE is attached as Rubicon Exhibit 2).

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

5. Attachment B to the Affidavit is the plat to the Unit Agreement that shows the boundaries of the Hightower 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 Hightower 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 Rubicon and is committed to the Unit.

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 Hightower State Exploratory Unit.

8. All of Rubicon's interest in the Unit Area has been committed to the Unit.

9. Attachment E to this affidavit is a Wolfcamp Net Pay Isopach Map, which shows the proposed Unit outline and the proposed initial well location. The map shows porosity development in the primary target. One economic well has produced in the Wolfcamp (Permo Penn) in the SESE of Section 27. This well was completed in 1952 and produced 122,000 barrels of oil before being converted to a salt water disposal well in 1963. The well was plugged and abandoned in 1983. Two other wells produced marginally economic Wolfcamp oil and gas in the SESE of Section 22 and the NWNE of Section 15 before being plugged and abandoned.

10. Attachment F is a Structure Map and is on the double X marker very near the Wolfcamp horizon. This map shows a broad structural nose trending south from the Bagley Field area culminating in closure over the Hightower Field area.

11. Attachment G is an Abo Net Pay Isopach Map which shows a maximum of about twenty feet of net pay. Economic quantities of oil and gas are currently produced from the Abo formation east of the Unit (Section 23). This well has made about 1.7 BCF and 4,000 barrels of oil since completion in 1999. The well continues to produce about 200 MCFPD. Marginally economic lower Pennsylvanian production was established in Section 15. This well produced 49,000 barrels of oil and 45 million cubic feet of gas before being plugged in 1978.

12. Attachment H is a map of cumulative production by zone. Production in the Bagley and Hightower fields occurs on structural closure. The initial test is a step out from plugged wells. Rubicon will explore for stratigraphically trapped reserves along the flanks of these proven structures.

13. Attachment I is Structural Cross-Section H-H' and traverses the Unit Area and offset wells from North to South. The primary target is shown in blue on the cross-

section. The cross-section provides completion information with perforations colored in red. Porosity development in the Abo, Wolfcamp, and Pennsylvanian varies widely based on logs and testing.

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

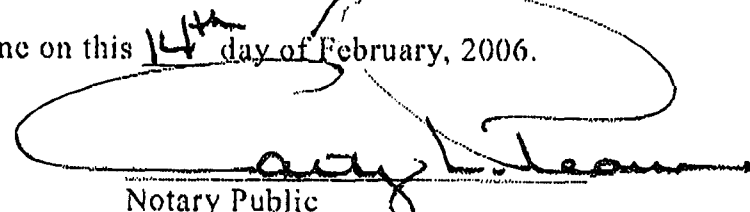
15. The primary target is the Wolfcamp formation. Secondary objectives include the Abo, Lower Pennsylvanian and the Devonian formations.

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 Hightower 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 14<sup>th</sup> day of February, 2006.

  
  
Notary Public

My Commission Expires:

