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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

NOMENCLATURE
CASE NO. 10556 (Reopened)
Order No. R-5353-M

IN THE MATTER OF CASE 10556 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-9759, WHICH ORDER PROMULGATED SPECIAL POOL RULES FOR THE OLD MILLMAN RANCH-BONE SPRING POOL IN EDDY COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on July 15, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 31st day of August, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## **FINDS THAT:**

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) By Order No. R-9545 issued in Case No. 10343 on July 1, 1991, the Division created and defined the Old Millman Ranch-Bone Spring Pool. The discovery well for the pool was the Strata Production Company Aguila Federal Well No. 1 located in Unit L of Section 4, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) By Order No. R-9759 issued in Case No. 10556 on November 4, 1992, the Division, upon application of Chi Energy Inc., promulgated Temporary Special Rules and Regulations for the Old Millman Ranch-Bone Spring Pool, Eddy County, New Mexico, including a limiting gas-oil ratio of 20,000 cubic feet of gas per barrel of oil.

- (4) Pursuant to the provisions of Order No. R-9759, this case was reopened in order to allow the operators in the subject pool the opportunity to appear and present evidence and testimony as to the nature of the reservoir with regards to the proper classification of the pool as either oil or gas.
- (5) Chi Energy Inc., one of three operators in the pool, appeared at the hearing and presented evidence and testimony in this case. Mewbourne Oil Company, another operator in the pool, appeared through counsel at the hearing but did not present evidence or testimony either in support or opposition of Chi Energy Inc.
- (6) At this time Chi Energy Inc. requests that the Old Millman Ranch-Bone Spring Pool be reclassified as an associated pool to be governed by the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico, as contained within Division Order No. R-5353, as amended.
- (7) The applicant further seeks the promulgation of additional Special Rules and Regulations for the Old Millman Ranch-Bone Spring Pool including 80-acre oil spacing, 160-acre gas spacing and a limiting gas-oil ratio of 5,000 cubic feet of gas per barrel of oil.
- (8) The Old Millman Ranch-Bone Spring Pool currently comprises the W/2 of Section 3, S/2 of Section 4, SE/4 of Section 5, and the NE/4 of Section 9, all in Township 20 South, Range 28 East, NMPM.
- (9) Applicant's geologic evidence indicates that the reservoir is an elongated sand body draped over a southeast trending nose, is of limited extent and is positioned near the updip limit of the First Bone Spring Sand along the northwest edge of the Delaware Basin. The trap of the reservoir is formed by a stratigraphic pinchout of effective porosity within the First Bone Spring Sand.
- (10) Division records indicate that there are currently five wells producing within the pool. Production information indicates that four of the wells in the pool meet the qualification for a gas well as contained within Order No. R-5353 (gas-liquid ratio in excess of 30,000 cubic feet of gas per barrel of liquid hydrocarbon).
- (11) The gas wells within the pool are located up-structure from the only oil well in the pool.

(12) PVT analysis conducted on the applicant's Winchester Federal Well No. 1 indicates that the subject reservoir is likely a gas-condensate reservoir.

- (13) The evidence indicates that while this is a complex reservoir with limited pressure data, there is a reasonable engineering probability that the gas wells may be connected to the oil well; and in which case a gas cap may be forming or has formed upstructure of the oil production in the reservoir.
- (14) The reservoir data currently available indicates that the Old Millman Ranch-Bone Spring Pool should be temporarily classified as an associated oil and gas pool until such time as further geologic and engineering evidence is available.
- (15) Additional drilling will likely take place within the subject pool within the next eighteen months.
- (16) Preliminary engineering data indicates that oil wells and gas wells within the Old Millman Ranch-Bone Spring Associated Pool should be spaced on 80 and 160 acres, respectively.
- (17) Production tests indicate that the continuation of the current gas-oil ratio limitation of 20,000 cubic feet of gas per barrel of oil may have an adverse affect on the reservoir and should be reduced to 5,000 cubic feet of gas per barrel of oil, thereby maximizing ultimate recovery of oil and gas from the reservoir.
- (18) Production tests further indicate that producing the gas wells in the pool at an allowable rate of 2.2 MMCFG per day should not reduce ultimate condensate recovery from the reservoir.
- (19) No offset operator and/or interest owner appeared at the hearing to present evidence and testimony or to oppose the proposal by Chi Energy Inc.
- (20) The reclassification of the Old Millman Ranch-Bone Spring Pool as an associated pool and the promulgation of special rules and regulations for said pool as described above for a temporary period of eighteen months will allow the operators in the subject pool the opportunity to produce their just and equitable share of the oil and gas within the pool, will provide for the orderly development of the pool, will prevent the drilling of unnecessary wells, and will otherwise prevent waste and protect correlative rights.
- (21) This case should be reopened at an examiner hearing in February, 1995, at which time the operators in the Old Millman Ranch-Bone Spring Associated Pool should be prepared to appear and present evidence and testimony as to the nature of the reservoir with regards to the adoption of permanent rules.

#### IT IS THEREFORE ORDERED THAT:

- (1) Division Order No. R-9759, dated November 4, 1992 shall be superseded by this order.
- (2) The Old Millman Ranch-Bone Spring Pool, located in portions of Sections 3, 4, 5 and 9, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico, is hereby reclassified as an associated oil and gas pool and redesignated the Old Millman Ranch-Bone Spring Associated Pool.
- (3) The Old Millman Ranch-Bone Spring Associated Pool shall be governed by the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico, as promulgated by Division Order No. R-5353, as amended, insofar as said General Rules and Regulations are not inconsistent with the Special Rules and Regulations for the subject pool as hereinafter set forth, in which event the Special Rules and Regulations shall apply.

# TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE OLD MILLMAN RANCH-BONE SPRING ASSOCIATED POOL

- <u>RULE 2</u>. A standard oil proration unit shall consist of 80 acres. A standard gas proration unit shall consist of 160 acres.
- <u>RULE 6</u>. The limiting gas-oil ratio shall be 5,000 cubic feet of gas per barrel of oil.

### **IT IS FURTHER ORDERED THAT:**

- (4) The location of all wells presently drilling to or completed in the Old Millman Ranch-Bone Spring Associated Pool or in the Bone Spring formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well within 30 days from the date of this order.
- (5) Pursuant to Paragraph A of Section 70-2-18, N.M.S.A. 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil wells and gas wells in the Old Millman Ranch-Bone Spring Associated Pool shall have dedicated thereto 80 and 160 acres, respectively, in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating the appropriate acreage to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drilling to or completed in the Old Millman Ranch-Bone Spring Associated Pool or in its corresponding vertical limits, or within one mile thereof, shall receive no more than one-fourth of a standard allowable for said pool.

- (6) This case shall be reopened at an examiner hearing in February, 1995, at which time the operators in the subject pool may appear and show cause why the Temporary Special Rules and Regulations for the Old Millman Ranch-Bone Spring Pool promulgated herein should not be rescinded and the pool reclassified.
- (7) Jurisdiction of this cause is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

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