# 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. 12751 ORDER NO. R-11721

APPLICATION OF YATES PETROLEUM CORPORATION FOR POOL CREATION AND SPECIAL POOL RULES INCLUDING SPECIAL SPACING AND WELL LOCATION REQUIREMENTS AND A SPECIAL OIL DEPTH BRACKET ALLOWABLE, CHAVES COUNTY, NEW MEXICO.

## **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on November 1, 2001, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of February, 2002, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

# **FINDS THAT:**

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Yates Petroleum Corporation ("Yates"), seeks the creation of a new pool for the production of oil from the Cisco formation comprising the W/2 of Section 26, Township 6 South, Range 25 East, NMPM, Chaves County, New Mexico, to be designated the Pecos Slope Deep Oil Pool.
  - (3) Yates further seeks to establish special pool rules that include:
    - (a) a provision whereby the vertical limits of the pool would include all formations below the base of the Abo formation:
    - (b) 320-acre oil spacing and proration units with the option of drilling a second infill well within the

- quarter section that does not contain the initial well on the spacing unit;
- (c) well location requirements such that wells shall be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and
- (d) a special depth bracket allowable of 694 barrels of oil per day.
- (4) Yates recently drilled its George "QJ" Federal Well No. 10 (API No. 30-005-63368) at a location 660 feet from the South line and 1500 feet from the West line (Unit N) of Section 26, Township 6 South, Range 25 East, NMPM, to a total depth of 5,329 feet. This well has been completed in the Cisco formation through perforations from 4,996 feet to 5,012 feet.
- (5) The predominant producing pool in this area of Chaves County is the Pecos Slope-Abo Gas Pool. Yates testified however, that it is currently implementing an exploration drilling program in this area that targets formations deeper than the Abo formation, namely the Wolfcamp and Pennsylvanian intervals.
- (6) Yates testified that the George "QJ" Federal No. 10 has discovered a new oil pool in the Cisco formation and presented geologic and engineering evidence to support its position.
  - (7) Yates presented geologic evidence that demonstrates:
    - (a) the geology below the Abo formation in this area is not well defined. It appears that the Wolfcamp, Strawn and Cisco intervals are the only ones present in the George "QJ" Federal No. 10 below the Abo formation;
    - (b) Yates has only tested the Cisco interval from 4,996 feet to 5,012 feet within the George "QJ" Federal No. 10; however, there is potential for additional production in this well from the Abo and Wolfcamp intervals. In addition, there is a Cisco interval

located from a depth of 4,900 feet to 4,910 feet that also may be productive;

- (c) Yates has tested one additional well in the Cisco formation that offsets the George "QJ" Federal No. 10, this being the Cottonwood Ranch "MK" State No. 1 (API No. 30-005-60615) located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 36, Township 6 South, Range 25 East, NMPM. This well, which was perforated in the same correlative interval that is being produced in the George "QJ" Federal No. 10, was tested at a producing rate of 782 MCF gas per day, 10 barrels of oil per day, and 18 barrels of water per day; and
- (d) one additional well that offsets the George "QJ" Federal No. 10, being the Five Mile Draw "LX" Federal No. 1 (API No. 30-005-60608) located 800 feet from the South line and 2100 feet from the East line (Unit O) of Section 34, Township 6 South, Range 25 East, NMPM, may be potentially productive in the subject Cisco interval.
- (8) Yates presented engineering evidence that demonstrates:
  - the George "QJ" Federal No. 10 began producing from this Cisco interval on August 22, 2001 at a rate of approximately 1.26 MMCF of gas per day and 2 barrels of oil per day. On August 25, 2001, the well produced at a rate of 1.9 MMCF of gas per day and 142 barrels of oil per day. Subsequent to that time, the well's oil production has significantly increased and the well's gas production has significantly decreased;
  - (b) as of October 24, 2001 the George "QJ" Federal No. 10 was producing at a rate of 382 barrels of oil per day, 235 MCF gas per day, and 0 barrels of water per day;

- (c) preliminary data indicates that this Cisco reservoir is a solution-gas drive reservoir, and that a gas cap may exist; and
- (d) preliminary data further indicates that the George "QJ" Federal No. 10 may ultimately recover 232,000 barrels of oil from this Cisco reservoir, and may drain an area of approximately 199 acres.
- (9) The geologic and engineering evidence demonstrates that the George "QJ" Federal No. 10 has discovered a new oil pool.
- (10) The vertical limits of the pool should initially comprise the Pennsylvanian formation only.
- (11) By Order No. R-11691 issued in Case No. 12772 on November 28, 2001, the Division created the Cottonwood Ranch-Pennsylvanian Gas Pool comprising the S/2 of Section 25, Township 6 South, Range 25 East, NMPM. The discovery well for this pool was the Yates Petroleum Corporation Hewitt "IM" Federal Well No. 5 located in Unit I of Section 25, which was completed in the Cisco interval from a depth of 4,865 feet to 5,010 feet.
- (12) By Order No. R-11705 issued in Case No. 12781 on December 13, 2001, the Division extended the Cottonwood Ranch-Pennsylvanian Gas Pool to include the W/2 and SE/4 of Section 26, Township 6 South, Range 25 East, and the S/2 of Section 30, Township 6 South, Range 26 East, NMPM.
- (13) The Cottonwood Ranch-Pennsylvanian Gas Pool was extended by the Artesia District Office of the Division to include the W/2 and SE/4 of Section 26 due to certain well completion documents filed by Yates that indicated the George "QJ" Federal No. 10 had been completed as a gas well in the Cisco formation.
- (14) These well completion documents were filed by Yates prior to the time that the George "QJ" Federal No. 10 began to produce oil.
- (15) There is not sufficient geologic and engineering evidence available at the current time to demonstrate that the Cisco interval being produced in the George "QJ" Federal No. 10, the Hewitt "IM" Federal No. 5 and the Cottonwood Ranch "MK" State No. 1 represent a single common source of supply.

- (16) Until additional evidence is obtained, the Cisco reservoir being produced in the George "QJ" Federal No. 10 should be treated as a separate common source of supply from the Cisco reservoir being produced in the Hewitt "IM" Federal No. 5 and the Cottonwood Ranch "MK" State No. 1.
- (17) The Artesia District Office of the Division should be directed to contract the horizontal limits of the Cottonwood Ranch-Pennsylvanian Gas Pool by deleting the W/2 and SE/4 of Section 26, Township 6 South, Range 25 East, NMPM.
- (18) A new pool for the production of oil from the Cisco formation should be created and designated the Pecos Slope-Pennsylvanian Pool with horizontal limits comprising the W/2 of Section 26, Township 6 South, Range 25 East, NMPM.
- (19) The preliminary evidence currently available for the Pecos Slope-Pennsylvanian Pool demonstrates that special pool rules should be established that provide for 320-acre oil spacing and proration units, designated well location requirements, a special infill well provision, and a special depth bracket allowable of 694 barrels of oil per day.
- (20) No other interest owner or operator appeared at the hearing in opposition to the application.
- (21) Approval of the application will promote orderly and efficient development of the Pecos Slope-Pennsylvanian Pool, and will not violate correlative rights.
- (22) Yates proposed that the special pool rules for the Pecos Slope-Pennsylvanian Pool be established for a temporary period of two years in order to allow the operators in the pool the opportunity to gather additional geologic and engineering data.
- (23) The evidence presented demonstrates that it may ultimately be determined that the Pecos Slope-Pennsylvanian Pool and the Cottonwood Ranch-Pennsylvanian Gas Pool are a single common source of supply, and that additional timely data is necessary in order to ascertain the best method by which to develop the Pennsylvanian formation in this area.
- (24) The evidence also shows that Yates is making rapid advances in terms of drilling and testing additional wells and obtaining additional reservoir data.

- (25) The special pool rules for the Pecos Slope-Pennsylvanian Pool should remain in effect for a temporary period of one year.
- (26) This case should be reopened at an examiner hearing in February, 2003, at which time the operators in the Pecos Slope-Pennsylvanian Pool should appear to show cause why the temporary special pool rules established by this order should not be rescinded, and the pool developed on standard 40-acre spacing.

## IT IS THEREFORE ORDERED THAT:

- (1) Pursuant to the application of Yates Petroleum Corporation, a new pool for the production of oil from the Pennsylvanian formation should be created and designated the Pecos Slope-Pennsylvanian Pool with vertical limits comprising the Pennsylvanian formation and horizontal limits comprising the W/2 of Section 26, Township 6 South, Range 25 East, NMPM, Chaves County, New Mexico.
- (2) The Artesia District Office of the Division shall be directed to contract the horizontal limits of the Cottonwood Ranch-Pennsylvanian Gas Pool by deleting the W/2 and SE/4 of Section 26, Township 6 South, Range 25 East, NMPM, Chaves County, New Mexico.
- (3) Temporary special pool rules for the Pecos Slope-Pennsylvanian Pool are hereby established as follows:

## TEMPORARY SPECIAL POOL RULES FOR THE PECOS SLOPE-PENNSYLVANIAN POOL

- RULE 1. Each well completed in or recompleted in the Pecos Slope-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian pool, shall be spaced, drilled, operated, and produced in accordance with the special rules hereinafter set forth.
- RULE 2. Each well completed or recompleted in the Pecos Slope-Pennsylvanian Pool shall be located on a unit containing 320 acres, more or less, which consists of two contiguous governmental quarter sections.
- RULE 3. The Director may grant an exception to the requirements of Rule 2 in accordance with the procedure set forth by Division Rule No. 104.D.(2).

- RULE 4. The initial well on a 320-acre unit shall be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located, and no closer than 10 feet to any governmental quarter-quarter section line or subdivision inner boundary. Only one infill well on a 320-acre unit shall be allowed provided that the well is located in the quarter section of the 320-acre unit not containing the initial well and is no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any governmental quarter-quarter section line or subdivision inner boundary.
- RULE 5. The Director may grant an exception to the requirements of Rule 4 in accordance with the procedure set forth by Division Rule No. 104.F.
- RULE 6. The allowable for a standard 320-acre proration unit shall be 694 barrels of oil per day. In the event there is more than one well on a 320-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 320 acres.

#### IT IS FURTHER ORDERED THAT:

- (4) The location of all wells presently drilling to or completed in the Pecos Slope-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof are hereby approved. The operator of any well having an unorthodox location shall notify the Division's Artesia District Office in writing of the name and location of the well within 30 days from the date of this order.
- (5) Existing wells in the Pecos Slope-Pennsylvanian Pool shall have dedicated thereto 320 acres in accordance with the foregoing pool rules; or, existing wells may have non-standard spacing and proration units established by the Division and dedicated thereto.

Failure to file new Form C-102 with the Division dedicating 320 acres 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 unit has been approved.

(6) This case shall be reopened at an examiner hearing in February, 2003, at which time the operators in the Pecos Slope-Pennsylvanian Pool shall appear and present evidence to show cause why the temporary special pool rules established by this order should not be rescinded and the pool developed on standard 40-acre spacing.

(7) Jurisdiction 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

LORI WROTENBERY Director

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