

**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:**

**CASE NO. 10748 (Reopened)
CASE NO. 11484
Order No. R-9922-C**

IN THE MATTER OF CASE NO. 10748 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-9922-B, WHICH ORDER CONTINUED IN EFFECT THE TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL AS PROMULGATED BY DIVISION ORDER NO. R-9922, AS AMENDED, EDDY COUNTY, NEW MEXICO.

APPLICATION OF YATES PETROLEUM CORPORATION TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 21, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 14th day of May, 1996, 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) Division Case Nos. 10748 (Reopened) and Case No. 11484 were consolidated at the time of the hearing for the purpose of testimony, and inasmuch as both cases concern the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, one order should be entered for both cases.

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(3) By Order No. R-9922 issued in Case No. 10748 on July 6, 1993, the Division, upon application of Yates Petroleum Corporation (Yates), created the Indian Basin-Upper Pennsylvanian Associated Pool in Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico, and promulgated Temporary Special Rules and Regulations for said pool including the establishment of standard 320-acre oil or gas spacing and proration units, designated well locations, and a special depth bracket allowable of 940 barrels of oil per day.

(4) Pursuant to the provisions of Order No. R-9922, Case No. 10748 was reopened and heard in February, 1995, to consider permanently adopting the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool. At the request of Yates and for good cause shown, the subject temporary rules were continued in full force and effect for an additional twelve month period.

(5) Pursuant to the provisions of Order No. R-9922-B, this case is being reopened at the present time to allow the operators in the subject pool to appear and present evidence and testimony to show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(6) The applicant in Case No. 11484, Yates Petroleum Corporation, seeks to amend the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool whereby:

- a) no more than one well would be allowed to be drilled per 80 acre tract;
- b) the simultaneous dedication of acreage to both oil and gas wells would be allowed;
- c) the gas-oil ratio limitation for the pool would be increased from 2,000 cubic feet of gas per barrel of oil to 10,000 cubic feet of gas per barrel of oil; and,
- d) the oil allowable for the pool would be increased from 940 barrels of oil per day to 1,400 barrels of oil per day.

(7) Yates Petroleum Corporation appeared and presented technical evidence and testimony in support of adopting amended and permanent rules for the Indian Basin-Upper Pennsylvanian Associated Pool.

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(8) Marathon Oil Company and Santa Fe Energy Resources Inc., both operators in the Indian Basin-Upper Pennsylvanian Associated Pool, appeared through legal counsel at the hearing in support of adopting permanent rules for the pool and in support of Yates' proposed pool rule amendments.

(9) The Indian Basin-Upper Pennsylvanian Associated Pool currently comprises all or portions of Sections 27, 33 and 34, Township 21 South, Range 24 East, and all or portions of Sections 2, 3, 4, 5, 7, 8, 9, 10, 11, 16 and 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(10) According to the latest Division Monthly Statistical Report, there are twenty-one wells producing from the Indian Basin-Upper Pennsylvanian Associated Pool operated by five different companies. The pool rules currently in effect for the Indian Basin-Upper Pennsylvanian Associated Pool are summarized as follows:

SIM. DEDICATION				
<u>SPACING</u>	<u>ALLOWABLE</u>	<u>POOL GOR</u>	<u>ALLOWED</u>	<u>DRILLING DENSITY</u>
320 Acres/Oil	940 BOPD	2,000:1	No	1 Well/160 acres
320 Acres/Gas	1.88 MMCFGD			

(11) The geologic evidence presented at the hearing in this matter and in numerous prior cases presented before the Division indicates that the Indian Basin-Upper Pennsylvanian Associated Pool is a small portion of an extensive Cisco-Canyon reservoir which encompasses the North Dagger Draw-Upper Pennsylvanian Pool, the South Dagger Draw-Upper Pennsylvanian Associated Pool, and the Indian Basin-Upper Pennsylvanian Gas Pool. This extensive reservoir comprises portions of Townships 19, 20, 20 1/2, 21 and 22 and Ranges 23, 24 and 25.

(12) The North Dagger Draw-Upper Pennsylvanian Pool, South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Gas Pool are all currently governed by permanent special rules and regulations summarized as follows:

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<u>POOL NAME</u>	<u>OIL/GAS/ ASSOCIATED</u>	<u>SPACING</u>	<u>ALLOWABLE</u>	<u>POOL GOR</u>	<u>SIM. DEDICATION ALLOWED</u>
North Dagger Draw-Upper Pennsylvanian	Oil	160 acres	700 BOPD 7.0 MMCFGD	10,000:1	No/NA
South Dagger Draw-Upper Pennsylvanian Associated	Associated	320 acres/ Oil 320 acres/ Gas	1,400 BOPD 9.8 MMCFGD	7,000:1	Yes
Indian Basin- Upper Pennsylvanian	Gas	640 acres	Prorated Gas	NA	NA

(13) In support of its request to increase the oil allowable and gas-oil ratio limitation and to include a provision whereby simultaneous dedication of acreage to both oil and gas wells is allowed, Yates presented geologic evidence which indicates that:

- a) the geologic properties (i.e. permeability, porosity, etc.) of the South Dagger Draw-Upper Pennsylvanian Associated Pool closely resemble those of the Indian Basin-Upper Pennsylvanian Associated Pool;
- b) extension of the pool boundaries for the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Associated Pool through development drilling will likely demonstrate that the pools represent a single common source of supply; and,
- c) both the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Associated Pool are located in an area of the Cisco-Canyon reservoir which is a transition zone between the oil producing portion of the reservoir and the gas cap, represented by the Indian Basin-Upper Pennsylvanian Gas Pool.

(14) The geologic evidence presented indicates that the Indian Basin-Upper Pennsylvanian Associated Pool is properly classified as an "associated" pool.

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(15) Previous cases presented before the Division have shown that oil allowables of 1,400 barrels per day per 320-acre proration unit should not have adverse effects on the reservoir or decrease ultimate recovery, therefore, the oil allowable for the Indian Basin-Upper Pennsylvanian Associated Pool should be increased as proposed by the applicant to be consistent with the North Dagger Draw-Upper Pennsylvanian Pool and the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(16) The reservoir conditions and correlative rights issues which prompted the deletion of Rule No. 5 (b) of the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico for the South Dagger Draw-Upper Pennsylvanian Associated Pool, thereby allowing the simultaneous dedication of acreage to both oil and gas wells, also exist within the Indian Basin-Upper Pennsylvanian Associated Pool, therefore, the simultaneous dedication of acreage to both oil and gas wells in the Indian Basin-Upper Pennsylvanian Associated Pool should be allowed.

(17) In support of its request to amend the current pool rules so as to allow the drilling of a well on each 80-acre tract within a standard proration unit, the applicant presented drainage data from existing wells within the pool. The information presented indicates that the smallest drainage area calculated was approximately 60 acres, and that the average drainage area within the pool is approximately 112 acres.

(18) The evidence presented indicates that even though both the North Dagger Draw-Upper Pennsylvanian Pool and the South Dagger Draw-Upper Pennsylvanian Associated Pool do not preclude the drilling of a well on each 40-acre tract within a standard proration unit, and that each of these pools has effectively been developed on 40-acre spacing, a more appropriate drilling density for the Indian Basin-Upper Pennsylvanian Associated Pool is one well per 80-acre tract.

(19) The applicant did not present sufficient evidence to justify the need for establishing a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil, however, the limiting gas-oil ratio for the Indian Basin-Upper Pennsylvanian Associated Pool should be increased to 7,000:1 in order to be consistent with the limiting GOR currently in effect for the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(20) No other operator and/or interest owner appeared and presented evidence in opposition to Yates' proposed pool rule amendments or to adopting permanent rules for the subject pool.

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(21) The establishment of permanent Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, including certain amendments proposed by Yates Petroleum Corporation, will allow the "equivalent" development of the Cisco-Canyon reservoir, will provide the oil and gas allowable incentive necessary for further development and delineation of the pool, will prevent the economic loss caused by the drilling of an excessive number of wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, as promulgated by Division Order No. R-9922, as amended, are hereby amended as follows and continued in full force and effect until further order of the Division.

**SPECIAL RULES AND REGULATIONS
FOR THE
INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL**

RULE 2. (a) A standard oil proration unit shall comprise 320 acres. A standard gas proration unit shall comprise 320 acres.

RULE 2. (b) Each well shall be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary. No more than one well per 80-acre tract shall be drilled or produced on a standard proration unit.

RULE 6. The limiting gas-oil ratio shall be 7,000 cubic feet of gas per barrel of oil.

RULE 22. The special depth bracket allowable for a 320-acre proration unit shall be 1,400 barrels of oil per day. All or any part of the allowable may be produced by a single well or by two or more wells on the unit.

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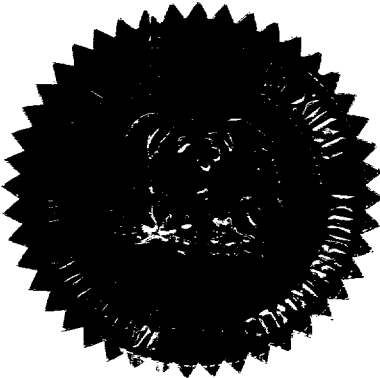
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IT IS FURTHER ORDERED THAT:

(2) The application of Yates Petroleum Corporation in Case No. 11484 to delete Rule No. 5 (b) of 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, as it pertains to the Indian Basin-Upper Pennsylvanian Associated Pool, thereby allowing the simultaneous dedication of acreage to both oil and gas wells, is hereby approved.

(3) 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

A handwritten signature in black ink, appearing to read 'William J. Lemay', written over the typed name and title.

WILLIAM J. LEMAY
Director