

**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. 11841
Order No. R-10892**

**APPLICATION OF YATES PETROLEUM
CORPORATION FOR POOL CONTRACTION
AND EXPANSION, EDDY COUNTY, NEW
MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 4, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 8th day of October, 1997, 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) The applicant, Yates Petroleum Corporation (Yates), seeks the contraction of the Indian Basin-Upper Pennsylvanian Gas Pool by the deletion therefrom of Section 6, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico, and the concomitant expansion of the Indian Basin-Upper Pennsylvanian Associated Pool to include this acreage.

(3) Yates is the current operator of the following described four wells located in Section 6:

| <u>Well Name</u> | <u>Well Location</u> |
|-------------------------------|--------------------------------|
| Brannigan "ANF" Federal No. 1 | 660' FNL & 400' FWL (Unit D) |
| Brannigan "ANF" Federal No. 2 | 2000' FSL & 1850' FEL (Unit J) |
| Brannigan "ANF" Federal No. 3 | 2410' FNL & 2310' FEL (Unit G) |
| Brannigan "ANF" Federal No. 4 | 660' FSL & 1980' FWL (Unit N) |

(4) Division records and evidence and testimony presented by the applicant indicates that:

- a) the Brannigan "ANF" Federal Well No. 1 was originally drilled in 1963 by John H. Trigg. The well, then known as the Federal "IB" Well No. 1-6, was completed in the Cisco-Canyon formation through the perforated interval from 7,430 feet to 7,554 feet. At that time, the well was placed within the Indian Basin-Upper Pennsylvanian Gas Pool. On June 1, 1966, Pan American Petroleum Corporation assumed operations on the well and changed the well name to the Federal "D" Well No. 1. Amoco Production Company (successor to Pan American Petroleum Corporation) produced the well until September, 1986, and subsequently plugged and abandoned the well in November, 1986. Cumulative production at that time was approximately 28.3 BCFG. Yates re-entered the well in September, 1993, and completed the well in the Cisco-Canyon formation (Indian Basin-Upper Pennsylvanian Gas Pool) through perforations from 7,430 feet to 7,695 feet. All of Section 6 was dedicated to the well forming a standard 640-acre gas spacing and proration unit. The well IP'd at a rate of 1.7 MMCFGD, 10 BOPD and 4,633 BWPD. The well is currently producing and has cumulatively produced to date 30.3 BCFG and 197 MSTBO;
- b) the Brannigan "ANF" Federal Well No. 3 was originally drilled in 1989 by Hondo Oil & Gas Company. The well, then known as the Indian Basin "6" Federal Well No. 1 was drilled as an Indian Basin-Upper Pennsylvanian Gas Pool test and was completed through the open hole interval from 7,597 feet to 7,788 feet. The well apparently never produced and was placed in a temporarily abandoned status in 1992. Devon Energy Corporation (Nevada) assumed operations on the well in July, 1992. Yates Petroleum Corporation assumed operations on the well in September, 1994. The well continues to remain in a temporarily abandoned status;

- c) the Brannigan "ANF" Federal Well No. 2 was drilled by the applicant in 1994 as a Morrow test with an E/2 dedication. The well was eventually completed in the Cisco-Canyon formation through the perforated interval from 8,017 feet to 8,050 feet. By Federal Form 3160-4 dated December 19, 1994 the applicant stated that the well was within the Indian Basin-Upper Pennsylvanian Associated Pool. This form was received by the Division and accepted for record on February 3, 1995. The well has cumulatively produced approximately 1.8 BCFG and 121 MSTBO;
- d) the Brannigan "ANF" Federal Well No. 4 was drilled by the applicant in April, 1997, as an Indian Basin-Upper Pennsylvanian Associated Pool test with a W/2 dedication. The well was completed in the Canyon interval through perforations from 7,573 feet to 7,903 feet. The well is currently producing and has cumulatively produced approximately 148 MMCFG and 464 STBO.

(5) The Indian Basin-Upper Pennsylvanian Gas Pool is a prorated gas pool currently governed by the General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Gas Pool as promulgated by Division Order No. R-8170, as amended, which require standard 640-acre spacing and proration units with wells to be located no closer than 1650 feet from the outer boundary of the proration unit nor closer than 330 feet from any governmental quarter-quarter section line or subdivision inner boundary. The current gas allowable for the Indian Basin-Upper Pennsylvanian Gas Pool is approximately 5-6 MMCFG per day.

(6) The Indian Basin-Upper Pennsylvanian Associated Pool is currently governed by special rules and regulations as promulgated by Division Order No. R-9922, as amended, which require standard 320-acre oil and gas spacing units with wells to 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. The limiting gas-oil ratio for the pool is 7,000 cubic feet of gas per barrel of oil which results in a casinghead gas allowable of 9.8 MMCFG per day.

(7) Division records indicate that Section 6 was originally placed within the Indian Basin-Upper Pennsylvanian Gas Pool by Order No. R-2726 dated July 1, 1964.

(8) Division records further indicate that Section 6 is directly offset to the east, southeast and south by sections which are currently contained within the Indian Basin-Upper Pennsylvanian Associated Pool.

- (9) According to applicant's geologic evidence and testimony:
- a) the Cisco-Canyon interval is continuous from the Indian Basin-Upper Pennsylvanian Gas Pool south and southeast to the Indian Basin-Upper Pennsylvanian Associated Pool;
 - b) the wells producing from the Indian Basin-Upper Pennsylvanian Gas Pool have generally been completed in the upper dolomite section, while the wells producing from the Indian Basin-Upper Pennsylvanian Associated Pool have generally been completed in the middle and lower dolomite or all of the dolomite section;
 - c) the Brannigan "ANF" Federal Well Nos. 1, 2, and 4 are generally completed in the entire dolomite section;
 - d) the Cisco-Canyon structure is generally dipping from northwest to southeast and therefore wells completed in the Indian Basin-Upper Pennsylvanian Associated Pool are located structurally lower in the reservoir than wells completed in the Indian Basin-Upper Pennsylvanian Gas Pool;
 - e) the Cisco-Canyon reservoir generally thins to the south and southeast from the Indian Basin-Upper Pennsylvanian Gas Pool towards the Indian Basin-Upper Pennsylvanian Associated Pool.

(10) The geologic evidence and testimony indicates that Section 6 is located in an area of transition between the Indian Basin-Upper Pennsylvanian Gas Pool and the Indian Basin-Upper Pennsylvanian Associated Pool.

(11) The applicant presented engineering evidence and testimony which indicates that:

- a) the Brannigan "ANF" Federal Well Nos. 1, 2 and 4 are currently capable of combined gas production of approximately 9.8 MMCFG per day;
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- b) Yates Petroleum Corporation operates the two offset proration units to the west and southwest in Sections 1 and 12, Township 22 South, Range 23 East, NMPM. Both these proration units are in the Indian Basin-Upper Pennsylvanian Gas Pool, and according to Division records and evidence and testimony presented, both are marginal GPU's within this gas pool;
- c) the offset proration unit to the north in Section 31, Township 21 South, Range 24 East, is currently operated by Devon Energy Corporation (Nevada). Division records indicate that there are no wells currently completed in the Indian Basin-Upper Pennsylvanian Gas Pool on this proration unit;
- d) the offset proration unit to the northeast in Section 32, Township 21 South, Range 24 East, is currently operated by Citation Oil & Gas Corporation. Division records indicate that this is a marginal GPU in the Indian Basin-Upper Pennsylvanian Gas Pool with one producing well on the unit;
- e) the offset proration unit to the northwest in Section 36, Township 21 South, Range 23 East, is currently operated by Oryx Energy Company. Division records indicate that this is a marginal GPU in the Indian Basin-Upper Pennsylvanian Gas Pool with one producing well on the unit.

(12) The evidence indicates that the producing gas wells located in the offsetting proration units are currently being produced at capacity, and that Yates will not gain an advantage over these proration units by virtue of the proposed pool contraction and expansion.

(13) The applicant provided notice of its application to Citation Oil & Gas Corporation, Devon Energy Corporation (Nevada), Maralo Inc., Oryx Energy Company and Santa Fe Energy. No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(14) The geologic and engineering evidence and testimony indicates that Section 6 should be placed within the Indian Basin-Upper Pennsylvanian Associated Pool.

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(15) Approval of the application will allow the applicant the opportunity to produce its just and equitable share of the gas underlying the subject proration unit and will not violate correlative rights.

(16) The applicant should be required to file the appropriate Federal and/or Division forms to reflect the proper pool placement and acreage dedication of its wells in Section 6.

IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Yates Petroleum Corporation, the Indian Basin-Upper Pennsylvanian Gas Pool is hereby contracted by the deletion therefrom of Section 6, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

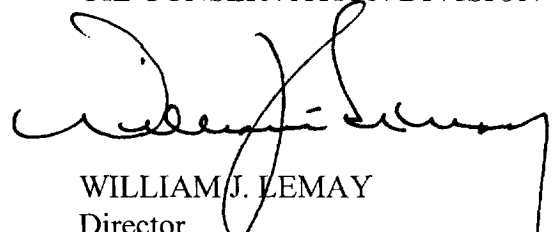
(2) The Indian Basin-Upper Pennsylvanian Associated Pool is hereby extended to include Section 6, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(3) The applicant shall file the appropriate Federal and/or Division forms to reflect the proper pool placement and acreage dedication of its wells in Section 6.

(4) Jurisdiction of this cause is 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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