

**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. 10746
Order No. R-9952**

**APPLICATION OF DEVON ENERGY
CORPORATION FOR SPECIAL POOL
RULES, 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 30th 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) The applicant, Devon Energy Corporation, seeks the promulgation of Special Rules and Regulations for the East Catclaw Draw-Delaware Pool, Eddy County, New Mexico, including a provision for a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil.

(3) By Order No. R-9418 dated January 23, 1991, the Division created the East Catclaw Draw-Delaware Pool. The discovery well for the pool was the Chi Operating Inc. Oxy State Well No. 1 located in Unit K of Section 9, Township 21 South, Range 26 East, NMPM, Eddy County, New Mexico.

(4) The East Catclaw Draw-Delaware Pool, which currently comprises all of Section 9 and the NW/4 of Section 16, is governed by Division General Rules and Regulations, including a gas-oil ratio limitation of 2,000 cubic feet of gas per barrel of oil and an oil allowable of 80 barrels of oil per day.

(5) Division records indicate that there are currently six wells producing from the East Catclaw Draw-Delaware Pool within Section 9, all operated by Chi Operating Inc.

(6) The applicant has recently drilled its Cactus State Well No. 1 located 960 feet from the North line and 1860 feet from the West line (Unit C) of Section 16, Township 21 South, Range 26 East, NMPM, and has completed this well in the East Catclaw Draw-Delaware Pool.

(7) Applicant's geologic evidence indicates that within the East Catclaw Draw-Delaware Pool there are numerous distinct sand intervals which are being singly or multiply produced within the various wells in the pool.

(8) Division records indicate that the Cactus State Well No. 1 was perforated in the Chi "D" interval from 3,170 feet to 3,220 feet on March 17, 1993. The average producing rate for this interval was 82 BOPD and 173 MCFGD at an average GOR of 2,517.

(9) On April 17, 1993, the applicant perforated the Chi "B" and "C" intervals from 3,040-3,070 feet and 3,080-3,100 feet, respectively. The average producing rate for the commingled stream is approximately 87 BOPD and 437 MCFGD at an average GOR of 5,257.

(10) Geologic evidence further indicates that the producing interval in the applicant's well is located slightly up-structure from the wells currently being produced in Section 9.

(11) Applicant's request for a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil is based primarily upon production information obtained from the aforesaid Cactus State Well No. 1 during the period from March 24, 1993 through July 5, 1993.

(12) Applicant contends that choking back the well in order to produce at a rate of less than 80 barrels of oil per day results in a significant increase in gas production and a corresponding increase in the producing gas-oil ratio.

(13) Gas-oil ratio fluctuations within the subject well do not appear to be related to choke settings.

(14) The applicant, who testified that there is likely vertical segregation between the producing intervals in the pool, has not conducted any type of production profile log on the subject well in order to determine the amount and type of production attributable to each zone.

(15) The applicant has not conducted any PVT analysis on any of the producing intervals within the subject well in order to determine fluid properties at reservoir conditions.

(16) Applicant did not present evidence or testimony as to the reservoir drive mechanism(s) within each of the producing intervals.

(17) Applicant's evidence indicates that the existing producing wells in the field have exhibited, throughout their producing history, similar fluctuations in the producing gas-oil ratio as have been exhibited by the Cactus State Well No. 1.

(18) Within the past several months, the producing gas-oil ratio within existing wells in the pool has averaged less than 2,000 cubic feet of gas per barrel of oil.

(19) The applicant has not satisfactorily demonstrated that a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil within the East Catclaw Draw-Delaware Pool will not cause the premature abatement of reservoir energy, thereby resulting in decreased oil recovery, thereby causing waste.

(20) The application should be denied.

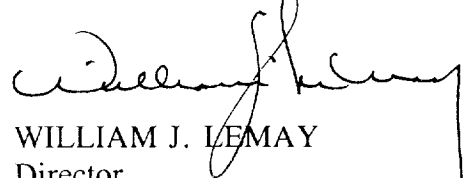
IT IS THEREFORE ORDERED THAT:

(1) The application of Devon Energy Corporation for the promulgation of Special Rules and Regulations for the East Catclaw Draw-Delaware Pool, Eddy County, New Mexico, including a provision for a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil is hereby denied.

(2) 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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