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

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

<u>DE NOVO</u> CASE NO. 10746 Order No. R-9952-A

## APPLICATION OF DEVON ENERGY CORPORATION FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

#### **ORDER OF THE COMMISSION**

#### **BY THE COMMISSION:**

This cause came on for hearing at 9:00 a.m. on September 22, 1993, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 10th day of November, 1993, the Commission, a quorum being present, having considered the testimony and the record, and being fully advised in the premises,

### FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Devon Energy Corporation, seeks the promulgation of temporary 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 per forty acre proration unit.

(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 sands covering a 500 feet interval which are oil productive, singularly or in combinations in the various wells in the pool.

(8) Division records indicate that the Cactus State Well No. 1 was perforated in the Chi "B" "C" and "D" intervals from 3,040 feet to 3,220 feet. The average producing rate for this producing interval was approximately 80 BOPD and 400 to 500 MCFGPD of associated gas. This reservoir produces oil by solution gas drive.

(9) 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.

(10) 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 testing information obtained from the aforesaid Cactus State Well No. 1 which showed the well not to be rate-sensitive and that producing the well at higher rates would not waste reservoir energy.

(11) A production profile log was run on the Cactus State Well No. 1 on September 18, 1993 to determine the relative contribution to total production of each set of perforations. Results show that approximately 95 percent of both oil and gas production was coming out of the top perforated interval from 3040 to 3070 feet with minor amounts of oil and gas coming out of the two lower zones confirming the initial interpretation of a solution gas drive reservoir where no zone was a predominate gas producer.

(12) The applicant testified that ultimate recovery would not be reduced by producing the Cactus State Well No. 1 at a higher rate because the gas-oil ratio was shown to be independent of producing rates in the various choke tests performed.

(13) Applicant's evidence indicates that other producing wells in the field have exhibited throughout their producing history fluctuations in producing gas-oil ratios but that higher deliverability wells have tended to produce in excess of the 2,000 to 1 GOR limit.

(14) Applicant testified that granting the application would result in a faster payout, enhancing the economic feasibility of drilling additional wells to develop the field.

(15) Applicant requested that an order granting this application be retroactive to June 1, 1993 but the only justification for this request was the overproduced status of the Cactus State Well. A retroactive order would not affect payout of wells yet to be drilled and therefore is not necessary to encourage field development and should be denied.

(16) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(17) Temporary Special Pool Rules for the East Catclaw Draw-Delaware Pool providing for a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil for a period of 18 months would encourage the drilling of new wells in the field with the corresponding acquisition of additional information, such as PVT data, which will help resolve remaining unanswered issues while continuing to protect correlative rights and prevent waste.

## **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, providing for 40 acre oil proration units and 80 BOPD allowable but increasing the gas-oil ratio limitation to 6,000 cubic feet of gas per barrel of oil is hereby approved for a period of 18 months beginning November 1, 1993.

(2) Jurisdiction of this cause is hereby retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JAMI BAILEY, Member

Bill Weise

WILLIAM W. WEISS, Member

00 WILLIAM J. LEMAY, Chairman

SEAL