

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. 10216
Order No. R-6849-A

APPLICATION OF CROSS TIMBERS
OIL COMPANY TO AMEND DIVISION
ORDER NO. R-6849, LEA COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 24, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 11th day of February, 1991, 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, Cross Timbers Oil Company, seeks to amend Division Order No. R-6849 to increase the gas-oil ratio for the West Nadine-Blinebry Pool to 10,000 cubic feet of gas per barrel of oil produced. Applicant further seeks to cancel overproduction from its McCallister Well No. 4 which is completed in the West Nadine-Blinebry Pool and located in the SE/4 SW/4 (Unit N) of Section 5, Township 20 South, Range 38 East, NMPM, Lea County, New Mexico.

(3) The limiting gas-oil ratio for the West Nadine-Blinebry Pool is currently 4,000 cubic feet per barrel of oil produced. This limiting ratio was established by Order R-6849 effective December 1, 1981. Top oil allowable for the pool is 142 barrels per day and the casinghead gas limit is 568 MCF per day.

(4) Notice concerning the applicant's request was provided to offset operators within one mile of the West Nadine-Blinebry Pool. Sirgo

Operating Inc. submitted a letter indicating they have no objection to the request. A representative of Bravo Operating Company appeared at the hearing to oppose the application.

(5) Applicant's witness submitted exhibits to show that the West Nadine-Blinebry Pool is actually five separate zones or reservoirs (Zones 1 through 5) within the Blinebry interval. A well log section was submitted to show separation. Variations in gas-oil ratios between the various zones and differences in reservoir pressures were also submitted as evidence that the zones are separate.

(6) A gas-oil ratio comparison for July 1990 submitted by the applicant shows that several wells in the pool produced at ratios exceeding 4,000 but that none except the Cross Timbers McCallister Well No. 4 exceeded the 568 MCF per day gas limit.

(7) Cross Timbers McCallister Well No. 4 was completed in Zone 5, the lowermost zone, in April 1990.

(8) Test data for Zone 5 production from the Cross Timbers McCallister Well No. 4 was submitted to show the performance of the well since completion. Initially gas production and the producing gas-oil ratio were well below the limits for the field and the oil producing capability exceeded top allowable. Within 100 days, oil production declined below 100 barrels per day and the producing gas-oil ratio increased to over 10,000. Recent tests indicate that the well produces efficiently at a gas producing rate of approximately 950 MCF per day. At lower gas producing rates, the producing gas-oil ratio increases and the oil rate decreases. A limiting gas-oil ratio of 7,000 would enable the well to produce at an efficient rate.

(9) Applicant's witness testified that the drive mechanism in Zone 5 is a combination gas cap-solution gas drive.

(10) Production data submitted by the applicant following the hearing shows that the McCallister Well No. 4 overproduced its gas limit by 40,424 MCF from June 1990 through December 1990. At the hearing applicant's witness testified that the well had been shut-in to make up overproduction.

(11) Test and production data submitted by the applicant shows that 6 wells other than the McCallister Well No. 4 are completed in Zone 5. Each of the 6 are also open in one or more other Blinebry zones. Applicant's data shows relatively low producing rates for each of the 6 wells - from 2 to 40 barrels of oil per day and from 10 to 202 MCF of gas per day.

(12) Applicant submitted production information from other Blinebry pools to show that in most of the pools, production is characterized by high gas-oil ratios.

(13) Mr. Ed Omar appeared at the hearing representing Bravo Operating Company to object to Cross Timbers' application. He testified that Bravo operates 21 wells in the subject pool, that applicant's McCallister Well No. 4 is a direct offset to Bravo's wells, that the recovery mechanism in the pool is solution gas drive, and that excessive gas production will have an adverse affect on oil recovery. He submitted a map to show the locations of Bravo's leases and production charts to show that the pool is produced by a solution gas drive. Mr. Omar stated that granting the application is not in the interest of the prevention of waste and the protection of correlative rights.

(14) Data and testimony submitted by the applicant indicates that its McCallister Well No. 4 will produce more efficiently if the limiting gas-oil ratio is increased to 7,000 cubic feet per barrel. This would provide a daily gas limit of 994 MCF per day. The data presented at the hearing indicates that this increase in the gas-oil ratio limit will not cause waste nor harm correlative rights.

(15) The McCallister Well No. 4 is in violation of Division rules because it is overproduced. It should remain shut-in until the overproduction is made up.

IT IS THEREFORE ORDERED THAT:

(1) The application of Cross Timbers Oil Company for an increased gas-oil ratio limit for the West Nadine-Blinebry Pool, Lea County, New Mexico, is hereby approved on a temporary basis.

(2) Division Order No. R-6849 is hereby amended on a temporary basis as follows:

SPECIAL RULES AND REGULATIONS
FOR THE WEST NADINE-BLINEBRY POOL

RULE 1. That the limiting gas-oil ratio for said West Nadine-Blinebry Pool shall be 7,000 cubic feet of gas for each barrel of oil produced.

IT IS FURTHER ORDERED THAT:

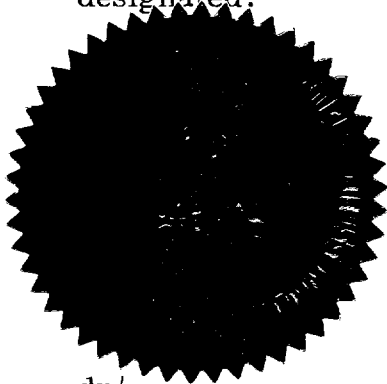
(3) The above amendment shall become effective February 1, 1991.

(4) This case shall be reopened at an examiner hearing in February, 1992, at which time the operator in the pool may appear and present evidence and show cause why the foregoing rule should remain in effect.

(5) Applicant's request to cancel overproduction from its McCallister Well No. 4 is hereby denied.

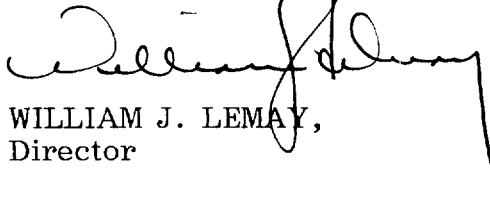
(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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



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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY,
Director