# 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. 10873 Order No. R-10036

APPLICATION OF MEWBOURNE OIL COMPANY FOR SPECIAL POOL RULES FOR THE WALTERS LAKE-BONE SPRING POOL, EDDY COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

# **BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on December 2, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 16th day of December, 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, Mewbourne Oil Company, seeks to establish a limiting gas-oil ratio of 5,000 cubic feet of gas per barrel of oil within the Walters Lake-Bone Spring Pool, Eddy County, New Mexico.
- (3) The Walters Lake-Bone Spring Pool, which was created by Division Order No. R-8827 on December 22, 1988, currently comprises the S/2 of Section 2, the S/2 and NW/4 of Section 3, and the NW/4 of Section 11, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico. The pool is currently governed by General Statewide Rules and Regulations including an oil allowable of 187 barrels per day and a gas-oil ratio limitation of 2,000 cubic feet of gas per barrel of oil.
- (4) There are currently nine wells completed in the Walters Lake-Bone Spring Pool, three are operated by Enron Oil and Gas Company, four by Mewbourne Oil Company, and two by Yates Petroleum Corporation.

- (5) Applicant's geologic evidence and testimony indicates that with the exception of the Enron Nelson "3" Federal Well No. 8, all the wells in the subject pool are completed in and producing from the 1st Bone Spring Sand interval. The Enron Nelson "3" Federal Well No. 8 is producing from the 2nd Bone Spring Sand interval.
- (6) In September, 1993, the applicant completed its Cedar Breaks State "2" State Well No. 4 located in Unit O of Section 2. Initial production from this well for September was 2,223 barrels of oil, 16,621 MCF gas and 328 barrels of water at a producing gas-oil ratio of 7,477 cubic feet of gas per barrel of oil.
- (7) Evidence presented by the applicant shows that six of the wells in the subject pool are currently producing at a gas-oil ratio in excess of 5,000 cubic feet of gas per barrel of oil.
- (8) Applicant's geologic and engineering evidence and testimony shows that there is no correlation between a well's producing gas-oil ratio and its location structurally within the reservoir.
- (9) Log analysis, according to the applicant, does not indicate the presence of a gas bearing interval within the reservoir.
- (10) Applicant's geologic and engineering evidence and testimony indicates that the Walters Lake-Bone Spring Pool is a solution-gas drive reservoir with no gas cap and no active water drive present.

### (11) The applicant contends that:

- a) restricting oil and gas production and pressure drawdown within the reservoir by maintaining the current gas-oil ratio may cause waste by preventing low permeability intervals from being effectively drained;
- b) the ultimate recovery from the Walters Lake-Bone Spring Pool, being a true solution-gas drive reservoir, will be unaffected by individual well producing rates and total or reservoir producing rates.
- (12) There are several Bone Spring pools located in the general area of the Walters Lake-Bone Spring Pool which are currently being developed with gas-oil ratios ranging from 5,000-10,000 cubic feet of gas per barrel of oil.

- (13) The evidence presented indicates that an increase in the gas-oil ratio for the Walters Lake-Bone Spring Pool should not result in decreased ultimate oil recovery from the reservoir.
- (14) No other operator and/or interest owner appeared at the hearing in opposition to the application.
- (15) The gas-oil ratio for the Walters Lake-Bone Spring Pool should be increased to 5,000 cubic feet of gas per barrel of oil.

# IT IS THEREFORE ORDERED THAT:

- (1) The limiting gas-oil ratio for the Walters Lake-Bone Spring Pool, Eddy County, New Mexico, is hereby established at 5,000 cubic feet of gas per barrel of oil; each proration unit in the Walters Lake-Bone Spring Pool shall produce only that volume of gas equivalent to 5,000 multiplied by the top unit allowable for the pool.
- (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. KEMAY

Director

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