# 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. 9354 Order No. R-8476-A NOMENCLATURE

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR THE EXPANSION OF THE NORTH HUME-WOLFCAMP POOL AND THE AMENDMENT OF DIVISION ORDER NO. R-8476, LEA COUNTY, NEW MEXICO.

# ORDER OF THE DIVISION

# BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 13 and 27, 1988, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 7th day of June, 1988, 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) By Order No. R-8409 dated March 7, 1987, and made effective April 1, 1987, the Division created and defined the North Hume-Wolfcamp Pool for the production of oil from the Wolfcamp formation.
- (3) By Order No. R-8476 dated July 21, 1987 and upon the application of Santa Fe Energy Operating Partners, L.P., the Division promulgated temporary special rules and regulations for the North Hume-Wolfcamp Pool including a provision for 80-acre spacing and proration units.

- (4) The applicant in the immediate case, Santa Fe Energy Operating Partners, L.P., seeks the amendment of said Order No. R-8476 to provide for temporary 160-acre spacing and proration units for the North Hume-Wolfcamp Pool.
- (5) The applicant further seeks the extension of the North Hume-Wolfcamp Pool, which currently comprises the SW/4 of Section 36, Township 15 South, Range 33 East, and Lots 1, 2, 7, and 8 of Section 5, Township 16 South, Range 34 East, NMPM, to include the SE/4 of Section 35, Township 15 South, Range 33 East, NMPM, and the SE/4 and Lots 9, 10, 15, and 16 of Section 5, Township 16 South, Range 34 East, NMPM, Lea County, New Mexico.
- (6) The applicant is the owner and operator of the discovery well for the subject pool, the N.H. "5" Federal Well No. 1 located 2466 feet from the North line and 1980 feet from the East line (Unit G) of said Section 5, and is also currently completing in the Wolfcamp formation its NH "35" Well No. 1 located 510 feet from the South line and 1980 feet from the East line of said Section 35.
- (7) The applicant is also the owner and operator of the Humble Hume "5" State Well No. 1 located 660 feet from the South line and 1980 feet from the East line of said Section 5, which is currently being tested in the Morrow formation and which will be completed in the Wolfcamp formation subsequent to the depletion of the Morrow.
- (8) Moncrief Oil and Coastal Oil and Gas Corporation, working interest owners in Section 8, Township 16 South, Range 34 East, NMPM, both entered appearances at the hearing in opposition to the proposed application.
- (9) The applicant presented as evidence decline curve analysis based on historical production data from the NH "5" Federal Well No. 1 which indicates total recoverable reserves from said well to be approximately 217,707 barrels of oil.
- (10) The applicant further presented revised volumetric calculations which indicate total recoverable reserves underlying the NH "35" Well No. 1 to be approximately 218,793 barrels of oil.

- (11) Evidence presented further indicates that certain reservoir parameters utilized in the volumetric calculation, namely porosity and water saturation, have been adjusted due to new information obtained from the NH "35" Well No. 1, and that 160 acres was used as the area of drainage in said calculations.
- (12) The applicant further presented initial bottom-hole pressure data obtained from the NH "5" Federal Well No. 1, the V-F Petroleum Chevron State Well No. 1 located 330 feet from the South and West lines (Unit M) of Section 36, Township 15 South, Range 33 East, NMPM, and the NH "35" Well No. 1 which further supports the applicability of 160-acre spacing in the subject pool.
- (13) Neither Moncrief Oil nor Coastal Oil and Gas Corporation presented evidence or testimony which would support their position that the subject pool remain on 80-acre spacing.
- (14) The evidence presented by the applicant is sufficient to establish temporary 160-acre spacing within the North Hume-Wolfcamp Pool.
- (15) In order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, Division Order No. R-8476 should be amended to provide for 160-acre spacing and proration units within the North Hume-Wolfcamp Pool for a temporary period of approximately one year.
- (16) This case should be reopened at an examiner hearing in July, 1989, at which time the operators in the subject pool should be prepared to appear and show cause why the North Hume-Wolfcamp Pool should not be developed on less than 160-acre spacing.

- (17) The applicant further requested the extension of the North Hume-Wolfcamp Pool to include in part the acreage upon which the Humble Hume "5" State Well No. 1 is located but testified that said well would not be completed in the Wolfcamp formation until such time as the Morrow formation was depleted.
- (18) It is the policy of the Division to extend the horizontal limits of a given pool only after a well has been completed in said pool and therefore the request by the applicant for the extension of the North Hume-Wolfcamp Pool to include the SE/4 and Lots 9, 10, 15, and 16 of said Section 5 should be denied.
- (19) The applicant's proposed extension of the North Hume-Wolfcamp Pool to include the SE/4 of said Section 35 represents a logical method of extending the subject pool at this time and should be approved.

# IT IS THEREFORE ORDERED THAT:

- (1) Rule Nos. 2, 3, 4, and 6 of the Temporary Special Rules and Regulations for the North Hume-Wolfcamp Pool as promulgated by Division Order No. R-8476 are hereby amended to read in their entirety as follows:
- "RULE 2. Each well completed or recompleted in the North Hume-Wolfcamp Pool shall be located on a standard unit consisting of 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Lands Survey.
- RULE 3. The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without hearing when an application has been filed for a non-standard unit comprising less than 160 acres. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator

has entered an objection to the formation of the non-standard unit within 30 days after the Director has received such application.

- RULE 4. Each well shall be located no closer than 660 feet to any quarter section line nor closer than 330 feet to any quarter-quarter section line.
- RULE 6. A standard proration unit (158 through 162 acres) in the North Hume-Wolfcamp Pool shall be assigned a depth bracket allowable of 560 barrels of oil per day. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres."

# IT IS FURTHER ORDERED THAT:

- (2) The locations of all wells presently drilling to or completed in the North Hume-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before September 1, 1988.
- (3) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), existing wells in the North Hume-Wolfcamp Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 160 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the North Hume-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

- (4) Unless called earlier upon the motion of the Division, this case shall be reopened at an examiner hearing in July, 1989, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the North Hume-Wolfcamp Pool amended herein should not be rescinded and the subject pool not be developed on less than 160-acre spacing.
- (5) The applicant's request for the extension of the North Hume-Wolfcamp Pool to include the SE/4 and Lots 9, 10, 15, and 16 of Section 5, Township 16 South, Range 34 East, NMPM, Lea County, New Mexico, is hereby denied.
- (6) The North Hume-Wolfcamp Pool, Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

# TOWNSHIP 15 SOUTH, RANGE 33 EAST, NMPM Section 35: SE/4

(7) 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 here-

eşignated.

STATE OF NEW MEXICO
OIL CONSERVATION PIVISION

WILLIAM J. LEMAY

Director