STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 7137 Order No. R-6588

APPLICATION OF CAULKINS OIL COMPANY FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 28, 1981, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of February, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises.

## FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Caulkins Oil Company, is the owner and operator of certain wells located in Sections 1 through 5, 7, 8, 21, 22, 24, and 25 in Township 26 North, Range 6 West; Sections 13, 14, 23, 24, and 26 in Township 26 North, Range 7 West; and Sections 33 through 35 in Township 27 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Chacra and Blanco Mesaverde production within the wellbores of the above-described wells.
- (4) That from the Chacra zone, the subject wells are expected to be capable of low production only.
- (5) That from the Mesaverde zone, the subject wells are expected to be capable of low production only.

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- (6) That the proposed commingling should result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and would not violate correlative rights.
- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That the establishment of an administrative procedure whereby production from the Chacra and Mesaverde formations in those sections described in Finding No. (2) above may be commingled within the wellbore of a producing well therein should permit the recovery of otherwise uneconomic reserves.
- (9) That such an administrative procedure should provide for approval by the Division's District Supervisor at Aztec, safeguards to prevent crossflow between pools, and the protection of interest owners under each proration or spacing unit.
- (10) That provision should be made whereby the applicant would consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each well commingled pursuant to this order and such administrative approval.
- (11) That the operator of any well so commingled should immediately notify the Division's Aztec district office any time any such well commingled under terms of this order has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

## IT IS THEREFORE ORDERED:

- (1) That an administrative procedure is hereby adopted whereby the district supervisor of the Division District Office at Aztec may administratively authorize downhole commingling of the Chacra and Mesaverde zones in Caulkins Oil Company's wells in Sections 1 through 5, 7, 8, 21, 22, 24, and 25, Township 26 North, Range 6 West, NMPM, and in Sections 13, 14, 23, 24, and 26, Township 26 North, Range 7 West, NMPM, and in Sections 33 and 35, Township 27 North, Range 6 West, NMPM, all in Rio Arriba County, New Mexico.
- (2) That qualification and application for and approval of requests for downhole commingling shall be made in accordance with the following rules:

- RULE 1. Wells shall qualify for approval for downhole commingling under this order provided that:
  - (a) That the commingling is necessary to permit production from the Chacra and Mesaverde zones which would not otherwise be economically producible, i.e., wells which are expected to have a combined stabilized pipeline delivery rate from both zones of 150 Mcf per day or less.
  - (b) neither zone produces more than 10 barrels of liquid per day;
  - (c) the bottom hole pressure of the lower pressure zone is not less than 50 percent of the bottom hole pressure of the higher pressure zone adjusted to a common datum; and,
  - (d) the ownership of the two zones is common (including working interest, royalty interest, and overriding royalty).
- RULE 2. Applications for administrative approval of downhole commingling under this order shall include:
  - (a) Name and address of the operator.
  - (b) Lease name, well number, well location and names of the pools to be commingled.
  - (c) A mechanical log of the well.
  - (d) A diagrammatic sketch of the well showing casing, tubing, cement tops, perforations, and any downhole equipment.
  - (e) Pressures and production for each zone to be commingled as determined from drill stem tests or potential tests following completion.
  - (f) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula.

- RULE 3. The district supervisor may approve the proposed downhole commingling if, in his opinion, there is no disqualifying disparity of bottomhole pressures or other reservoir characteristics, waste will not result thereby, and correlative rights will not be violated.
- RULE 4. Upon such approval, the well shall be operated in accordance with the provisions of the administrative order which authorized the commingling.
- RULE 5. That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator shall notify the Aztec district office of the Division any time any well commingled pursuant to this authority is shut-in for 7 consecutive days.
- RULE 6. That in order to allocate the commingled production to each of the commingled zones in any such well, applicant should consult with the supervisor of the Aztec district effice of the Division and determine an allocation formula for each of the production zones.
- RULE 7. The Division Director may rescind authority to commingle production in the wellbore and require both zones to be produced separately in any well commingled pursuant to this authority if, in his opinion, waste or reservoir damage is resulting thereby, or if any change of conditions render the installation no longer eligible for downhole commingling under the provisions of Rule 1, paragraphs (a) through (d).

## IT IS FURTHER ORDERED:

(1) That 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.

-STATE OF NEW MEXICO
OLL CONSERVATION DIVISION

JOE D. RAMEY,

Director

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