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

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

CASE NO. 7046 Order No. R-6564

APPLICATION OF COTTON PETROLEUM CORPORATION 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 Becember 10, 1980, at Santa Fe, New México, before Examiner Richard L. Stamets.

NOW, on this <u>15th</u> day of January, 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, Cotton Petroleum Corporation, seeks approval for the downhole commingling of Chacra and Pictured Cliffs production in the wellbores of wells in the South Blanco-Pictured Cliffs Pool located in Sections 1 thru 4, 9 thru 14, and 23 and 24. Township 24 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the establishment of an administrative procedure whereby production from the Chacra and Pictured Cliffs 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.
- (4) 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.

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- (5) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (6) That the applicant further seeks authority to commingle Chacra and Pictured Cliffs production within the wellbore of its Apache Well No. 30 in Unit J of Section 3 and Apache Well No. 29 in Unit C of Section 14, both in Township 24 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.
- (7) That from the Chacra zone, the subject wells are capable of low production only.
- (8) That from the Pictured Cliffs zone, the subject wells are capable of low production only.
- (9) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (10) 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.
- (11) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time either of the subject wells is shut-in for 7 consecutive days.
- (12) That in order to allocate the commgled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Cotton Petroleum Corporation, is hereby authorized to commingle Chacra and Pictured Cliffs production within the wellbore of its Apache Well No. 30 located in Unit J of Section 3 and its Apache Well No. 29 located in Unit C of Section 14, both in Township 24 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.

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- (2) That the applicant shall 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 of the subject wells.
- (3) That the operator of the subject wells shall immediately notify the Division's Aztec district office any time any 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 FURTHER 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 Pictured Cliffs zones in applicant's wells in Sections 1 through 4, 9 through 14, and 23 and 24, Township 24 North, Range 4 West, NMPM, 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 Pictured Cliffs zones which would not otherwise be economically producible;
  - (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, and allocation of the commingled production from the well to each of the producing zones shall be in accordance with the allocation formula set forth in the order.
- RULE 5. The Division Director may rescind authority to commingle production in the wellbore and require both zones to be produced separately, 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.

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

> STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY
Director

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