Entered October 1, 1969

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION TO CONSIDER THE ADOPTION OF AN ADMINISTRATIVE PROCEDURE WHEREBY THE SECRETARY-DIRECTOR OF THE COMMISSION COULD GRANT EXCEPTIONS TO RULE 303 (a) OF THE COMMISSION RULES AND REGULATIONS AND PERMIT MARGINAL ZONES IN DUALLY COMPLETED OIL WELLS TO BE COMMINGLED IN THE WELL-BORE.

> CASE No. 4104 Order No. R-3845

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 16, 1969, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>lst</u> day of October, 1969, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

# FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That Rule 303 of the Commission Rules and Regulations prohibits, among other things, the commingling of production from two or more common sources of supply in the well-bore of any well.

(3) That there are a number of dually completed oil wells, the production from which is marginal as to each zone.

(4) That there are cases in which the reservoir characteristics of pools are such that waste would not be caused by the commingling of two separate common sources of supply in the wellbore. -2-CASE No. 4104 Order No. R-3845

(5) That there are cases in which the productive life of each of the marginal zones in a dually completed well may be substantially extended by permitting the commingling of production in the well-bore.

(6) That commingling the production from marginal zones in the well-bore of certain dually completed wells may result in the recovery of substantial amounts of additional oil from one or both of the zones, thereby preventing waste, and will not violate correlative rights.

(7) That in order to ease the administrative burden upon the operators and the Commission and to enable the Commission to more efficiently and effectively administer the laws of the State of New Mexico concerning the prevention of waste and the protection of correlative rights, Rule 303 of the New Mexico Oil Conservation Commission Rules and Regulations should be amended to grant the Secretary-Director of the Commission authority to permit the commingling of production from two separate common sources of supply of oil in the well-bore of a dually completed well.

## IT IS THEREFORE ORDERED:

(1) That Rule 303 of the New Mexico Oil Conservation Commission Rules and Regulations is hereby amended to read in its entirety as follows:

RULE 303. SEGREGATION OF PRODUCTION FROM POOLS

A. SEGREGATION REQUIRED

Each pool shall be produced as a single common source of supply and the wells therein shall be completed, cased, maintained, and operated so as to prevent communication, within the well-bore, with any other specific pool or horizon, and the production therefrom shall at all times be actually segregated, and the commingling or confusion of such production, before marketing, with the production from any other pool or pools is strictly prohibited.

# B. SURFACE COMMINGLING

The Secretary-Director of the Commission shall have the authority to grant an exception to Rule 303-A to permit the commingling in common facilities of the commonly owned production -3-CASE No. 4104 Order No. R-3845

from two or more common sources of supply, without notice and hearing, provided that the liquid hydrocarbon production from each common source of supply is to be accurately measured or determined prior to such commingling in accordance with the applicable provisions of the Commission "Manual for the Installation and Operation of Commingling Facilities," then current.

Applications for administrative approval to commingle the production from two or more common sources of supply shall be filed in triplicate with the Santa Fe office of the Commission. The application must contain detailed data as to the gravities of the liquid hydrocarbons, the values thereof, and the volumes of the liquid hydrocarbons from each pool, as well as the expected gravity and value of the commingled liquid hydrocarbon production; a schematic diagram of the proposed installation; a plat showing the location of all wells on the applicant's lease and the pool from which each well is producing. The application shall also state specifically whether the actual commercial value of such commingled production will be less than the sum of the values of the production from each common source of supply and, if so, how much less.

Where State or Federal lands are involved, applicant shall furnish evidence that the Commissioner of Public Lands for the State of New Mexico or the Regional Supervisor of the United States Geological Survey has consented to the proposed commingling.

### C. DOWN-HOLE COMMINGLING

1. The Secretary-Director of the Commission shall have the authority to grant an exception to Rule 303-A to permit the commingling in the well-bore of dually completed oil wells when the following facts exist and the following conditions are met:

- (a) Both zones to be commingled in the well-bore are classified as oil zones.
- (b) The total daily production from both zones before commingling (as determined in accordance with Section 2, paragraphs (d) and

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(e) below) does not exceed the following:

Bottom perforation, lowermost pool	<u>Bbls/day</u>
Less than 4,999 feet	20
5,000 feet to 5,999 feet	30
6,000 feet to 6,999 feet	40
7,000 feet to 7,999 feet	50
8,000 feet to 8,999 feet	60
9,000 feet to 9,999 feet	70
More than 10,000 feet	80

- (c) Both zones require artificial lift, or, both zones are capable of flowing. (Special consideration may be given to an exception to this latter requirement in the case in which a particular well's characteristics may justify same; however, the commingled production must be artificially lifted if either zone required artificial lift prior to commingling.)
- (d) Neither zone produces more water than the combined oil limit as determined in paragraph(b) above.
- (e) The fluids from each zone are compatible with the fluids from the other, and combining the fluids will not result in the formation of precipitates which might damage either reservoir.
- (f) The total value of the crude will not be reduced by commingling.
- (g) Ownership of the two zones to be commingled is common (including working interest, royalty, and overriding royalty).
- (h) The commingling will not jeopardize the efficiency of present or future secondary recovery operations in either of the zones to be commingled.

2. To obtain approval for down-hole commingling, the operator of the well shall submit the following in duplicate to

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the Secretary-Director of the Commission plus one copy to the appropriate District Office of the Commission:

- (a) Name and address of the operator.
- (b) Lease name, well number, well location.
- (c) Names of the pools the well is completed in and the Commission order number which authorized the dual completion.
- (d) A current (within 30 days) 24-hour productivity test on Commission Form C-116 showing the amount of oil, gas, and water produced from each zone.
- (e) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes. (This requirement may be dispensed with in the case of a newly completed or recently completed well which has little or no production history. However, a complete résumé of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)
- (f) Estimated bottom-hole pressure for each artificially lifted zone. A current (within 30 days) measured bottom-hole pressure for each zone capable of flowing.
- (g) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the well-bore.
- (h) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams.
- (i) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

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3. The Secretary-Director of the Commission may approve the proposed down-hole commingling in the absence of a valid objection within 20 days after the receipt of the application if, in his opinion, there is no disqualifying disparity of bottom-hole pressures or other reservoir characteristics, waste will not result thereby, and correlative rights will not be violated. The 20-day waiting period may be dispensed with upon receipt of waivers of objection from all parties mentioned in Section 2, paragraph (i).

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. The production from the well shall be subject to the lower of the daily gas-oil ratio limitations applicable to the reservoirs. Wells shall be tested on a commingled basis annually, except that a well penalized for a high gas-oil ratio shall be tested semi-annually.

5. The Secretary-Director may rescind authority to commingle production in the well-bore and require both zones to be produced separately, if, in his opinion, waste or reservoir damage is resulting thereby or the efficiency of any secondary recovery project is being impaired, or if any change of conditions renders the installation no longer eligible for down-hole commingling under the provisions of Section 1, paragraphs (a) through (h).

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION DAVID F. ČARGO, Chairman ARMIJO, Л

A. L. PORTER, Jr., Member & Secretary

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