Entred Cetaber 15, 1956

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 1125 Order No. R-895

THE APPLICATION OF SUNRAY MID-CONTINENT OIL COMPANY FOR AN ORDER EXTENDING THE LANE-WOLFCAMP POOL AND CREATING THE LANE-PENNSYLVANIAN POOL, FOR AN ORDER ESTABLISHING 80-ACRE SPACING UNITS IN SAID LANE-WOLFCAMP AND LANE-PENNSYLVANIAN POOLS AND FOR AN ORDER PERMITTING THE DUAL COMPLETION OF WELLS IN THE LANE-WOLFCAMP AND LANE-PENNSYLVANIAN POOLS, ALL IN LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 o'clock a.m. on August 15, 1956, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this day of October, 1956, the Commission, a quorum being present, having considered the record herein and the evidence and testimony adduced 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 a common source of supply for the production of oil in the Wolfcamp formation was discovered by the Sunray Mid-Continent Oil Company's State "F" Well No. 1, located in the SE/4 of the NW/4 of Section 1, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico. It was completed December 10, 1955. The top of the perforations is at 9648 feet.
- (3) That the Commission on February 15, 1956, heard Case No. 1018 and entered Order R-763 which was an order creating the Lane-Wolfcamp Pool in Lea County, New Mexico, and again in Case No. 1055 extended the pool by Order R-800.
- (4) That there is need for the creation of a new pool in Lea County, New Mexico, for the production of oil from the Pennsylvanian formation, said pool to bear the designation Lane-Pennsylvanian Pool. Said Lane-Pennsylvanian Pool was discovered

by Sunray Mid-Continent Oil Company's State "F" Well No. 2, located in the NE/4 of the NW/4 of Section 1, Township 10 South, Range 33 East, NMPM. It was completed April 9, 1956. The top of perforations is at 9855 feet.

- (5) That evidence presented indicates that the horizontal limits of both the Lane-Wolfcamp and Lane-Pennsylvanian Pools should be somewhat different from the horizontal limits of the pools as set forth in applicant's application.
- (6) That geological and engineering data presented to the Commission indicate that one well will drain 80 acres in both the Lane-Wolfcamp and Lane-Pennsylvanian Pools and said pools should be developed on 80-acre proration units.
- (7) That applicant has shown that the dual completion of wells within the Lane-Wolfcamp common source of supply and the Lane-Pennsylvanian common source of supply in the subject area should be permitted under certain conditions.
- That applicant, Sunray Mid-Continent Oil Company, has shown that there is reasonable assurance that wells completed in said Wolfcamp or Pennsylvanian formations in the subject area will adequately drain 80 acres. Applicant requested fixed spacing and fixed proration units, but this fixed pattern would not be in the best interest of conservation. The Commission finds that all wells drilled to and completed in the Wolfcamp or Pennsylvanian formations in the area should be located on 80-acre units embracing two adjacent governmental quarter-quarter sections or lots within a single governmental section, which units should run either North and South or East and West; further, that wells drilled to and completed in the Wolfcamp or the Pennsylvanian formations in said area should be located on either quarter-quarter section or lot comprising the 80-acre units, and should not be closer than 330 feet from the lines of such quarter-quarter section; further, that all wells so located on such 80-acre units should have allowables assigned thereto in accordance with the 80-acre proportional factor for a depth range of 9,000 to 10,000 feet, and with the other provisions of Rule 505 of the Rules and Regulations of the Commission.
- as of October 1956, and which was drilled or was drilling as of October 1956, and which is located within the horizontal limits of the Lane-Wolfcamp or Lane-Pennsylvanian Pool as herein defined should be granted an exception to the 80-acre spacing requirements of this order; further, that any such excepted well should be assigned an allowable which is in the same proportion to the standard 80-acre allowable that the well's dedicated acreage is to 80 acres; further, that the allowable for any such excepted well should be increased to that of a standard unit upon receipt by the Commission of proper evidence that such well has 80 acres dedicated thereto.

IT IS THEREFORE ORDERED:

- (1) That the application of Sunray Mid-Continent Oil Company for an order extending the Lane-Wolfcamp Pool and creating the Lane-Pennsylvanian Pool, and for an order establishing 80-acre spacing in the Lane-Wolfcamp and Lane-Pennsylvanian Pools be and the same is hereby approved.
- (2) That the vertical limits of the Lane-Wolfcamp Pool shall be the Wolfcamp formation, and the horizontal limits of said Lane-Wolfcamp Pool shall be that area described in Exhibit "A" attached hereto and made a part hereof.
- (3) That the vertical limits of the Lane-Pennsylvanian Pool shall consist of the Pennsylvanian formation, and the horizontal limits of said Lane-Pennsylvanian Pool shall be that area described in Exhibit "A" attached hereto and made a part hereof.

IT IS FURTHER ORDERED:

That special pool rules applicable to the Lane-Wolfcamp and Lane-Pennsylvanian Pools be and the same are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE LANE-WOLFCAMP AND LANE-PENNSYLVANIAN POOLS

IT IS ORDERED:

- (1) That 80-acre proration units be and the same are hereby established for the Lane-Wolfcamp and Lane-Pennsylvanian Pools; further, that all wells drilled to and completed in said Lane-Wolfcamp or Lane-Pennsylvanian Pool shall be located on 80-acre proration units embracing two adjacent governmental quarter-quarter sections or lots within a single governmental section; further, that the aforesaid 80-acre proration units shall run either North and South or East and West. The well thereon may be located on either quarter-quarter section or lot comprising the 80-acre unit, but shall not be closer than 330 feet from the boundaries of such quarter-quarter section or lot.
- (2) That Form C-128 shall be filed in conformance with Rule 1104 and shall outline the acreage dedicated to any projected well.
- (3) That individual well allowables for wells drilled in conformity with the 80-acre spacing rules herein provided for the Lane-Wolfcamp and Lane-Pennsylvanian Pools shall be established in accordance with the 80-acre proportional factor for a depth range of 9,000 to 10,000 feet, and with the other provisions of Rule 505 of the Rules and Regulations of the Commission. Provided, however, that the date of assignment of an allowable to a newly

completed well shall be governed by the provisions of Rule 503 (c) and the date of receipt by the Commission of the Commission's Affidavit of Communitization Agreement, if applicable.

- as of October / 1956, and which is located within the limits of the Lane-Wolfcamp or Lane-Pennsylvanian Pool as herein defined, is hereby granted an exception to the 80-acre spacing requirements of this order; further, that any such excepted well shall be assigned an allowable, effective at 7 o'clock a.m., Mountain Standard Time, November 1, 1956, which is in the same proportion to the standard 80-acre allowable that the well's dedicated acreage is to 80 acres. Provided, however, that the allowable for any such excepted well may be increased to that of a standard unit effective on the date of receipt by the Commission of Commission Form C-128, Well Location and/or Gas Proration Plat, indicating that sufficient additional acreage has been dedicated to the excepted well to form a standard proration unit as defined in Paragraph (1) above, or on the date of receipt by the Commission of the Commission's Affidavit of Communitization Agreement, if applicable, whichever date is later. Provided however, that no well shall have its allowable increased to that of a standard unit prior to November 1, 1956.
- (5) The allowable for any well completed in the Lane-Wolfcamp or Lane-Pennsylvanian Pool and to which is assigned any governmental quarter-quarter section or lot containing less than 39 1/2 acres or more than 40 1/2 acres shall have its allowable decreased or increased in the proportion that the total number of acres assigned to the well bears to 80 acres.
- (6) That the application of Sunray Mid-Continent Oil Company for an order promulgating special pool rules for the Lane-Wolfcamp common source of supply and the Lane-Pennsylvanian common source of supply permitting the dual completion of a well within the horizontal and the vertical limits of the subject pools, after individual approval as hereinafter provided, be and the same is hereby approved.
- (7) (a) That the dual completion of any well within the horizontal and vertical limits of the subject pools may be permitted only by order of the Commission after due notice and hearing, except as noted by Paragraph 7 (c) below.
- (b) The application for such hearing shall be submitted in triplicate and shall include an exhibit showing the location of all wells in both pools and a diagrammatic sketch of the proposed dual completion and shall set forth all material facts on the common sources of supply involved, and the manner and method of completion proposed.
- (c) The Secretary of the Commission shall have authority to grant administratively an exception to the requirements of Paragraph (a) above without notice and hearing where application

for administrative approval has been filed in due form and includes an exhibit showing the location of all wells in the subject pools and a diagrammatic sketch of the proposed dual completion, and has set forth all material facts on the common sources of supply involved, and the manner and method of dual completion proposed, and

- (1) applicant proposes to dually complete a well in the Lane-Wolfcamp common source of supply and the Lane-Pennsylvanian common source of supply and the well is located within the horizontal limits of both of the pools or within one-half mile of the horizontal limits thereof, and
- (2) applicant proposes to complete and equip the well in such a manner that the Lane-Wolfcamp common source of supply and the Lane-Pennsylvanian common source of supply shall be completely segregated from each other by setting the production casing string at total depth and circulating cement from total depth to a point at least 500 feet above the uppermost perforation, and by utilizing parallel strings of tubing, one string to each of the common sources of supply, and a permanent retainer-type production packer.

Applicants shall also furnish all operators who own leases within the horizontal limits of either or both pools a copy of the application and a diagrammatic sketch of the proposed dual completion and a plat showing the location of all wells in the subject pools. Applicant shall include with his application to the Commission a written stipulation that all such operators have been properly notified. The Secretary of the Commission shall wait at least 20 days before approving any such dual completion, and shall approve such dual completion only in the absence of objection from any such operator owning acreage in either or both of the pools. In the event an operator objects to the dual completion, the Commission shall consider the matter only after proper notice and hearing.

The Commission may waive the 20-day waiting period requirements if the applicant furnishes the Commission with the written consent to the dual completion by all of the aforesaid operators involved.

(8) That any well so dually completed shall be completed and thereafter produced in such a manner that there will be no commingling within the well-bore, either within or outside the

casing, of gas, oil and gas, or oil produced from either or both of the separate strata.

- (9) That upon the actual dual completion of any such well, the operator shall submit to the District Office of the Commission at Hobbs, New Mexico, copies of Oil Conservation Commission Form C-103, Form C-104, and Form C-110 outlining the information required on those forms by existing Rules and Regulations, packer-setting affidavit form, and two copies of the electric log of the well. Operator shall also submit in duplicate evidence indicating that the cement behind the production casing string was circulated from total depth to a point at least 500 feet above the uppermost perforation.
- (10) That any well so dually completed shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used, at any time, as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined.
- (11) That the operator shall be required to make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each test properly attested to by the operator and all witnesses, and shall be filed with the Commission within 15 days after completion of such test.
- (12) That upon the actual dual completion of any such well, operator shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas-oil ratio, and reservoir pressure determination of each producing zone or stratum immediately following completion.
- (13) That upon actual dual completion of any well, operator shall within 15 days commence a segregation test, and shall conduct and report the results of said test in accordance with the instructions pertaining to and a part of the Commission's "Packer Leakage Test" form. Such segregation tests shall also be conducted at six-months intervals from the date of initial dual completion and at such other times as may be deemed necessary by the Commission.

IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary



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or convenient for the prevention of waste and/or the protection of correlative rights; upon failure of any operator to comply with any requirement of this order, after proper notice and hearing the Commission may terminate the authority granted and require, in the interests of conservation, the operator or its successors and assigns to limit its activities to regular single-zone production insofar as the well wherein the failure to comply be concerned.

EXHIBIT "A"

Horizontal limits of the Lane-Wolfcamp and Lane-Pennsylvanian Pool:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM Section 25; S/2 Section 35; E/2 All Section 36;

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM Section 31; W/2

TOWNSHIP 10 SOUTH, RANGE 33 EAST, NMPM

Section 1; All Section 2; E/2 Section 11; NE/4 Section 12; N/2

TOWNSHIP 10 SOUTH, RANGE 34 EAST, NMPM Section 6; W/2

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JOHN F. SIMMS, Chairman

E. S. WALKER, Member

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

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