Entered December 21, 1983

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION COMMISSION

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

CASE NO. 7980 Order No. R-7407

NOMENCLATURE

APPLICATION OF JEROME P. McHUGH FOR THE CREATION OF A NEW OIL POOL AND SPECIAL POOL RULES, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 16, 1983, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this $20 \, \mathrm{th}$ day of December, 1983, 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 the applicant, Jerome P. McHugh, seeks an order creating a new oil pool, vertical limits to be the Niobrara member of the Mancos formation, with special pool rules including a provision for 320-acre spacing, Rio Arriba County, New Mexico.
- (3) That in companion Case 7979, Northwest Pipeline Company seeks an order deleting certain lands from the Basin Dakota Pool, the creation of a new oil pool with vertical limits defined as being from the base of the Mesaverde formation to the base of the Dakota formation, (the Mancos and Dakota formations), and the promulgation of special pool rules including a provision for 160-acre spacing, Rio Arriba County, New Mexico.

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- (4) That Cases 7979 and 7980 were consolidated for the purpose of obtaining testimony.
- (5) That geological information and bottomhole pressure differentials indicate that the Mancos and Dakota Formations are separate and distinct common sources of supply.
- (6) That the testimony presented would not support a finding that one well would efficiently drain 320 acres in the Dakota formation.
- (7) That the Mancos formation in the area is a fractured reservoir with low porosity and with a matrix permeability characteristic of the Mancos being produced in the West Puerto Chiquito Mancos Pool immediately to the east of the area.
- (8) That said West Puerto Chiquito-Mancos Pool is a gravity drainage reservoir spaced at 640 acres to the well.
- (9) That the evidence presented in this case established that the gravity drainage in this area will not be as effective as that in said West Puerto Chiquito-Mancos Pool and that smaller proration units should be established therein.
- (10) That the currently available information indicates that one well in the Gavilan-Mancos Oil Pool should be capable of effectively and efficiently draining 320 acres.
- (11) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to prevent reduced recovery of hydrocarbons which might result from the drilling of too many wells, and to otherwise prevent waste and protect correlative rights, the Gavilan-Mancos Oil Pool should be created with temporary Special Rules providing for 320-acre spacing.
- (12) That the vertical limits of the Gavilan-Mancos Pool should be defined as: The Niobrara member of the Mancos formation between the depths of 6590 feet and 7574 feet as found in the Northwest Exploration Company, Gavilan Well No. 1, located in Unit A of Section 26, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.

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(13) That the horizontal limits of the Gavilan-Mancos Oil Pool should be as follows:

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM Sections 1 through 3: All

(TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM)
Sections 19 through 30: All
Sections 33 through 36: All

- (14) That to protect the correlative rights of interested parties in the West Puerto-Chiquito Mancos Oil Pool, it is necessary to adopt a restriction requiring that no more than one well be completed in the Gavilan-Mancos Oil Pool in the E/2 of each section adjoining the western boundary of the West Puerto Chiquito-Mancos Oil Pool, and shall be no closer than 1650 feet to the common boundary line between the two pools.
- (15) That in order to gather information pertaining to reservoir characteristics in the Gavilan-Mancos Oil Pool and its potential impact upon the West Puerto Chiquito-Mancos Oil Pool, the Special Rules for the Gavilan-Mancos Oil Pool should provide for the annual testing of the Mancos in any well drilled in the E/2 of a section adjoining the West Puerto Chiquito-Mancos Pool.
- (16) That the said Temporary Special Rules and Regulations should be established for a three-year period in order to allow the operators in the Gavilan-Mancos Oil Pool to gather reservoir information to establish whether the temporary rules should be made permanent.
- (17) That the effective date of the Special Rules and Regulations promulgated for the Gavilan-Mancos Oil Pool should be more than sixty days from the date of this order in order to allow the operators time to amend their existing proration and spacing units to conform to the new spacing and proration rules.

IT IS THEREFORE ORDERED:

(1) That a new pool in Rio Arriba County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated as the Gavilan-Mancos Oil Pool, with the vertical limits comprising the Niobrara member of the Mancos shale as described in Finding No. (12) of this Order and with horizontal limits as follows:

GAVILAN-MANCOS OIL POOL RIO ARRIBA COUNTY, NEW MEXICO

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TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM Sections 1 through 3: All

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM Sections 19 through 30: All Sections 33 through 36: All

(2) That temporary Special Rules and Regulations for the Gavilan Mancos Oil Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE GAVILAN-MANCOS OIL POOL

- PULE 1. Each well completed or recompleted in the Gavilan-Mancos Oil Pool or in a correlative interval within one mile of its northern, western or southern boundary, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. No more than one well shall be completed or recompleted on a standard unit containing 320 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental section.
- RULE 3. Non-standard spacing or proration units shall be authorized only after proper notice and hearing.
- RULE 4. Each well shall be located no nearer than 790 feet to the outer boundary of the spacing or proration unit, nor nearer than 330 feet to a governmental quarter-quarter section line.
- RULE 5. That no more than one well in the Gavilan-Mancos Oil Pool shall be completed in the East one-half of any section that is contiguous with the western boundary of the West Puerto Chiquito-Mancos Oil Pool, with said well being located no closer than 1650 feet to said boundary.
- RULE 6. That the operator of any Gavilan-Mancos Oil Pool well located in any of the governmental sections contiguous to the West Puerto Chiquito-Mancos Oil Pool the production from which is commingled with production from any other pool or formation and which is capable of producing more than 50 barrels of oil per day or which has a gas-oil ratio greater than 2,000 to 1, shall annually, during the month of April or May, conduct a production test of the Mancos formation production in each said well in accordance with testing procedures acceptable to the Aztec district office of the Oil Conservation Division.

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IT IS FURTHER ORDERED:

- (1) That the Special Rules and Regulations for the Gavilan-Mancos Oil Pool shall become effective March 1, 1984.
- (2) That any well presently producing from the Gavilan-Mancos Oil Pool which does not have a standard 320-acre proration unit, an approved non-standard proration unit, or which does not have a pending application for a hearing for a standard or non-standard proration unit by March 1, 1984, shall be shut-in until a standard or non-standard unit is assigned the well.
- (3) That this case shall be reopened at an examiner hearing in March, 1987, at which time the operators in the subject pool should be prepared to appear and show cause why the Gavilan-Mancos Oil Pool should not be developed on 40-acre spacing units.
- (4) 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

JIM BACA, MEMBER

ED KELLEY, MEMBER

JOE D. RAMEY, CHAIRMAN AND

SEAL