

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 8950
Order No. R-2565-E
and
Order No. R-3401-A

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR THE AMENDMENT
OF THE SPECIAL RULES AND REGULATIONS OF THE
WEST PUERTO CHIQUITO-MANCOS OIL POOL TO ESTABLISH
TEMPORARY SPECIAL PRODUCTION ALLOWABLE
LIMITATIONS AND GAS-OIL RATIO LIMITATIONS,
RIO ARriba COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing on August 7, 8, 21, 22, and 27, 1986, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 11th day of September, 1986, 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 THAT:

(1) Notice of this application was provided to all operators of wells and each unleased mineral owner within the existing pool boundaries of the West Puerto Chiquito-Mancos Oil Pool as required by Division Rule 1207.

(2) Due public notice has been given as required by law and the Commission has jurisdiction of this case, the parties, and the subject matter thereof.

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(3) The applicant, Benson-Montin-Greer Drilling Corporation (Greer) seeks an order amending the Special Rules and Regulations of the West Puerto Chiquito-Mancos Oil Pool to establish for a period of not less than 90 days a temporary special production allowable limitation of 400 barrels of oil per day for a standard 640-acre spacing and proration unit and a special temporary gas-oil ratio limitation factor of 1,000 cubic feet of gas per barrel of oil produced.

(4) In companion Case 8946, Jerome P. McHugh and Associates, Inc. (McHugh) seeks an order amending the temporary Special Rules and Regulations of the Gavilan-Mancos Oil Pool as promulgated by Division Order No. R-7407 to establish for a period of not less than 90 days a temporary special production allowable limitation of 200 barrels of oil per day for a standard 320-acre spacing and proration unit and a special temporary gas-oil ratio limitation factor of 1,000 cubic feet of gas per barrel of oil produced.

(5) Case 8946 and Case 8950 were consolidated by the Commission for the purposes of hearing.

(6) The Gavilan-Mancos Oil Pool and the West Puerto Chiquito-Mancos Oil Pool share a common boundary and are in pressure communication at least in proximity to such boundary.

(7) Greer operates and has operated the Canada Ojitos Unit in the West Puerto Chiquito-Mancos Oil Pool since 1963 to produce oil from the Mancos formation, and has developed the Mancos formation in the Canada Ojitos Unit with low well density, controlled withdrawal rates and pressure maintenance resulting in a low rate of pressure decline and significant additional oil recovery by gravity drainage.

(8) McHugh, Greer and Meridian Oil Company presented testimony and evidence in these cases as set out in Finding No. (7) in Order No. R-7407-D herein incorporated by reference.

(9) The Commission found that the evidence presented in these cases established those matters and issues contained in Findings Nos. (12) through (16) in Order No. R-7407-D also herein incorporated by reference.

(10) In Case No. 8950, Greer effectively seeks to have a common gas oil ratio limitation and a maximum daily oil allowable established to permit withdrawal rates on each side of the Gavilan/West Puerto Chiquito Oil Pool boundary to be equivalent, thereby protecting correlative rights.

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(11) No party to the consolidated hearing objected to the establishment of such common limiting gas-oil ratio or equivalent daily oil allowable.

(12) Order No. R-7407-D, entered in Case No. 8946 effective September 1, 1986, established a limiting gas-oil ratio of 600 cubic feet of gas per barrel and a depth bracket allowable of 400 barrels of oil per day for wells in the Gavilan-Mancos Oil Pool for a temporary period until further order of the Commission and provided for reopening of such case at a hearing in March, 1987, unless otherwise called earlier by the Commission.

(13) Such temporary rules should be adopted for the West Puerto Chiquito-Mancos Oil Pool except that the maximum assignable oil allowable should be 800 barrels per day to account for the variation in spacing unit size between the two pools.

(14) For consistency, both the Special Rules for the West Puerto Chiquito-Mancos Oil Pool contained in Order No. R-2565-B, as amended, and the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project contained in Order No. R-3401 should be amended to reflect such limiting gas-oil ratio and maximum oil allowable.

IT IS THEREFORE ORDERED THAT:

(1) The limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool, as heretofore defined and described, Rio Arriba County, New Mexico, shall be 600 cubic feet of gas per barrel of liquid hydrocarbons produced.

(2) Rule 7(a) of the Special Rules for The West Puerto Chiquito-Mancos Oil Pool as established by Order No. R-2565-B, as amended, is hereby amended to read in its entirety as follows:

"Rule 7. (a) Except as otherwise provided for in subparts (b) and (c), below, a standard spacing or proration unit in the West Puerto Chiquito-Mancos Oil Pool (632 through 648 acres) shall be assigned a top allowable of 800 barrels of oil per day. Any non-standard spacing or proration unit containing less than 632 acres or more than 648 acres shall be assigned an allowable in the same ratio to 800 as the acreage in the proration unit bears to 640."

(3) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established

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by Order No. R-3401 are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (600 to 1) for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil ratio (600 to 1) for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of 600 cubic feet of gas per barrel of oil may be produced on a "net" gas-oil ratio basis, which net gas-oil ratio shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = \frac{TUA \times F_a \times 1,000}{\frac{P_g - I_g}{P_o}}$$

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where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than 600 cubic feet of gas per barrel of oil produced.

(4) The effective date of this order shall be September 1, 1986.

(5) Unless otherwise reopened by the Commission, this case shall be reopened at a Commission hearing in March, 1987, to be consolidated with the reconsideration of the Temporary Special Rules established by Order No. R-7407 for the Gavilan-Mancos Oil Pool.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Commission 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 COMMISSION

JIM BACA, Member



ED KELLY, Member



R. L. STAMETS, Chairman and
Secretary

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