

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

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

CASE NO. 9837  
ORDER NO. R-3401-C

APPLICATION OF BENSON-MONTIN-GREER  
DRILLING CORPORATION FOR AMENDMENT  
OF DIVISION ORDER NO. R-3401, AS  
AMENDED, RIO ARriba COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 29, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 8<sup>th</sup> day of February, 1990, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Benson-Montin-Greer Drilling Corporation, seeks amendment of the Special Pool Rules and Regulations for the BMG West Puerto Chiquito-Mancos Pressure Maintenance Project as promulgated by Order No. R-3401, as amended, to provide for accumulation of credit for extraneous gas injected into the project area.
- (3) The applicant is the operator of the BMG West Puerto Chiquito Mancos Pressure Maintenance Project and is injecting gas into this unit which is produced from a source outside of the project area.
- (4) At the hearing, the applicant requested dismissal of that portion of the application which requested cumulation of credits on an annual basis.
- (5) Granting this application will result in the operator moving more gas through the project area which will increase the ultimate recovery of oil from the project area thereby preventing waste.

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(6) Since the injection credit will be equal to the gas injected by the operator into this formation as part of pressure maintenance operations, less that volume of gas produced from the project area, the correlative rights of no interest owners in the pool will be impaired by permitting the operator to cumulate the credit for injection of this gas.

(7) The Special Pool Rules and Regulations for the BMG West Puerto Chiquito-Mancos Pressure Maintenance Project should be amended to provide for accumulation of credit for withdrawal at a future date for gas which is produced from a source outside the project area and injected into the Unit by the operator as part of pressure maintenance operations.

IT IS THEREFORE ORDERED THAT:

(1) Rules 7, 8 and 9 of the Special Pool Rules and Regulations for the BMG West Puerto Chiquito-Mancos Pressure Maintenance Project, as promulgated by Division Order No. R-3401, as amended, are hereby amended to read as follows:

"Rule 7(a): The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or 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 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 the limiting gas-oil ratio may be produced on a "net gas-oil ratio" basis, which 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:

$$A_{adj} = TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

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

TUA = top unit allowable for the pool.

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- $F_a$  = 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 feet from the Gavilan boundary).
- $P_g$  = average daily volume of gas produced by the well during the subject month, cubic feet.
- $I_g$  = the well's allocated share of the daily average gas injected during the subject month, cubic feet.
- $P_o$  = average daily volume of oil produced by the well during the subject month, barrels.
- GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

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 the limiting gas-oil for the West Puerto Chiquito-Mancos Oil Pool.

PROVIDED HOWEVER, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1 West; Sections 5, 8, 17, 20, 29 and 32, Township 25 North, Range 1 West; Sections 29 and 32 and W/2 of Sections 5, 8, 17 and 20, Township 26 North, Range 1 West, shall be limited to 50% of the allocated share of injected gas in the  $I_g$  term of the formula above.

Rule 7(b): The operator may inject extraneous gas (gas produced from a source outside the West Puerto Chiquito-Mancos Pressure Maintenance Project) and accumulate credit for withdrawal at a future date. Withdrawal of such gas shall not be charged against the gas allowable of any well in the unit. Hydrocarbon liquids recovered from such gas at a separation facility shall be charged against the oil allowable for the well which produced the gas, but hydrocarbon liquids recovered from a processing or stripping facility shall be, and shall be treated as, condensate and shall not be charged against the unit's allowable or that of any well in the unit."

"Rule 8: Each month the project operator shall, within three weeks following the production month, submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission outlining thereon the data required, and setting out the allowables for that production month and showing thereon overproduction, if any, for each of the several wells in the project

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volume of extraneous gas injected, the amount withdrawn and the cumulative net status of extraneous gas remaining in the project area at the end of the reporting month. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project."

"Rule 9: The Commission shall, upon review of the report and after any adjustments deemed necessary, confirm the allowable and overproduction, if any, and, if the project operator is not so doing, issue instructions to bring production and allowables into balance. The sum of the allowables so calculated shall be assigned to the project and may be produced from the wells in the project in any proportion except that no well in the project which directly or diagonally offsets a well outside the project producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool."

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

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