# 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. 10052 Order Nos. R-8539-A R-8541-B

APPLICATION OF SHELL WESTERN E & P INC. FOR AMENDMENT OF DIVISION ORDER NOS. R-8539 AND R-8541, AS AMENDED, LEA COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

### **BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on August 22, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>24th</u> day of September, 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) By Order No. R-8539 dated November 9, 1987, issued in Case No. 9230 upon application of Shell Western E & P Inc., the Division created and defined the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool for the purpose of conducting secondary recovery operations, and further promulgated Temporary Special Rules and Regulations including provisions whereby Blinebry and Tubb gas wells would be separately classified and produced in accordance with the Rules and Regulations for the Prorated Gas Pools of New Mexico as promulgated by Division Order No. R-8170, as amended. CASE NO. 10052 Order Nos. R-8539-A R-8541-B Page -2-

(3) By Order No. R-8541, as amended, dated November 9, 1987, issued in Case No. 9232, the Division authorized Shell Western E & P Inc. to institute a waterflood project on its Northeast Drinkard Unit within said North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool.

(4) The applicant, Shell Western E & P Inc., seeks to delete Rule Nos. 4 through 10 of the Special Rules and Regulations for the North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool, which rules pertain to Blinebry and Tubb gas well classification and production.

(5) In addition, the applicant seeks to delete Rule Nos. 11 and 12, which rules established a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil and oil and gas allowables in accordance with Division General Rule Nos. 701 (F)(3), 503, 505, and 506.

(6) The applicant further seeks to amend Division Order No. R-8541, as amended, by eliminating Ordering Paragraph Nos. (8) and (9) which prohibit injection into gas bearing zones, and which provide that an adequate number of wells be utilized for Blinebry and Tubb gas production.

(7) In addition, pursuant to the provisions of Division Order No. R-8539, the applicant is prepared (via Case No. 10052 in lieu of reopening Case No. 9230) to present evidence and testimony to show cause why the Temporary Rules and Regulations for the subject pool should not be rescinded.

(8) Rule Nos. 4 through 10 and Ordering Paragraph Nos. (8) and (9) as described above, were incorporated into said Order Nos. R-8539 and R-8541, respectively, in order to protect and provide a means by which remaining gas cap reserves within the Blinebry and Tubb formations could be recovered and to further ensure that these gas cap reserves would not be watered out during coexistent waterflood operations.

(9) Rule Nos. 11 and 12 were incorporated into said Order No. R-8539 in order to allow more efficient and complete production of primary reserves within the pool during the interim period prior to commencement of injection operations. CASE NO. 10052 Order Nos. R-8539-A R-8541-B Page -3-

(10) Subsequent to the issuance of Order Nos. R-8539 and R-8541, as amended, the applicant has obtained extensive additional reservoir data which now indicates that the gas caps which may have existed in this reservoir are now largely depleted.

(11) The evidence presented by the applicant indicates that approximately 95 percent of the gas currently being produced within the subject unit is produced from the depleted oil column and approximately 5 percent is being produced from remaining Blinebry and Tubb gas caps.

(12) According to further evidence it is currently uneconomic for the applicant to drill or recomplete wells to produce any remaining gas cap reserves due to the marginal gas production encountered in such wells.

(13) The applicant has demonstrated that the ultimate gas recovery within the unit (approximately 54.7 BCF-1987 forecast) will not be reduced by approval of the subject application.

(14) The applicant has further demonstrated that failure to waterflood depleted gas caps in the reservoir could decrease ultimate oil recovery because of the possibility that oil reserves will be displaced into depleted gas caps and not be recoverable in the future.

(15) The applicant intends, according to testimony, to continue producing these marginal Blinebry and Tubb gas wells until such time as they are depleted or until such time as mechanical failures force the abandonment of such wells.

(16) In order to prevent the drilling of unnecessary wells, promote effective and efficient secondary recovery operations, and to otherwise prevent waste and protect correlative rights, Rule Nos. 4 through 10, 11, and 12 of the Special Rules and Regulations for the North Eunice Blinebry-Tubb Drinkard Oil and Gas Pool and Ordering Paragraph Nos. (8) and (9) of Division Order No. R-8541, as amended, should be rescinded.

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(17) The evidence and testimony by the applicant further indicates that the pool rules currently in effect, with the exception of those described in Finding No. (16) above, are effective in promoting orderly development of secondary reserves within the subject pool, and should therefore be made permanent.

(18) The subject pool should be redesignated the North Eunice Blinebry-Tubb-Drinkard Pool.

(19) In order to protect the correlative rights of those operators who may be producing gas from the Blinebry and Tubb zones outside the boundary of the North Eunice Blinebry-Tubb-Drinkard Pool, the applicant should be required to notify such affected offset operators in the event the applicant intends to:

- a) Add perforations to any well currently producing from the gas bearing portion of the Blinebry and/or Tubb formation.
- b) Perforate the gas bearing portion of the Blinebry and/or Tubb formation in any currently authorized or subsequently approved injection well.

(20) In accordance with Division General Rule No. 701 (F)(3), the Northeast Drinkard Unit Waterflood Project should be assigned an oil and gas allowable equal to the project's ability to produce.

(21) The amended Rules and Regulations for the North Eunice Blinebry-Tubb-Drinkard Pool should remain in effect until further order of the Division. CASE NO. 10052 Order Nos. R-8539-A R--8541-B Page -5-

### IT IS THEREFORE ORDERED THAT:

(1) The North Eunice Blinebry-Tubb-Drinkard Oil and Gas Pool, heretofore created and defined by Division Order No. R-8539, Lea County, New Mexico, is hereby redesignated the North Eunice Blinebry-Tubb-Drinkard Pool.

(2) The Special Rules and Regulations for the North Eunice Blinebry-Tubb-Drinkard Pool, as originally promulgated by Division Order No. R-8539 are hereby superseded by the following:

# SPECIAL RULES AND REGULATIONS FOR THE NORTH EUNICE BLINEBRY-TUBB-DRINKARD POOL

- RULE 1. Each well completed or recompleted in the North Eunice Blinebry-Tubb-Drinkard Pool or in the Blinebry, Tubb, or Drinkard formation within the designated vertical and horizontal pool boundaries shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. A producing oil well within the North Eunice Blinebry-Tubb-Drinkard Pool shall have dedicated to it a tract consisting of 40 acres comprised of a governmental quarter-quarter section or lot and shall be located no closer than 330 feet to any outer boundary of such tract.
- RULE 3. The Division Director shall have authority to grant exceptions to the well location requirements of Rule 2 in accordance with the terms and provisions of General Rule 104 (F), and provided the requirements contained in said rule are complied with.

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- RULE 4. The operator shall consult with the Division's Hobbs district office for procedures to be used for obtaining approval of well conversions, recompletions, abandonment of zones, etc., and for production reporting within the pool.
- RULE 5. The supervisor of the Hobbs district office of the Division may grant requests to add perforations to any well currently producing from the gas bearing portion of the Blinebry and/or Tubb formation provided that the applicant includes proof that all affected offset operators have been notified of such requests and that no objections have been received by the Division within 20 days of such notification.
- RULE 6. The Division Director may grant requests to perforate the gas bearing portion of the Blinebry and/or Tubb formations in any currently authorized or subsequently approved injection well provided that all affected offset operators have been notified of such requests and that no objections have been received by the Division within 20 days of such notification.

(3) Ordering Paragraph Nos. (8) and (9) of Division Order No. R-8541, as amended, are hereby deleted.

(4) In accordance with Division General Rule No. 701 (F)(3), the Northeast Drinkard Unit Waterflood Project shall be assigned an oil and gas allowable equal to the project's ability to produce.

(5) All other provisions contained within Division Order Nos. R-8539 and R-8541, as amended, shall remain in full force and effect.

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

WILLIAM J. LEMAY Director

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