

Equation for Calculating Drainage Area

$$\text{OGIP} = 43560 \text{ (Acres)} (h\phi S_g) B_g$$

$$\text{Reserves} = \text{RECOVERY FACTOR} \times \text{OGIP}$$

$$\text{Pressure} = 5200 \text{ psi}$$

$$\text{Gas Gravity} = 0.75$$

$$\text{Temperature} = 154^\circ \text{ F}$$

$$T_c = 396^\circ \text{ R}$$

$$P_c = 662 \text{ psi}$$

$$T_r = (460 + 154)/396 = 1.55$$

$$P_r = 5200/662 = 7.86$$

$$z = 0.98$$

$$B_g = 35.35 \frac{P}{ZT} = (35.35) (5200)/(0.98) (614) = 305 \text{ Scf/ft}^3$$

$$S_g = 0.75$$

$$R_F = 0.85$$

NOW

$$\text{Reserves} = 0.85 (43560) \text{ (Acres)} (h\phi) (0.75) (305)$$

$$\text{Reserves} = 8470 (10)^3 \text{ Acres } (h\phi)$$

$$\text{Acres} = 0.118 (10)^{-6} (\text{Reserves})/h\phi$$

$$\text{Acres} = 0.118 (\text{Reserves in MMcf})/h\phi$$

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:

REOPENED
CASE NO. 9109
Order No. R-8446-A

IN THE MATTER OF CASE 9109 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF DIVISION ORDER NOS. R-6129-A AND
R-8446, WHICH ORDER CLASSIFIED THE
BENSON-STRAWN POOL AS A GAS POOL AND
PROMULGATED TEMPORARY RULES AND REGULATIONS
FOR SAID POOL INCLUDING A PROVISION
FOR 320-ACRE SPACING UNITS, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 21, 1989, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of June, 1989, 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-6129-A, dated May 14, 1980, the Division created, defined, and promulgated special rules and regulations for the Benson-Strawn Oil Pool, Eddy County, New Mexico, including a provision for 160-acre spacing and proration units and designated well locations.

(3) By Order No. R-8446, dated May 29, 1987, and upon the application of Yates Petroleum Corporation, the Division reclassified the Benson-Strawn Oil Pool, Eddy County, New Mexico, as a gas pool, and further directed that the subject pool was to be temporarily drilled on 320-acre gas proration units with designated well locations in accordance with the General Statewide Gas Spacing Rule No. 104 C (II) of the Division Rules and Regulations.

(3) Pursuant to the provisions of said Order No. R-8446, this case was reopened to allow the operators in the subject pool to appear and show cause why the Benson-Strawn Gas Pool should not be redesignated as an oil pool and the special rules and regulations promulgated by said Order No. R-6129-A reinstated.

(4) Yates Petroleum Corporation (Yates) and Meridian Oil Inc. (Meridian), the only operators in the Benson-Strawn Gas Pool at the present time, appeared at the hearing.

(5) Yates, who currently operates three wells within the subject pool, presented evidence and testimony in support of retaining the current gas pool classification and rules and regulations currently in effect.

(6) The evidence presented established that one well in the subject pool can efficiently and economically drain and develop 320 acres.

(7) The current pool classification and rules and regulations currently in effect as promulgated by said Order No. R-8446 have afforded and will afford the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in the pool.

(8) In order to prevent the economic loss caused by the drilling of an excessive number of wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells and to otherwise prevent waste and protect correlative rights, Division Order No. R-8446 should be continued in full force and effect until further order of the Division.

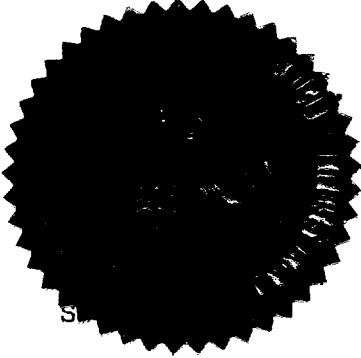
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IT IT THEREFORE ORDERED THAT:

(1) The pool classification and rules and regulations set forth for the Benson-Strawn Gas Pool, Eddy County, New Mexico, as promulgated by Division Order No. R-8446, are hereby continued in full force and effect until further order of the Division.

(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
WILLIAM J. LEMAY
Director