

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 9109 and
CASE NO. 9110
Order No. R-8446

APPLICATION OF YATES PETROLEUM
CORPORATION FOR POOL RECLASSIFICATION
OR, IN THE ALTERNATIVE, THE AMENDMENT
OF DIVISION ORDER NO. R-6129-A, EDDY
COUNTY, NEW MEXICO.

APPLICATION OF MERIDIAN OIL INC.
TO AMEND DIVISION ORDER NO. R-6129-A,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 18 and April 22, 1987, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 29th day of May, 1987, 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) Yates Petroleum Corporation ("Yates"), the applicant in Case No. 9109, seeks the reclassification of the Benson-Strawn Oil Pool to a gas pool, with a provision for 320-acre spacing and proration units or, in the alternative, to amend the Special Rules and Regulations for said pool, as promulgated by Division Order No. R-6129-A, to increase the allowable for said pool from the current 70 barrels of oil per day to the statewide depth bracket allowable of 560 barrels of oil per day, and to increase the current gas-oil ratio limitation from 2000 to 3000 cu.ft./barrel, both changes to be made effective January 1, 1985.

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(3) Meridian Oil Inc. ("Meridian"), the applicant in Case No. 9110, seeks to retain the oil pool classification of the Benson-Strawn Pool and to amend the Special Rules and Regulations for said pool to also change the current allowable for said pool to the statewide depth bracket allowable of 560 barrels of oil per day and to further increase the current gas-oil ratio limitation from 2000 to 3000 cu.ft./barrel.

(4) At the time of the hearing Division Case Nos. 9109 and 9110 were consolidated for the purpose of testimony.

(5) Inasmuch as the applications in both Case Nos. 9109 and 9110 concern the classification and amendment of the Special Rules and Regulations for the Benson-Strawn Pool, one order should be entered for these cases.

(6) By Order No. R-6129-A, issued in Case No. 6609 on May 14, 1980, the Division created and defined the Benson-Strawn Pool as a volatile oil pool based upon PVT analysis of a fluid sample obtained from the only producing well in the pool at that time, the Benson Deep Unit Well No. 1, as described below in Finding Paragraph No. (9), and further promulgated Special Rules and Regulations for said pool, including a provision for 160-acre spacing and proration units.

(7) At the time of the original hearing for Case No. 6609, insufficient reservoir information and production data existed to allow the Division to establish a permanent oil allowable and gas-oil ratio limitation for said pool and, as a result, a temporary oil allowable of 70 barrels a day and a gas-oil ratio limitation of 2000 cu.ft./barrel was established by the Division for a temporary period pending the gathering and submittal of production data from the pool by Napeco Inc., the applicant in said Case No. 6609.

(8) The record in said Case No. 6609 indicates that subsequent production data from the Benson-Strawn Pool was submitted to the Division on October 8, 1980, by Yates Petroleum Corporation, the successor operator to Napeco Inc., but that the Division failed to make appropriate changes in the oil allowable and gas-oil ratio limitations at that time.

(9) Yates Petroleum Corporation is the owner and operator of the Benson Deep Unit Well Nos. 1, 4, and 5, located respectively in Section 33, Township 18 South, Range 30 East, and Sections 3 and 4, Township 19 South,

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Range 30 East, NMPM, Eddy County, New Mexico, and all currently completed in the Benson-Strawn Pool.

(10) Meridian Oil Inc. is the owner and operator of the Benson "3" Federal Well No. 1 located in Section 3, Township 19 South, Range 30 East, NMPM, Eddy County, New Mexico, which was drilled and completed in the Benson-Strawn Pool in January, 1987.

(11) Yates testified that subsequent to the issuance of Division Order No. R-6129-A and upon further investigation by Yates, it was determined that the PVT analysis obtained from the Benson Deep Unit Well No. 1, which was used as evidence in Case 6609 and which indicated the Benson-Strawn Pool to be a volatile oil reservoir, was inaccurate due to improper fluid sampling procedures.

(12) Yates presented at the hearing new PVT data based upon fluid samples obtained from the Benson Deep Unit Well No. 1 during June, 1980, and from the Benson Deep Unit Well No. 4 obtained during February, 1987, which indicate that the reservoir demonstrates characteristics of a retrograde condensate gas reservoir.

(13) Meridian contends that the temperature at which said fluid samples were analyzed in the laboratory were higher than the actual reservoir temperature as determined from well logs in this area and, as a result, the data obtained from the tests are inaccurate.

(14) Evidence presented by Yates indicates that the temperatures used for fluid analysis were determined from pressure buildup tests conducted on the wells which are more accurate than temperatures obtained from well logs.

(15) The PVT data presented by Yates represent the best and most current reservoir fluid analysis available at the present time with which to make a determination regarding the classification of the Benson-Strawn Pool.

(16) Production data for the Benson Deep Unit Well No. 4 which, as a result of a clerical error, was not placed in the Benson-Strawn Pool until June, 1986, and which for a period of two years subsequent to that time produced as a gas well, indicate that the reservoir is not rate-sensitive and that waste should not occur by increasing the allowable in said pool.

(17) Meridian also testified that the reservoir was not rate-sensitive and that waste should not occur by increasing the allowable in said pool.

(18) Yates further presented evidence that shows that two other Strawn pools in the area, the East Burton Flat-Strawn Gas Pool and the West Parkway-Strawn Gas Pool, both exhibit similar retrograde condensate gas reservoir characteristics as determined by PVT data and are both currently classified by the Division as gas pools developed on 320-acre well spacing and proration units.

(19) Sufficient evidence exists at the present time to justify the reclassification of the Benson-Strawn Pool to a gas pool.

(20) Testimony by Yates indicates that the retroactive reclassification of the Benson-Strawn Pool to January 1, 1985, will not cause waste and will protect the correlative rights of all parties.

(21) The request by Yates for retroactive reclassification of the Benson-Strawn Pool should be approved.

(22) Yates testified that the Benson Deep Unit Well No. 5, which had not been produced at the time of the hearing, has experienced since its completion a 16 per cent decrease in bottomhole pressure attributable to the drainage taking place by the Benson Deep Unit Well No. 4 which is located approximately one-half mile away.

(23) This evidence would indicate that the Benson Deep Unit Well No. 4 is currently capable of draining 320 acres.

(24) The application of Yates in Case No. 9109 for reclassification of the Benson-Strawn Pool to a gas pool to be developed on 320-acre spacing and proration units should be approved.

(25) The application of Meridian Oil Inc. in Case No. 9110 to retain the current oil pool classification of the Benson-Strawn Pool and for the promulgation of special pool rules for said pool should be denied.

(26) In order to prevent the economic loss caused by the drilling of unnecessary 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, the Benson-Strawn Pool should be reclassified as a gas pool effective January 1, 1985, and the Special Rules and Regulations for said pool as promulgated by Division Order No. R-6129-A should be rescinded.

(27) The Benson-Strawn Gas Pool should be governed by General Statewide 320-acre Gas Rules and Regulations, as contained in Rule 104 C (II) of the Division Rules and Regulations, for a temporary period of two years.

(28) Case No. 9109 should be reopened at an examiner hearing in May, 1989, at which time the operators in the subject pool should be prepared 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 reinstated.

IT IS THEREFORE ORDERED THAT:

(1) The application of Yates Petroleum Corporation in Case No. 9109 for the reclassification of the Benson-Strawn Pool to a gas pool effective January 1, 1985, is hereby approved.

(2) The application of Meridian Oil Inc. to retain the current oil pool classification and the amendment of the Special Rules and Regulations for said pool is hereby denied.

(3) The Special Rules and Regulations for the Benson-Strawn Pool as promulgated by Division Order No. R-6129-A are hereby rescinded.

(4) The Benson-Strawn Gas Pool shall be developed and operated in accordance with General Statewide 320-acre Gas Spacing Rule 104 C (II) of the Division's Rules and Regulations until further order of the Division.

(5) The locations of all wells presently drilling to or completed in the Benson-Strawn Gas Pool or in the Strawn formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia district office of the Division in writing of the name and location of the well on or before July 1, 1987.

(6) Pursuant to Paragraph A of Section 70-2-18, NMSA 1978, contained in Chapter 271, Laws of 1969, existing wells in the Benson-Strawn Gas Pool shall have dedicated thereto 320 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

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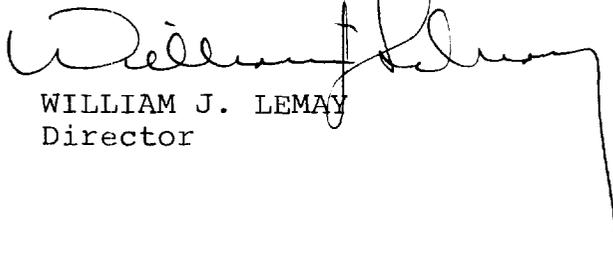
(7) Failure to file new Forms C-102 with the Division dedicating 320 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable.

(8) Case No. 9109 shall be reopened at an examiner hearing in May, 1989, at which time the operators in the subject pool may appear and show cause why the Benson-Strawn Gas Pool should not be redesignated as an oil pool and the Special Rules and Regulations reinstated.

(9) 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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