

**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. 14419
ORDER NO. R-13247**

**APPLICATION OF MARBOB ENERGY CORPORATION FOR SPECIAL
RULES AND REGULATIONS FOR THE SOUTHEAST WILLOW LAKE-BONE
SPRING POOL, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on February 4, 2010, at Santa Fe, New Mexico, before Examiner Richard I. Ezeanyim.

NOW, on this 30th day of April, 2010, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.

(2) Case Nos. 14419 and 14420 were consolidated for the purpose of testimony; however, separate orders will be issued for each case.

(3) In Case No. 14419, Marbob Energy Corporation ("Applicant" or "Marbob") seeks an order establishing special rules and regulations for the Southeast Willow Lake-Bone Spring Pool (96217), including a limiting gas-oil ratio of 5000 cubic feet of gas for each barrel of oil produced.

(4) The Southeast Willow Lake-Bone Spring Pool was created by Division Order No. R-10124, dated June 1, 1994, and currently covers the following lands:

Township 25 South, Range 29 East, N.M.P.M.

Section 8: NE/4
Section 9: W/2

Section 16: W/2
Section 21: NW/4

(5) Under the Division Rules, spacing in the Pool is 40 acres, with wells to be located no closer than 330 feet to a quarter-quarter section line. The Pool has a depth bracket allowable of 187 barrels of oil per day with a limiting gas-oil ratio of 2000 cubic feet per barrel of oil produced. For a horizontal well with a 160-acre project area or proration unit, the depth bracket allowable will be 748 (187 X 4) barrels of oil with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil produced.

(6) Mewbourne Oil Company, XTO Energy, Inc., and OXY USA, Inc. appeared in this case through legal counsel, but did not oppose the granting of this application.

(7) The Applicant presented the following geological and engineering testimony:

(a) Wells in this area are producing from the Avalon Shale of the Bone Spring formation. Production from horizontal wells in the Avalon Shale are characterized by high gas-oil ratios.

(b) The Pressure-Volume-Temperature (PVT) analysis indicates that there is free oil in the reservoir; therefore, the reservoir is a volatile oil and gas condensate type reservoir.

(c) The average gas-oil ratios from wells producing from this reservoir range from 3,900 to 20,000 cubic feet per barrel of oil produced.

(d) If the gas-oil ratio is not increased, a number of wells in the Pool will have production restricted.

(e) The horizontal wells in this area are expensive to drill, require large fracture treatments, and produce large volumes of water; therefore, Marbob needs to produce these wells at high gas rates in order to clear the wellbore of liquids, and also be able to pay for these expensive horizontal wells.

(f) The older wells in this area are not affected by the increase in gas-oil ratio because they are already producing below their allowable.

(g) At current average oil production rate of 90 barrels of oil per day, any increase in gas-oil ratio will not harm the reservoir.

(8) Approval of the subject application will afford applicant and other operators the opportunity to recover their just and equitable shares of oil and gas reserves

from the Southeast Willow Lake-Bone Spring Pool, thereby preventing waste, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Marbob Energy Corporation for an order establishing special rules and regulations for the Southeast Willow Lake-Bone Spring Pool is hereby approved.

(2) The following "*Special Rules and Regulations for the Southeast Willow Lake-Bone Spring Pool*" are hereby adopted:

Rule 1: Each well completed or recompleted in the Southeast Willow Lake-Bone Spring Pool, or within one mile thereof and not nearer to or within the limits of another Bone Spring pool, shall be drilled, spaced, operated, and produced in accordance with the Special Rules hereinafter set forth.

Rule 2: The limiting gas-oil ratio within the pool shall be 5000 cubic feet of gas per barrel of oil. The oil depth bracket allowable for the pool shall not be exceeded.

Rule 3: All other rules shall conform to the Division's statewide rules.

(3) Jurisdiction of this case 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.

SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



MARK E. FESMIRE, P.E.
Acting Director