# 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. 10667 ORDER NO. R-9857

APPLICATION OF MARATHON OIL COMPANY FOR ESTABLISHMENT OF A TEMPORARY TESTING ALLOWABLE, VACUUM-DRINKARD POOL, LEA COUNTY, NEW MEXICO

# ORDER OF THE DIVISION

# BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 18, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>12th</u> day of March, 1993 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, Marathon Oil Company, seeks an order establishing a special testing allowable for its Warn State A/C 2 Lease Project, comprising the W/2 of Section 6, Township 18 South, Range 35 East, NMPM, Vacuum-Drinkard Pool, Lea County, New Mexico, for a maximum period of six months at a maximum rate equal to the capacity of each well within the project to produce oil from said pool.
- (3) The Vacuum-Drinkard Pool was created by Division Order No. R-2241, dated May 23, 1962, for oil production from the Drinkard formation. Its horizontal limits currently comprise the SE/4 of Section 1 and the NE/4 of Section 12, Township 18 South, Range 34 East, NMPM, and Lots 6 and 7 and the E/2 SW/4 (SW/4 equivalent) of Section 6; Lots 1 and 2, the NE/4 and the E/2 NW/4 (N/2 equivalent)

of Section 7 and the NW/4 of Section 8, Township 18 South, Range 35 East, NMPM, all in Lea County, New Mexico. Said pool is spaced on 40-acre tracts, assigned a depth bracket allowable of 187 barrels of oil per day for a unit assigned an acreage factor of 1.0 and has a gas/oil ratio limitation of 2000 cubic feet of gas per barrel of oil.

- (4) Prior to 1992, the last production from said pool occurred in January 1966 as the last of the three wells to produce from the pool was abandoned. In October 1992, Marathon recompleted its Warn State A/C-2 Well No. 11 located at a standard oil well location 1650 feet from the South line and 1910 feet from the West line (Unit L) of said Section 6, to the Drinkard formation.
- (5) In December 1992, Texaco Exploration and Production Inc. also recompleted its New Mexico "R" State NCT-3 Well No. 24, located at a standard oil well location 860 feet from the South line and 660 feet from the East line (Unit P) of said Section 1, to the Drinkard formation.
- (6) Marathon recompleted both its Warn State A/C-2 Well Nos. 8 and 9, located at standard oil well locations in Units N and M, respectively, of said Section 6, to the Drinkard formation in January 1993.
- (7) Of the four wells currently completed in the Vacuum-Drinkard Pool, only the No. 11 well is capable of producing oil in excess of the pool's assigned depth bracket allowable.
- (8) The applicant is the operator of the W/2 of said Section 6, which is identified as its Warn State Account 2 Lease ("Project Area") being evaluated as a pressure maintenance project for production from the Drinkard formation.
- (9) Said Project Area consists of a single lease with all interest common within the project area.
- (10) Based on the geologic and engineering testimony presented at the hearing the reservoir is a closed system without any apparent aquifer support, the reservoir appears to still be above bubble point and is primarily a solution gas drive.
- (11) At this time, Marathon seeks authority to conduct special tests over a period of six months on the Warn State A/C 2 Well No. 11 and any other wells completed or to be completed in the Vacuum-Drinkard Pool in the aforementioned Project Area, for the purpose of gathering data to determine:
  - (a) the most effective producing rate for this particular reservoir or portion thereof; and,

- (b) the feasibility of a pressure maintenance project for the Project Area through the determination of pore volume, inter-well communication and the existence of free gas saturation.
- (12) Texaco Exploration and Production, Inc., the only other operator in the pool and Exxon Corporation, an offset mineral interest owner in said Section 12, both appeared at the hearing in opposition to Marathon's proposed test.
- (13) Testimony at the hearing indicates that Marathon can obtain the desired data from running the proposed testing program on the Warn State A/C-2 Well No. 11 alone, and inasmuch as the Warn State A/C-2 Well Nos. 8 and 9 cannot produce their assigned allowables and no other wells are currently in the project area, limiting the test to the one well would serve to discourage the drilling of unnecessary wells before this much needed reservoir data is obtained nor cause other zones to suffer waste due to the premature abandonment of a deeper zone simply for the sake of risking an unnecessary and questionable recompletion in the Drinkard interval.
- (14) Marathon presented reservoir engineering testimony which indicates that ultimate recovery of oil from the reservoir should not be adversely affected by the proposed six-month test.
- (15) In the absence of unitization of the area inclusive of the subject Drinkard reservoir and to assure that correlative rights are protected any and all overproduction incurred by the Warn State A/C-2 Well No. 11 during the six-month period **must** be made up in accordance with Division General Rule 502.C. and 504. Such excess production should be considered as oil produced against the allowable assigned to Lot 6 (NW/4 SW/4 equivalent), comprising 37.57 acres (acreage factor equaling 0.94).
- (16) This application should be approved with the above limitations incorporated in said approval.

# IT IS THEREFORE ORDERED THAT:

(1) A special six-month testing period, due to commence at 7:00 a.m. April 1, 1993 and ending at 7:00 a.m. October 1, 1993 is hereby approved for the Marathon Oil Company Warn State A/C-2 Well No. 11 located at a standard well location 1650 feet from the South line and 1910 feet from the West line (Unit L) of Section 6, Township 18 South, Range 35 East, NMPM, Vacuum-Drinkard Pool, Lea County, New Mexico to be allowed to produce at its capacity. Said well is currently dedicated to a 37.57-acre oil spacing and proration unit comprising Lot 6 (NW/4 SW/4 equivalent) of said Section 6.

<u>PROVIDED HOWEVER</u>: During this six-month period, said well shall be allowed to incur excessive oil production atop the monthly allowable assigned to the subject 37.57-acre unit (acreage factor equaling 0.94).

<u>IT IS FURTHER ORDERED THAT</u> any and all excessive oil production shall be considered as oil produced against the allowable assigned to the subject unit for the following and subsequent proration periods until such time as overproduction is balanced by zero production.

(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

SEAL