

**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. 12355  
ORDER NO. R-3073-A**

**APPLICATION OF MATADOR E & P COMPANY TO ESTABLISH INFILL  
WELL PROCEDURES AND TO AMEND WELL LOCATION REQUIREMENTS  
FOR THE RED HILLS-WOLFCAMP GAS POOL OR, IN THE ALTERNATIVE,  
FOR SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on March 16 and April 6, 2000, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 28<sup>th</sup> day of April, 2000, 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 its subject matter.

(2) By Order No. R-3073 issued in reopened Case No. 3158 on June 2, 1966, the Division, upon application of Union Oil Company of California (Unocal), established special pool rules for the Red Hills-Wolfcamp Gas Pool, Lea County, New Mexico, including provisions for standard 640-acre spacing and proration units and designated well location requirements such that wells can be located no closer than 1650 feet to the outer boundary of the section and no closer than 330 feet to any governmental quarter-quarter section line or subdivision inner boundary.

(3) The applicant, Matador E & P Company (Matador), seeks to amend the special pool rules for the Red Hills-Wolfcamp Gas Pool as follows:

- (a) amend Rule 2 to provide that a second well may be drilled on a standard 640-acre gas spacing and proration unit within a quarter section not containing the first well; and

- (b) amend Rule 4 to conform the well location requirements to those contained in Division Rule 104.C(2), which currently requires wells to be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located, and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(4) In the alternative, the applicant seeks authority to simultaneously dedicate a standard 640-acre proration unit comprising Section 5, Township 26 South, Range 33 East, NMPM, to its Red Hills Unit Well No. 2 (**API No. 30-025-21802**), located 990 feet from the North line and 1650 feet from the East line (Unit B), which is currently producing from the Red Hills-Wolfcamp Gas Pool, and to its Red Hills Unit Well No. 3 (**API No. 30-025-28144**), located 1980 feet from the South line and 2180 feet from the West line (Unit K), which is also currently producing from the Red Hills-Wolfcamp Gas Pool.

(5) Bass Enterprises Production Company (Bass), an interest owner in Section 5, Township 26 South, Range 33 East, appeared at the hearing through legal counsel but presented no evidence. According to the Pre-Hearing Statement filed by Bass on April 3, 2000, it opposes Matador's application and reserves the right to present evidence at a Commission hearing, if called.

(6) The Red Hills-Wolfcamp Gas Pool was created by Division Order No. R-2826 dated December 7, 1964. The vertical limits of the Red Hills-Wolfcamp Gas Pool currently comprise the entire Wolfcamp formation and the horizontal limits currently comprise the following described acreage in Lea County, New Mexico:

**TOWNSHIP 25 SOUTH, RANGE 33 EAST, NMPM**

Section 21: All  
Section 28: All  
Sections 31 through 33: All

**TOWNSHIP 26 SOUTH, RANGE 33 EAST, NMPM**

Sections 4 through 7: All

(7) The evidence presented by the applicant demonstrates that there are six wells currently producing from the Red Hills-Wolfcamp Gas Pool, described as follows:

- (a) the aforesaid Red Hills Unit Wells No. 2 and 3, currently operated by Matador;

- (b) the Matador-operated Red Hills Unit Well No. 1 (**API No. 30-025-21036**), located in Unit O of Section 32, Township 25 South, Range 33 East;
- (c) the Matador-operated Red Hills "28" Federal Com Well No. 2 (**API No. 30-025-32946**), located in Unit E of Section 28, Township 25 South, Range 33 East;
- (d) the BTA Oil Producers Mesa "B" 8105 JV-P Well No. 1 (**API No. 30-025-30662**), located in Unit F of Section 7, Township 26 South, Range 33 East; and
- (e) the Kaiser-Francis Oil Company Red Hills Federal Well No. 1 (**API No. 30-025-25049**), located in Unit A of Section 6, Township 26 South, Range 33 East.

(8) Division records indicate that by Order No. R-10233 issued in Case No. 11105 on October 17, 1994, the Division authorized Unocal to:

- (a) simultaneously dedicate an existing standard 640-acre proration unit comprising Section 5, Township 26 South, Range 33 East, to its Red Hills Unit Wells No. 2 and 3 in the Red Hills-Wolfcamp Gas Pool;
- (b) produce only the Lower-Wolfcamp interval in its Red Hills Unit Well No. 2; and
- (c) produce only the Upper-Wolfcamp interval in its Red Hills Unit Well No. 3 from a depth of approximately 13,010 feet to 13,300 feet.

(9) Order No. R-10233 further stipulated that authority to produce both the Upper-and Lower-Wolfcamp intervals simultaneously in the Red Hills Unit Wells No. 2 and 3 could be authorized only after notice and hearing.

(10) Matador is the successor operator to Unocal of the Red Hills Unit Wells No. 2 and 3.

(11) The applicant testified that Sections 32 and 33, Township 25 South, Range 33 East, and Sections 4 and 5, Township 26 South, Range 33 East, are within the Red Hills Unit, a federal exploratory unit currently operated by Matador. The applicant further testified that the Red Hills Unit is currently governed by a joint operating agreement.

(12) The applicant presented geologic evidence and testimony demonstrating that:

- (a) the Wolfcamp formation in this area is generally productive from two separate and distinct intervals, the Upper-Wolfcamp and Lower-Wolfcamp intervals. The Lower-Wolfcamp interval is further segregated into the Upper and Lower Fan Complex;
- (b) the Upper-Wolfcamp interval is currently being produced or has previously been produced in two wells, the Red Hills Unit Well No. 3 and the BTA Oil Producers Mesa "B" 8105 JV-P Well No. 1. The Lower-Wolfcamp interval is currently being produced in all active wells in the field with the exception of the Red Hills Unit Well No. 3;
- (c) producing carbonate sections within the Upper and Lower Fan Complex generally exhibit very low permeability (< 1 millidarcy); and
- (d) producing carbonate sections within the Lower Fan Complex can be discontinuous from well to well within the Red Hills-Wolfcamp Gas Pool.

(13) The applicant presented engineering evidence demonstrating that:

- (a) the Red Hills "28" Federal Com Well No. 1, located in Unit G of Section 28, was drilled in 1985 and was open-hole completed in the Lower-Wolfcamp interval from 13,000-13,659 feet. The well cumulatively produced 1.3 BCF of gas and 12.0 MB of condensate from the Lower-Wolfcamp interval prior to being recompleted to the Devonian in 1993. In 1995, Unocal drilled the Red Hills "28" Federal Com Well No. 2 in Unit E of Section 28. This well, which is located 2,322 feet from the Red Hills "28" Federal Com Well No. 1, was completed in the same correlative interval as the No. 1 well, and has cumulatively produced 0.4 BCF of gas and 1.5 MB of condensate;

- (b) the Red Hills "28" Federal Com Well No. 2 encountered a higher initial bottomhole pressure within the Lower-Wolfcamp interval than that encountered by the Red Hills "28" Federal Com Well No. 1, indicating that pressure depletion had not occurred within this reservoir;
- (c) the recently drilled Matador Red Hills Unit Well No. 4, a Devonian test located in Unit N of Section 32, encountered a bottomhole pressure of approximately 6,500 psi within the Lower-Wolfcamp interval. The Red Hills Unit Well No. 1, the discovery well for the pool which is located 1475 feet from the Red Hills Unit Well No. 4, has cumulatively produced 13.0 BCF of gas and 436 MB of condensate from the Lower-Wolfcamp interval and, as of 1994, exhibited a bottomhole pressure of approximately 2,158 psi in this zone; and
- (d) a calculation of drainage area for seven wells within the Red Hills-Wolfcamp Gas Pool demonstrates that four wells have drained an area less than 320 acres, one well has drained an area less than 640 acres, and only one well has drained an area larger than 640 acres.

(14) The applicant erroneously testified that only the Lower-Wolfcamp interval is contained within the vertical limits of the Red Hills-Wolfcamp Gas Pool, and that the Upper-Wolfcamp interval is within the vertical limits of a separate Wolfcamp gas pool.

(15) As described in Finding No. (6), the entire Wolfcamp formation is contained within the Red Hills-Wolfcamp Gas Pool.

(16) Although incorrect, the applicant's testimony with regard to the vertical limits of the Red Hills-Wolfcamp Gas Pool does not adversely affect its application in this case.

(17) The geologic and engineering evidence presented by the applicant demonstrates that one well will not efficiently and effectively drain 640-acres within the Red Hills-Wolfcamp Gas Pool.

(18) Further testimony by the applicant demonstrates that approval of the proposed well setbacks will provide operators in the pool the flexibility to locate infill wells at optimum locations to efficiently recover remaining gas reserves underlying existing proration units.

(19) No other offset operator and/or interest owner appeared at the hearing in opposition to the application.

(20) Approval of the application will afford the operators the opportunity to recover additional gas reserves within the Red Hills-Wolfcamp Gas Pool that may otherwise not be recovered by existing wells, thereby preventing waste, and will not violate correlative rights.

(21) Division Order No. R-10233 should be superceded by this order.

**IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the application of Matador E & P Company, Rules No. 2 and 4 of the special pool rules for the Red Hills-Wolfcamp Gas Pool, established by Division Order No. R-3073, are hereby amended to read as follows:

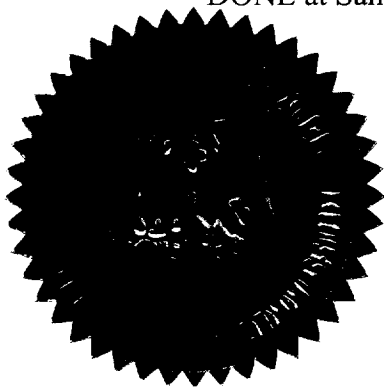
**Rule 2.** Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental quarter section. One infill well on a standard 640-acre unit shall be allowed provided that the well is located in a quarter section of the 640-acre unit not containing the initial well.

**Rule 4.** Each well shall be located no closer than 660 feet to the outer boundary of the section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(2) Division Order No. R-10233 is hereby superceded by this order.

(3) Jurisdiction is hereby 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

*Lori Wrotenbery*  
LORI WROTENBERY, Director