

**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. 13911 (Reopened)  
ORDER NO. R-12748-A**

**APPLICATION OF APACHE CORPORATION TO AMEND THE SPECIAL  
RULES AND REGULATIONS FOR THE SOUTH EUNICE-SAN ANDRES  
POOL, LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on May 10 and June 7, 2007, at Santa Fe, New Mexico, before Examiners David R. Catanach and David K. Brooks, respectively.

NOW, on this 30<sup>th</sup> day of August, 2007, 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-3706, as amended, issued in Case No. 4065 on March 12, 1969, the Division, upon the application of Humble Oil & Refining Company, established "*Special Rules and Regulations for the South Eunice-San Andres Pool*", Lea County, New Mexico, including provisions that provide:

- (a) each well shall be located on a standard unit containing 80 acres, more or less, comprising the N/2 or S/2 of a governmental quarter section;
- (b) each well shall be located no closer than 330 feet to a quarter-quarter section line; and

(c) only one well may be drilled on each quarter-quarter section within the standard unit.

(3) Order No. R-4193, as amended, issued in Case No. 4575 on September 14, 1971 established a limiting gas-oil ratio for the South Eunice-San Andres Pool of 5000 cubic feet of gas per barrel of oil.

(4) The applicant, Apache Corporation ("applicant" or "Apache") seeks an order amending the "*Special Rules and Regulations for the South Eunice-San Andres Pool*" to allow the drilling of two wells on each quarter-quarter section within a standard 80-acre unit.

(5) This case was heard on May 10, 2007, and at the conclusion of the proceedings, the case was taken under advisement. Subsequent to the hearing, the applicant discovered an error in the advertisement for this case and requested that the case be reopened to correct the error. The reopened case was then heard on June 7, 2007 and taken under advisement at that time.

(6) According to Division records, the South Eunice-San Andres Pool currently comprises the following-described area in Lea County, New Mexico:

**TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM**

Section 35: SW/4

**TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM**

Section 1: W/2

Section 2: S/2, NW/4

Section 10: N/2, SE/4

Section 11: All

Section 12: W/2

Section 14: NW/4

(7) The applicant presented testimony to the effect that it has commenced an infill drilling program primarily in Township 21 South, Range 37 East, NMPM, but also extending south into Township 22 South, Range 37 East, NMPM, within the Grayburg, San Andres, Blinbry and Tubb formations. As part of this infill drilling program, the applicant permitted and drilled additional San Andres producing wells on three existing 80-acre standard units within the South Eunice-San Andres Pool. These units comprise the N/2 NW/4, S/2 NW/4 and N/2 SW/4 of Section 2, Township 22 South, Range 37 East, NMPM. On each of these 80-acre units, the applicant has exceeded the well density provisions of Order No. R-3706, as amended.

(8) Within the NW/4 and N/2 SW/4 of Section 2, the applicant currently operates nine wells that are either currently producing from or have produced from the South Eunice-San Andres Pool. These wells are identified as the New Mexico "S" State Wells No. 42, 43, 46, 47, 48, 49, 50, 53 and 56.

(9) By letter dated March 15, 2007, the Hobbs District office of the Division ("Hobbs OCD") notified Apache that it was in violation of the provisions of Order No. R-3706, as amended.

(10) On April 10, 2007 Apache filed an application with the Division to amend the "*Special Rules and Regulations for the South Eunice-San Andres Pool*" to allow infill drilling. This application was assigned Case No. 13911.

(11) On April 17, 2007 Apache filed a motion for emergency relief with the Division seeking authority to continue to produce its wells within the NW/4 and N/2 SW/4 of Section 2 until such time as the Division enters a decision in Case No. 13911.

(12) On April 20, 2007 the Division issued a decision in Apache's motion for emergency relief. Order No. R-12748 authorized Apache to continue to produce its wells within the NW/4 and N/2 SW/4 of Section 2 until the hearing of Case No. 13911.

(13) At the hearing on May 10, 2007 Apache requested that Order No. R-12748 remain in effect until such time as a final decision is entered by the Division in Case No. 13911.

(14) The Division examiner inadvertently failed to rule on Apache's request at the conclusion of proceedings on May 10, 2007.

(15) Apache presented geologic evidence that demonstrates that:

- (a) the South Eunice-San Andres Pool is surrounded by various other Division-designated San Andres pools that have varying producing characteristics. The Southwest Eunice-San Andres, Eunice-San Andres, East Hare-San Andres and the Northwest Hare-San Andres Pools are all oil pools spaced on 40 acres, while the Hare-San Andres and the North Eunice-San Andres Pools are gas pools spaced on 160 acres;
- (b) the San Andres formation within the area of the South Eunice-San Andres Pool is approximately 1,000 feet thick and contains multiple porosity zones; and
- (c) the San Andres formation within the area of the South Eunice-San Andres pool is heterogeneous and compartmentalized. The discontinuous nature of the San Andres formation in this area supports Apache's position that wells in the South Eunice-San Andres Pool will not drain 40 acres.

(16) Apache presented engineering evidence that demonstrates that:

- (a) the Apache New Mexico "S" State Well No. 42 (API No. 30-025-37245), which is currently producing from the North Eunice-San Andres Pool within the N/2 NW/4 of Section 2, has exhibited a significant decline in its producing rate after being shut-in for a short period of time. This is primarily the reason Apache sought Division approval to continue producing its wells pending the outcome of this case;
- (b) drainage area data for Apache's New Mexico "S" State wells calculated from production decline curves and ultimate recovery estimates show a range of drainage areas from 2.2 acres to 41.6 acres. The average drainage area for these nine wells was 13.8 acres; and
- (c) drainage area data for other wells in the South Eunice-San Andres Pool ranged from 1 acre to 34 acres, with an average drainage area of 14.1 acres.

(17) The geologic and engineering evidence presented by Apache is sufficient to demonstrate that the wells within the South Eunice-San Andres Pool are not capable of draining 40 acres.

(18) Pursuant to Division Rule No. 19.15.14.1210.A(4), the applicant provided notice of this application to all Division-designated operators in the South Eunice-San Andres Pool, and to all Division-designated operators of San Andres producing wells within one mile of the pool's outer boundary that have not been assigned to another San Andres Pool.

(19) No party appeared at the hearing in opposition to the application.

(20) Apache presented as evidence a letter of support for its application from Chesapeake Operating, Inc., an operator within the South Eunice-San Andres Pool.

(21) Approval of the subject application will afford the applicant the opportunity to recover additional oil and gas reserves from the South Eunice-San Andres Pool that may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the application of Apache Corporation, Rule No. 2 of the "Special Rules and Regulations for the South Eunice-San Andres Pool," is hereby amended to read in its entirety as follows:

**"RULE 2.** Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2 or S/2 of a governmental quarter section; provided, however, that no more than two wells shall be drilled on each quarter-quarter section within the 80-acre standard unit."

(2) This order shall be effective as of May 10, 2007.

(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.



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STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "Mark E. Fesmire".

MARK E. FESMIRE, P.E.  
Director