

**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. 10775  
Order No. R-10027**

**APPLICATION OF SANTA FE ENERGY  
OPERATING PARTNERS, L. P. FOR  
AN UNORTHODOX INFILL GAS WELL  
LOCATION AND SIMULTANEOUS  
DEDICATION, EDDY COUNTY, NEW  
MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on October 7, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 8th day of December, 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, Santa Fe Energy Operating Partners, L. P., seeks authority to drill its Malaga Federal "1" Well No. 2 at an unorthodox gas well location 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 1, Township 24 South, Range 28 East, NMPM, Malaga-Atoka Gas Pool, Eddy County, New Mexico.

(3) The applicant further seeks an exception to Division General Rule No. 104(C)(II) to allow the existing 320-acre gas spacing and proration unit comprising the S/2 of Section 1 to be simultaneously dedicated in the Malaga-Atoka Gas Pool to the proposed well and to its existing Malaga Federal "1" Well No. 1 which is located at a standard gas well location 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 1.

(4) Texaco Exploration & Production Inc. (Texaco) and Enron Oil and Gas Company (Enron), the offset operators to the east and north, respectively, of the proposed well, appeared at the hearing in opposition to the application.

(5) Current Division policy regarding the drilling of a second well on a standard gas proration unit within a non-prorated gas pool is outlined in Division Memorandum dated August 3, 1990 regarding Rule 104 (C)(II) of the General Rules and Regulations, which in part states that "Applications for additional wells on existing proration units will be approved only on the understanding that upon completion of the well the operator shall elect which well will be produced and which will be abandoned. Application to produce both wells will be approved only after notice and hearing and upon compelling evidence that the applicant's correlative rights will be impaired unless both wells are produced".

(6) Within Section 1 there are currently two wells producing from the Malaga-Atoka Gas Pool, the aforesaid Malaga Federal "1" Well No. 1 located in Unit N, and the Enron Oil and Gas Company Malaga "1" State Com Well No. 1 located in Unit C. Within Section 6, Township 24 South, Range 29 East, Texaco Exploration & Production Inc. currently operates the Malaga Harroun "6" Com Well No. 1 located in Unit F, which currently produces from the Malaga-Atoka Gas Pool.

(7) According to applicant's geologic evidence and testimony, there are several producing intervals within the Malaga-Atoka Gas Pool. The applicant has identified these producing intervals as the "AB", "AC", "AD", "AE" and the Atoka Bank intervals.

(8) The existing Malaga Federal "1" Well No. 1 is currently perforated in the "AC", "AD" and Atoka Bank intervals.

(9) The primary and secondary objectives within the proposed Malaga Federal "1" Well No. 2 are the "AD" and "AC" intervals, respectively.

(10) Applicant's geologic evidence shows that the targeted "AD" channel sand is an isolated sand of limited extent which encompasses a substantial portion of the E/2 of both Sections 1 and 12.

(11) Applicant's geologic evidence further indicates that a well at the proposed location should encounter a greater amount of net sand in the "AD" interval than a well drilled at a standard well location in the SE/4 of Section 1.

(12) The geologic evidence further indicates that the Malaga "1" State Com Well No. 1 is producing from the "AC" and Atoka Bank intervals and that the Malaga Harroun "6" Com Well No. 1 is producing from the "AD", Atoka Bank, and Lower Atoka intervals.

(13) The applicant contends that:

- a) although present in the Malaga Federal "1" Well No. 1, the "AC" and "AD" intervals are not contributing any production to the wellbore;
- b) the Malaga Federal "1" Well No. 2 is necessary in order to drain and develop the "AD" and "AC" intervals within the S/2 of Section 1;
- c) no production penalty should be assessed against the Malaga Federal "1" Well No. 2 inasmuch as the Texaco Malaga Harroun "6" Com Well No. 1 is producing from the "AD" interval within a separate and distinct "pod" or channel sand than is present in Section 1, and the "AC" interval is not present or productive in Section 6.

(14) Applicant testified that it is not its intent to complete the Malaga Federal "1" Well No. 2 in the Atoka Bank interval, being the interval currently being produced in the Malaga Federal "1" Well No. 1, and would not do so unless subsequent further authorization from the Division is obtained.

(15) To support its contention that the "AD" reservoir in Section 6 is of limited size and does not extend into Section 1, the applicant presented engineering evidence based upon current and past production and reservoir data from the Malaga Harroun "6" Com Well No. 1. This engineering evidence indicates that the size of the "AD" reservoir underlying Section 6 is approximately 156 acres.

(16) Texaco's geologic evidence and testimony in this case shows that the "AC", "AD" and Atoka Bank intervals within Sections 1 and 6 are laterally continuous.

(17) In order to offset the advantage gained by the applicant by virtue of drilling its Malaga Federal "1" Well No. 2 at a structurally higher position within the "AD" producing interval than its Malaga Harroun "6" Com Well No. 1, and by virtue of drilling its well too close to Texaco's acreage, Texaco proposed that the subject well, if allowed to be drilled, should be assigned a production penalty of 67 percent (33 percent allowable). Texaco's proposed production penalty is based upon the deviation from a standard gas well location or  $660 \text{ feet} / 1980 \text{ feet} = 33 \text{ percent allowable}$ .

(18) The evidence presented in this case indicates that:

- a) the "AC" and "AD" intervals are present and perforated in the Malaga Federal "1" Well No. 1, however, such intervals are not contributing production to the well;
- b) a well at the proposed unorthodox location should encounter a greater amount of net sand in the "AD" interval than a well drilled at a standard gas well location thereon;
- c) the Malaga Federal "1" Well No. 2 is necessary in order to allow the applicant the opportunity to recover its share of the gas within the "AC" and "AD" intervals underlying the S/2 of Section 1.

(19) In order to allow the applicant the opportunity to recover its just and equitable share of the gas in the Malaga-Atoka Gas Pool underlying the S/2 of Section 1, the applicant should be authorized to drill its Malaga Federal "1" Well No. 2 at the proposed unorthodox location. The applicant should further be authorized to produce both the Malaga Federal "1" Well Nos. 1 and 2 concurrently and continuously, provided however, the Malaga Federal "1" Well No. 2 should be produced from the "AC" and "AD" intervals only within the Malaga-Atoka Gas Pool.

(20) Applicant's request for no production penalty is based upon its contention that the "AD" reservoir underlying Section 1 is not the same reservoir being produced by the Texaco Malaga Harroun "6" Com Well No. 1.

(21) There is no geologic evidence currently available which supports applicant's contention that there are two distinct producing "pods" underlying Sections 1 and 6.

(22) Texaco presented engineering evidence which indicates that it has recently performed workover operations on its Malaga Harroun "6" Com Well No. 1. Such workover operations have resulted in a significant increase in production from said well.

(23) Applicant's engineering calculations regarding the size of the "AD" reservoir underlying Section 6 are based upon production data from the Malaga Harroun "6" Com Well No. 1 prior to the recent workover. Such engineering calculations should be considered inaccurate due to the presentation of new production data by Texaco at the hearing.

(24) In the absence of other compelling geologic or engineering evidence to support applicant's contention that there are separate "AD" reservoirs underlying Sections 1 and 6, it appears that Texaco's geologic interpretation more accurately depicts the geologic setting within the area of interest.

(25) In order to offset the advantage gained by the applicant over Texaco by drilling its Malaga Federal "1" Well No. 2 at the proposed unorthodox location, such well should be assigned a production penalty.

(26) The production penalty proposed by Texaco is fair and reasonable and should be adopted in this case.

(27) A production penalty of 67 percent (33 percent allowable), should be applied against the well's ability to produce into the pipeline as determined by a deliverability test to be initially conducted and semi-annually thereafter. The applicant should notify the supervisor of the Artesia district office of the Division of the date and time said test is to be conducted in order that it may be witnessed.

(28) Approval of the proposed unorthodox location and simultaneous dedication, subject to a production penalty, will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Santa Fe Energy Operating Partners, L. P., is hereby authorized to drill its Malaga Federal "1" Well No. 2 at an unorthodox gas well location 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 1, Township 24 South, Range 28 East, NMPM, Malaga-Atoka Gas Pool, Eddy County, New Mexico.

(2) The applicant is further authorized to simultaneously dedicate the S/2 of Section 1 in the Malaga-Atoka Gas Pool to the above-described well and to its existing Malaga Federal "1" Well No. 1 located 660 feet from the South line and 1980 feet from the West line (Unit N).

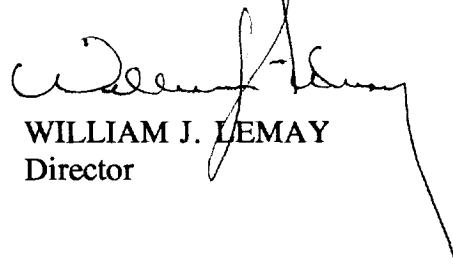
(3) The Malaga Federal "1" Well No. 2 shall not be completed in the Atoka Bank interval unless subsequent further authorization from the Division is obtained.

(4) The Malaga Federal "1" Well No. 2 is hereby assigned a production penalty of 67 percent (33 percent allowable). The production penalty shall be applied against the well's ability to produce into the pipeline as determined by a deliverability test to be initially conducted and semi-annually thereafter. The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time said test is to be conducted in order that it may be witnessed.

(5) Jurisdiction of this cause 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



WILLIAM J. LEMAY  
Director

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