

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. 10598
ORDER NO. R-9820

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 19 and December 17, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 31st day of December, 1992 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 approval of an unorthodox gas well location 660 feet from the North and West lines (Unit D) of Section 28, Township 23 South, Range 26 East, NMPM, to test the Undesignated Frontier Hills-Strawn Gas Pool and the South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico.

(3) Both aforementioned pools are subject to similar rules that both provide for 320-acre spacing units and for well locations to be no closer than 660 feet to the nearest side boundary nor closer than 1980 feet to the nearest end boundary of the dedicated tract. The Undesignated Frontier Hills-Strawn Gas Pool and the South Carlsbad-Morrow Gas Pool are prorated gas pools governed by Division Order No. R-8170, as amended.

- (4) The applicant's primary zone of interest for this well is the Strawn interval.
- (5) The N/2 of said Section 28 is to be dedicated to the well forming a standard 320-acre gas spacing and proration unit for both pools.
- (6) Many Strawn reservoirs in Southeast New Mexico are algal mound complexes developed within the Strawn carbonate shelf edge. Generally, these complexes consist of a central core flanked along the strike and along the updip side by thinner limestone deposits.
- (7) The applicant's proposed well offsets a known algal mound complex which presently has two wells completed in and producing from the mound core, the Pacific Enterprises PEOC Federal "21" Com Well No. 1 in Unit E and the Coquina Philly Federal Well No. 2 in Unit G, both in Section 21. In addition, the Bettis Brothers State "16" Well No. 1, located in Unit O of Section 16 is completed in, and is producing from, the flanking limestone deposits (along strike) north of the mound core. All three wells are situated in Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico.
- (8) At the time of the hearing, the applicant presented geological testimony that it expects further reservoir development, either in the mound core or in flanking but thinner clean limestone, to be developed along the geologic strike of the Strawn shelf edge. Applicant's regional geological mapping indicates that shelf edge strike is northeast-southwest in this area.
- (9) The Gulf Oil Corporation, Eddy "GN" State Com Well No. 1 located in Unit G of said Section 28 is dry in the Strawn, indicating the limited areal extent of Strawn mound found in this general area.
- (10) The applicant's proposed location 660 feet from the North and West lines of Section 28 is along strike to the well in the thickest portion of this particular mound complex (the Coquina Philly Federal Well No. 2).
- (11) The proposed well location should therefore penetrate a thicker portion of the Strawn interval within the subject proration unit than a well drilled at a standard location thereon, thereby increasing the chances of intersecting a gas-bearing zone within the Strawn formation.

(12) The secondary zone of interest for this well is the deeper Morrow interval, which will be an attempt to re-establish Morrow production on a previously existing 320-acre gas spacing and proration unit covering the N/2 of said Section 28. The Gulf Oil Corporation Eddy "GN" State Com Well No. 1 located at a standard gas well location 1880 feet from the North line and 1980 feet from the East line (Unit G) of said Section 28 produced a total of 40,891 MCF of gas and 678 barrels of condensate (from Division production records) from this prorated Morrow gas pool from September 1978 to November 1979. Said Gulf well was plugged and abandoned November 1990 after an unsuccessful Strawn recompletion (see Finding Paragraph No. (9) above). At the time of the hearing, the applicant offered no additional geologic or technical evidence for the Morrow formation other than to include for the record that it is accepted industry practice in this area to test the Morrow interval with wells drilled to similar deep zones of interest such as the Strawn.

(13) No offset operator or interested party objected to the proposed unorthodox gas well location.

(14) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected pools, 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:

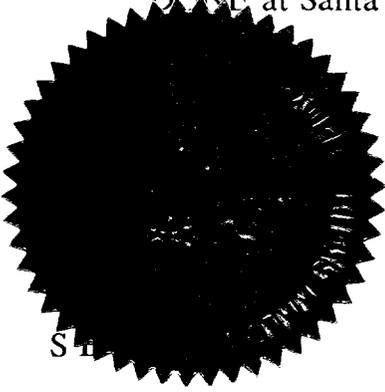
(1) The application of Santa Fe Energy Operating Partners, L.P for an unorthodox gas well location for the Undesignated Frontier Hills-Strawn Gas Pool and the South Carlsbad-Morrow Gas Pool is hereby approved for a well to be located 660 feet from the North and West lines (Unit D) of Section 28, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico.

(2) The N/2 of said Section 28 shall be dedicated to the above-described well forming a standard 320-acre gas spacing and proration unit for both pools.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



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WILLIAM J. LEMAY
Director