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. 11079 ORDER NO. R-10197

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 1, 1994, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 195 day of September, 1994 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. (Santa Fe), seeks authorization to drill its Cygnet "4" Federal Com Well No. 1 at an unorthodox gas well location 2310 feet from the South line and 1800 feet from the East line (Unit J) of Section 4, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico. The well would test the Undesignated Bilbrey-Morrow Gas Pool.
- (3) The S/2 of said Section 4 is to be dedicated to the well to form a standard 320-acre gas spacing and proration unit.
- (4) Texaco Exploration and Production, Inc. (Texaco) appeared at the hearing in opposition to the application.

- (5) OCD General Rule 104C.(2)(b) is applicable for spacing requirements in the Bilbrey-Morrow Gas Pool. It provides for 320-acre spacing with wells to be located not closer than 660 feet to the nearest side boundary nor closer than 1980 feet to the nearest end boundary. The proposed location is therefore unorthodox with respect to both the North and East boundaries.
- (6) Santa Fe initially proposed a standard location 1980 feet from the South and East lines of Section 4. The Bureau of Land Management asked Santa Fe to move the location because it was too close to a "Playa/Buffalo Wallow" and a raptor's nest. The BLM approved the unorthodox location which is the subject of this hearing.
- (7) Santa Fe submitted well location maps to show topographic conditions, roads, and pipelines which prevent access to some standard well locations on the lease.
- (8) Santa Fe's geologic evidence included Morrow structure and isopach maps and a Morrow cross-section. Offset production information was also submitted. Favorable geologic conditions are indicated at the proposed location. Mapping also indicates favorable Morrow sand development in the S/2 SE/4 of Section 4.
- (9) The proposed well would be a south extension to existing Morrow production in the Bilbrey-Morrow Gas Pool.
- (10) OCD production records show twelve producing wells in the Bilbrey-Morrow Gas Pool. In 1993, average daily per well production from the twelve wells was 2.684 MMCF. Four of the wells averaged producing in excess of 4 MMCF per day in 1993. Santa Fe submitted data showing that six wells in the pool have recovered over 4 BCF.
- (11) Santa Fe's witness indicated they had not considered drilling a directional well from the BLM authorized surface location to the standard bottomhole location.
- (12) Santa Fe requested expedited approval of the application because of expiring state and federal leases.
- (13) Texaco is an operator in the N/2 of said Section 4. They appeared at the hearing and requested that the application be denied or that a 50% production penalty be applied against the well. The basis for the penalty is that the proposed location is only half the required distance from the nearest side boundary. There is currently no Morrow production in the N/2 of Section 4 and Texaco indicated they have no plans for a Morrow well there at this time.

- (14) Texaco proposed that the production penalty be applied to the well's daily deliverability into the pipeline. They proposed that the deliverability be established by an extended test into the pipeline.
- (15) The evidence presented indicates that a well drilled at the proposed location will allow the applicant access to the reserves underlying the S/2 of Section 4 and that the application should be approved.
- (16) In order to assure the protection of correlative rights, the proposed production penalty should be adopted. However, to allow for economic operation and payout, the daily producing rate should not be penalized below 1.34 MMCF per day which is a rate equal to 50% of the 1993 average daily per well producing rate for the wells in the pool. (2.684 MMCF x 50% equals 1.34 MMCF.)
- (17) No interest owner or offset operator, except for Texaco, appeared at the hearing in opposition to this application.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Santa Fe Energy Operating Partners, L.P., is hereby authorized to drill its Cygnet "4" Federal Com Well No. 1 at an unorthodox gas well location 2310 feet from the South line and 1800 feet from the East line (Unit J) of Section 4, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico to test the Undesignated Bilbrey-Morrow Gas Pool.
- (2) The S/2 of said Section 4 shall be dedicated to the well to form a standard 320-acre gas spacing and proration unit.
- (3) A production penalty shall be applied against the well. The penalty shall be applied by authorizing the well to produce at a daily rate equal to 1.34 MMCF or 50% of the well's daily deliverability, whichever amount is greater.
- (4) Daily deliverability shall be established by producing the well into the pipeline for a 120-hour period. Daily deliverability shall be equal to the 120-hour volume divided by five.
- (5) Santa Fe shall not be required to redetermine daily deliverability after it is initially determined, but shall have that option if the producing capacity of the well is increased.

- (6) Santa Fe shall notify Texaco and the supervisor of the Hobbs District Office of the Division of the date and time of commencement of the daily deliverability test to be used in calculating the production penalty to allow Texaco and OCD to witness the test. Test results shall be filed with OCD on Form C-116 showing the volumes produced during each 24 hour period, the average daily volume and the authorized daily producing rate. This case and order number shall be written on the form.
- (7) 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