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. 9407 ORDER NO. R-8724

APPLICATION OF NEARBURG PRODUCING COMPANY 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 July 20, 1988, at Santa Fe, New Mexico.

NOW, on this 23rd day of August, 1988, the Division Director, having considered the record,

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, Nearburg Producing Company, seeks approval to re-enter a well at an unorthodox gas well location 2310 feet from the South line and 960 feet from the East line (Unit I) of Section 11, Township 22 South, Range 24 East, NMPM, to test the Undesignated McKittrick Hills-Morrow Gas Pool, Eddy County. New Mexico.

- (3) The S/2 of said Section 11 is to be dedicated to the well forming a standard 320-acre gas spacing and proration unit for said pool since the E/2 of the section is no longer available for dedication as described below.
- (4) The applicant proposes to re-enter the previously plugged and abandoned Flag-Redfern Oil Company, McClellan Federal Com Well No. 1 at the above-described location and deepen the wellbore from 8132 feet (original total depth) to a depth sufficient to fully penetrate the Morrow formation.
- (5) The McClellan Federal Com Well No. 1 was originally permitted in 1978 to drill and test the Undesignated McKittrick Hills-Upper Pennsylvanian Gas Pool and a 320-acre proration and spacing unit consisting of the E/2 of said Section 11 was assigned to said well which was a standard location for a unit so oriented.
- (6) Enron Oil & Gas Company, owner and operator of the Chama Federal Com Well No. 1 located at a previously approved unorthodox gas well location 780 feet from the North line and 1350 feet from the East line (Unit B) of said Section 11, which is presently producing from the McKittrick Hills-Morrow Gas Pool and to which is dedicated the N/2 of said Section 11, appeared at the hearing and objected to the subject application.
- (7) Re-entering the McClellan Federal Com Well No. 1 involves less risk and is less expensive for the applicant than requiring a well to be drilled at a standard location in the $\rm S/2$ of said Section 11.
- (3) According to the geological evidence and testimony presented at the hearing, a well at the proposed unorthodox gas well location will enable the applicant to produce the gas underlying the proration unit.
- (9) An allowable penalty should be imposed on the Morrow production from the subject well to protect the correlative rights of the other operators in the area.
- (10) The most northeasterly standard well site in the $\rm S/2$ of said Section 11 would be 1980 feet from the South and East lines (Unit J) of said Section 11.

- (11) The subject well was originally drilled at a standard location for its existing unit but now is 330 feet (50 percent) closer to the northern side boundary and 1020 feet (51.5 percent) closer to the eastern end boundary than permitted under Rule 104.C.II(a) of the New Mexico Oil Conservation Division General Rules and Regulations; however there is an existing well producing from the Morrow formation across the northern boundary, but none across the eastern boundary.
- (12) The penalty imposed for the Morrow production upon the subject well should be based upon the footage variation of the unorthodox location from a standard Morrow location as described in Finding Paragraph No. 11 above as related to the north sideboundary.
- (13) An allowable factor for Morrow production of 0.50 for the subject well (a penalty of 50 percent) will prevent waste and protect correlative rights of the applicant as well as other operators in the Morrow formation, and should therefore be approved.
- (14) In the absence of any special rules and regulations for the proration of production from the Morrow formation in which the subject well will be completed, the aforesaid production limitation factor should be applied against said well's ability to produce into the pipeline as determined by back pressure test and data extracted from Division records.
- (15) A reasonable minimum allowable for the subject well should be established, and 500,000 cubic feet of gas per day is considered to be a reasonable figure for such minimum allowable.
- (16) The Division records reflect only one well completed in and producing from the McKittrick Hills Morrow pool, the Chama Federal Well No. 1 operated by protestant Enron Oil and Gas Company.
- (17) The Division records further reflect that said well tested at calculated absolute open flow rate (CAOF) of 2505 MCFD, had an initial potential of 1237 MCFD (49.4% of CAOF) and produced in the best month to date at the rate of 836 MCFD (33.37% of CAOF) and it is hereby determined that the reasonably expected maximum flow rate of the subject well would be 1/3 of the CAOF.
- (18) Applicant should be limited each month to 50% of the reasonably expected maximum flow rate, or 50% of 1/3 of the CAOF, but such limit should not be less than 500 MCF per day.

- (19) In the event the well should be completed as a gas well in another formation the same limitation of production should apply.
- (20) Approval of the subject application subject to the above provisions and limitations will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject Morrow reservoir, 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 Nearburg Producing Company for reentry of a well at an unorthodox gas well location 2310 feet from the South line and 960 feet from the East line (Unit I) of Section 11, Township 22 South, Range 24 East, NMPM, to test the Undesignated McKittrick Hills-Morrow Gas Pool, Eddy County, New Mexico is hereby approved.
- (2) The S/2 of said Section 11, being a standard 320-acre Morrow gas spacing and proration unit, shall be dedicated to the above-described well.

IT IS FURTHER ORDERED THAT:

- (3) Said well is hereby assigned a Production Limitation Factor of 0.50 for the Morrow gas production.
- (4) In the absence of any special rules and regulations prorating gas production in the subject Morrow pool, the well's production each day of the first year's production shall be limited to 50% of 1/3 of the CAOF established by test as required by Rule 401 of the General Rules and Regulations, or to 500,000 cubic feet of gas per day, whichever is greater.
- (5) Before October 1 each year following the well's completion the shut-in pressure shall be measured and reported as required by General Rule 402, and a new CAOF shall be calculated based on the revised shut-in pressure so as to establish a revised maximum flow rate as described in Ordering Paragraph No. (4) above until such penalized flow rate becomes less than 500,000 cubic feet per day. The revised penalized flow rate shall become effective November 1. In the event of failure to establish a satisfactory slope on the 4-point test required in Ordering Paragraph No. (4), above, a slope of 0.730 shall be used in calculating CAOF.

- (6) Production during any month at a rate less than the limitation described above shall not be carried forward as underproduction into succeeding months, but overproduction of such limitation during any month shall be made up in the next succeeding month or months by shut in or reduced rates as required by the District Supervisor of the Division.
- (7) Unless modified by further order, after notice and hearing, the limitation imposed on Morrow production by ordering paragraphs (3) and (4) shall also apply to gas production from any other formation in which the well may be completed to which the S/2 or SE/4 of said Section 11 is dedicated.
- Jurisdiction of this cause is retained for the entry of (3)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

SEAL