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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 8259 Order No. R-7636

APPLICATION OF ROBERT N. ENFIELD FOR AN UNORTHODOX OIL WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 3, 1984, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 23rd day of August, 1984, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Robert N. Enfield, seeks approval of an unorthodox gas well location 1200 feet from the South line and 330 feet from the East line of Section 18, Township 21 South, Range 23 East, NMPM, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.
- (3) That all of said Section 18, containing approximately 574 acres, is to be dedicated to the well.
- (4) That Marathon Oil Company, an offset operator to the south and southeast, appeared at the hearing and objected to approval of the aforesaid unorthodox location without penalty on the grounds that a well drilled at said location would drain gas from offsetting leases in which it has a working interest, thereby violating correlative rights.

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- (5) That no offset operator directly to the east of the aforesaid unorthodox location appeared and opposed the location.
- (6) That the Bunnel Federal Well No. 1 in said Section 18 which is located at a standard location 1650 feet from the South and East lines of said Section 18 is no longer capable of commercial production.
- (7) That to re-enter and rework the Bunnel Federal Well No. 1 to cause it to be commercially productive is not feasible.
- (8) That applicant's proposed well is to be a replacement well for the Bunnel Federal Well No. 1.
- (9) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.
- (10) That there exists a fault running in a southwest northeast direction, and which lies on the west half of said Section 18 and there are admittedly no recoverable hydrocarbons west of the fault.
- (11) That considering only those acres within Section 18 that lie east of the fault and within a 2 percent porosity cutoff, there are 420 acres capable of production underlying said Section 18, or 65.6 percent of a standard 640-acre section.
- (12) That the calculated recoverable reserves completed in the wellbore of said Bunnel Federal Well No. 1 total approximately 8 Bcf.
- (13) That to date only approximately 4.75 Bcf have been recovered from said well leaving 3.25 Bcf or 40.6 percent of the original reserves completed to be recovered.
- (14) That a well at the proposed unorthodox location is only 72.7 percent of the distance from the South line of said Section 18 as a well at the closest standard location for said pool as provided by the special pool rules.
- (15) That to offset any advantage gained from a well at an unorthodox location, production from the well should be limited from the Upper Pennsylvanian formation.

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That such limitation should be based upon the southern variation of the location from a standard location, the productive acres, and the remaining reserves under the tract, which may best be accomplished by assigning a well at the proposed location an allowable factor of 0.60 (average of 0.656 productive acres, 0.406 recoverable reserves, and 0.727 distance from the south line) or:

$$0.60 = \underbrace{0.656 + 0.406 + 0.727}_{3}$$

That approval of this application subject to the above limitation will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject 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 the application of Robert N. Enfield for an unorthodox gas well location for the Pennsylvanian formation is hereby approved for a well to be located at a point 1200 feet from the South line and 330 feet from the East line of Section 18, Township 21 South, Range 23 East, NMPM, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.
- That all of said Section 18 shall be dedicated to the above-described well.
- That said well is hereby assigned an allowable factor of 0.60 in the Upper Pennsylvanian formation.
- That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JIM BACA, Member I felley

ED KELLEX, Member

JOE D. RAMEY, Chairman and Secretary

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