

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:

APPLICATION OF MEWBOURNE OIL  
COMPANY FOR AN UNORTHODOX GAS WELL  
LOCATION, LEA COUNTY, NEW MEXICO.

Case No. 11,842  
Order No. R-\_\_\_\_\_

ORDER OF THE DIVISION  
(Proposed by Mewbourne Oil Company)

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 6, 1997 at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this \_\_\_\_\_ day of December, 1997, 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 hereof.

(2) The applicant, Mewbourne Oil Company ("Mewbourne"), seeks authority to drill its ETA State Well No. 3 at an unorthodox gas well location 1980 feet from the North line and 660 feet from the East line (Unit H) of Section 8, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, to test the Atoka/Morrow formation. The N½ of Section 8 will be dedicated to the subject well, forming a standard 320-acre gas spacing and proration unit.

(3) V-F Petroleum Inc. ("V-F"), an offset operator to the east of the proposed location, appeared at the hearing in opposition to the application. Kaiser-Francis Oil Company, an interest owner in the N½ of Section 8, entered an appearance in support of the application.

(4) The proposed well is located in the Townsend-Morrow Gas Pool, which is governed by Rule 104.C.(2)(b) of the Division's General Rules and Regulations, which requires standard 320-acre gas spacing and proration units with wells no closer than 1650 feet to the nearest end boundary and 660 feet to the nearest side boundary of the spacing unit, and no closer than 330 feet from a quarter-

quarter section line.

(5) The proposed ETA State Well No. 3 is located 660 feet from the nearest end boundary of the spacing unit, 990 feet closer than allowed by Division rules.

(6) The applicant presented the following geologic and engineering evidence:

(a) The subject pool actually produces from the lower Atoka sand, which is a north-south trending channel sand.

(b) The Atoka sand thins rapidly to the west, and a well at an orthodox location would be unproductive. **Mewbourne Exhibit 6.** Moreover, moving the well farther to the north would unacceptably increase the risk involved in drilling the well. Thus, an unorthodox location is necessary to adequately test the Atoka sand in the N½ of Section 8.

(c) There are four wells producing from the Townsend-Morrow Gas Pool in the immediate area of the proposed well:

<u>Well</u>	<u>Location</u>	<u>EUR</u>
ETA State No. 2	Unit I §8	14.2 BCF
Humble Townsend No. 1	Unit L §9	14.0 BCF
Lowe State Com. No. 1	Unit H §17	12.6 BCF
Humble A State No. 1	Unit E §16	3.8 BCF

The initial producing rates of these wells, except for the Humble A State Well No. 1, were in excess of 3 MMCF/day.

(d) The pressure information shows the following:

(i) Despite producing more than a combined 20 BCF to date, the ETA State Well No. 2 (operated by Louis Dreyfus Natural Gas Corp.) and the Humble Townsend Well No. 1 (operated by V-F), which are located only 1320 feet apart, have a pressure differential of 700 psi after 25 years of production.

(ii) Similarly, the Lowe State Well Com. No. 1 and the Humble A State Well No. 1, located 1558 feet apart, have a pressure differential of 1100 psi after 25 years of production.

(iii) To the contrary, the Humble Townsend Well No. 1 and the Lowe State Com. Well No. 1 have the same pressures.

**Mewbourne Exhibit 9A.**

(e) Based on the foregoing, there are faults or permeability barriers between (i) the ETA State Well No. 2 and the Humble Townsend Well No. 1, and (ii) the Lowe State Com. Well No. 1 and the Humble A State Well No. 1. **Mewbourne Exhibit 4.**

(f) As a result, there is also a fault or permeability barrier between the proposed well and V-F's Humble Townsend Well No. 1. Therefore, the applicant's unorthodox location will not adversely affect the Humble Townsend Well No. 1.

(g) The four existing wells in the pool will cumulatively produce 44 BCF, and are located in a one (1) section area. The reservoir needed to contain the reserves of the four wells is over five (5) sections in extent. Thus, there is additional reservoir which will be tapped by a new well.

(h) An additional well in the pool will help delineate the reservoir, and will produce reserves which will not be produced by the existing wells.

(7) V-F's geology also showed that a well at an unorthodox location will be unproductive in the Atoka.

(8) V-F argued that the bulk of the reservoir is on its acreage. However, it was unable to explain the pressure differential between the ETA State Well No. 2 and the Humble Townsend Well No. 1, nor the similarity in production between the two wells.

(9) V-F proposed that, if the proposed well is drilled, a penalty of 60% (40% allowable) should be assessed against the well based upon the footage encroachment towards its acreage, as follows:

$$1650-660/1650 = 60\%$$

(10) The applicant did not object to such a penalty, provided that a minimum allowable of 1.25 MMCF/day is established.

(11) The evidence shows that prior to hearing, the applicant attempted to reach an agreement with V-F whereby the proposed well would have a production cap of 2 MMCF/day, and the applicant would not oppose a similar unorthodox location for V-F in Section 9, nor a simultaneous dedication application by V-F.

(12) The evidence and testimony in this case indicates that unless a well is drilled at an unorthodox location in the N½ of Section 8, the interest owners therein will not have the opportunity to produce their fair and equitable share of reserves in the reservoir.

(13) The proposed unorthodox location should be approved,

provided that, in order to protect the correlative rights of V-F, a production penalty should be imposed on the ETA State Well No. 3.

(14) The penalty proposed by V-F, with a minimum allowable as proposed by the applicant, is fair and reasonable.

(15) Approval of the proposed unorthodox location, subject to the above-described production penalty, will afford the applicant the opportunity to produce its just and equitable share of gas from the subject pool, will prevent 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 prevent waste and protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Mewbourne Oil Company, is hereby authorized to drill its ETA State Well No. 3 at an unorthodox gas well location 1980 feet from the North line and 660 feet from the East line of Section 8, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, to test the Atoka formation, Townsend-Morrow Gas Pool.

(2) The N $\frac{1}{2}$  of Section 8 shall be dedicated to the well, forming a standard 320-acre gas spacing and proration unit for said pool.

(3) The ETA State Well No. 3 is hereby assessed a production penalty of 60% (40% allowable). The penalty shall be applied toward the well's ability to produce into a pipeline as determined from a deliverability test to be conducted on a semi-annual basis. The applicant shall advise the supervisor of the Hobbs district office of the Division of the date and time the above-described production tests are to be conducted in order that they may be witnessed. Notwithstanding the foregoing, the subject well shall have a minimum allowable of 1.25 MMCF/day.

(4) Jurisdiction 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