# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

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

APPLICATION OF MEWBOURNE OIL COMPANY FOR AN UNORTHODOX GAS WELL LOCATION AND A NON-STANDARD GAS PRORATION UNIT, EDDY COUNTY, NEW MEXICO.

APPLICATION OF FASKEN OIL AND RANCH, LTD. FOR A NON-STANDARD GAS PRORATION AND SPACING UNIT AND AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

APPLICATION OF TEXACO EXPLORATION
AND PRODUCTION INC. FOR CLARIFICATION,
OR IN THE ALTERNATIVE, AN EXCEPTION
TO, THE SPECIAL POOL RULES AND
REGULATIONS FOR THE CATCLAW DRAW-MORROW
GAS POOL, EDDY COUNTY, NEW MEXICO.

7/1 1997

Oil Conservation Division

Case No. 11,723 (de novo)

Case No. 11,755 (de novo)

//865 Case No. 11,808

Order No. R-10872-B

## ORDER OF THE COMMISSION (Proposed by Mewbourne Oil Company)

#### BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on October 30, 1997 at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission."

NOW, on this \_\_\_\_\_ day of December, 1997, the Commission, a quorum being present, having considered the pleadings filed herein, the testimony, the exhibits, and the record, and being fully advised in the premises,

#### FINDS THAT:

(1) In Case 11723, Mewbourne Oil Company ("Mewbourne") seeks approval of a non-standard 297.88 acre gas spacing and proration unit in the Catclaw Draw-Morrow Gas Pool comprised of Lots 29-32 and the SW% (S% equivalent) of Section 1, Township 21 South, Range

- 25 East, NMPM, to be dedicated to a well to be drilled at an unorthodox gas well location 660 feet from the South line and 2310 feet from the East line (Unit W) of Section 1.
- (2) In Case 11755, Fasken Oil and Ranch, Ltd. ("Fasken") also seeks approval of the above-described non-standard gas spacing and proration unit, for a well to be drilled at an unorthodox gas well location 2080 feet from the South line and 750 feet from the West line (Unit T) of Section 1.
- (3) In Case 11808, Texaco Exploration and Production Inc. ("Texaco") seeks clarification of the rules for the Catclaw Draw-Morrow Gas Pool regarding second wells on a well unit, or in the alternative an exception to Division rules for its E.J. Levers "NCT-1" Well Nos. 1 and 2, located in Units N and F, respectively, of Section 12, Township 21 South, Range 25 East, NMPM, to allow both wells to produce simultaneously.
- (4) Section 1 is within the Catclaw Draw-Morrow Gas Pool, which has pool rules requiring 640 acre units, with wells to be no closer than 1650 feet to the unit's outer boundary and no closer than 330 feet to a quarter-quarter section line. Prorationing in the pool was suspended by Commission Order No. R-10328, and wells in the pool are allowed to produce at capacity.
- (5) Order No. R-4157-D found that wells in the Catclaw Draw-Morrow Gas Pool were only capable of draining 320 acres, and the pool has been effectively developed on 320 acre spacing. See Mewbourne Exhibit 8. Half of the wells in the pool are at unorthodox locations.
- (6) Section 1 is comprised of 863.62 acres of land. The middle one-third of the section is federal land which is unleased due to a wildlife study, and cannot be included in the well unit. As a result, approval of the non-standard gas spacing and proration unit is proper and necessary, and should be approved.
- (7) All working interest owners in the S½ of Section 1 are subject to an A.A.P.L. Model Form Operating Agreement 1956, dated April 1, 1970 ("Operating Agreement"). Mewbourne is the largest working interest owner in the S½ of Section 1. The Operating Agreement contains a procedure to implement the drilling of a well proposed thereunder.
- (8) Pursuant to the Operating Agreement, Mewbourne proposed its well to the working interest owners in January 1997. Fasken subsequently proposed its well in February 1997. Fasken advised Mewbourne that it elected to participate in Mewbourne's well, but was going to oppose Mewbourne's location at the Division. Mewbourne refused to participate in a well at Fasken's location.

- (9) The geologic evidence presented in this matter by Mewbourne shows that:
  - (a) The primary zone of interest in Section 1 is the Morrow.
  - (b) The primary Morrow zone is the Middle Morrow, the producing zone in Texaco's Levers Well No. 2, which trends in a north/northeast south/southwest direction.
  - (c) Mewbourne's proposed well is a development well, which minimizes the risk to all of the interest owners in the S% of Section 1.
  - (d) Faulting in the Morrow does <u>not</u> adversely affect producibilty in the Morrow, and in fact may increase productivity.
  - (e) Development of the pool occurred primarily in the early 1970's and early 1980's. The Texaco Levers Well No. 2, in Unit F of Section 12, was completed on January 13, 1996, and has produced 2.2 BCF of gas from the Middle Morrow.
  - (f) There is no commercial Morrow production north of Texaco's Levers Well No. 2.
- (10) The geologic and geophysical evidence presented in this matter by Fasken shows that:
  - (a) Fasken's location has potential in the Cisco formation. However, the well is a wildcat in the Cisco, and the chances of success in that zone are 10% at best.
  - (b) The Cisco is based on seismic, but seismic has never found a Cisco pool which is a satellite to a large Cisco pool, such as the Springs-Cisco Pool to the northwest of Fasken's location.
  - (c) Fasken's maps show the Morrow to trend in an east-west or a northwest-southeast direction, with little or no Morrow pay at Mewbourne's location.
  - (d) Fasken's interpretation of the Middle Morrow in Section 1 indicates that the reservoir is not connected with the producing Middle Morrow formation in Texaco's Levers Well No. 2, and is therefore not being drained by Texaco's well.
  - (e) Fasken's Morrow location is midway between a non-commercial Morrow well in Unit P of Section 1 and a dry Morrow well in Unit R of Section 2.
  - (f) Mewbourne's location may be fault-separated from the Texaco Levers Well Nos. 1 and 2.

- (11) The geologic evidence presented in this matter by Texaco is in general agreement with that presented by Mewbourne, except that Texaco's maps indicate that there are large areas north of Section 12 which are productive in the Morrow.
- (12) Mewbourne presented reservoir engineering evidence in this matter which shows that:
  - (a) The gas in place figures for Sections 1 and 12 are as follows:

	Sec. 1	<u>Sec. 12</u>	<u>Total</u>
1/13/96	1.80 BCF	3.95 BCF	5.75 BCF
10/1/97		2.44 BCF	3.55 BCF

Thus, 690 MMCF (0.69 BCF) has been drained from the S% of Section 1 by Texaco's Levers Well No. 2.

- (b) Drainage is non-radial, along the trend of the Morrow reservoir. The Texaco Levers Well No. 2 is not draining from the south or southwest because of competing wells located in those directions. The Levers Well No. 2 is not draining reserves northwest of Section 12 because that area is dry in the Morrow, and is not draining the middle third of Section 1 because that acreage has been proven non-commercial in the Morrow. Thus, the S½ of Section 1 is being drained by the Levers Well No. 2.
- (c) If Mewbourne is not allowed to drill its location, the Levers Well No. 2, which will produce 5.5 BCF, will drain the S½ of Section 1. Mewbourne's unorthodox location is necessary to protect the correlative rights of interest owners in the S½ of Section 1.
- (d) If the fault theorized by Fasken is present, Mewbourne's location may not compete with Texaco's Levers Well No. 2, and the unorthodox location will not affect Texaco's correlative rights.
- (13) Neither Texaco nor Fasken presented any evidence as to gas in place under each section, and the Commission adopts the figures presented by Mewbourne.
  - (14) Based on the foregoing, the Commission finds that:
  - (a) Mewbourne's location is a development prospect which is likely to encounter the same Middle Morrow sands from which Texaco's Levers Well No. 2 is producing. Moving a well too far to the north unacceptably increases the risk in drilling to the Morrow.

- (b) Fasken's location has a small chance of success in the Cisco, and a substantially greater risk in the Morrow than Mewbourne's location. Thus, Fasken's location increases the risk in the Morrow, the primary zone of interest in the S% of Section 1.
- (c) If Mewbourne's location is on the downthrown side of a localized fault, it may nevertheless drain around the fault, and in addition may benefit from natural fracturing of the Morrow formation.
- (d) Fasken's election to join in the Mewbourne well indicates less than complete conviction in its map of the Middle Morrow, which shows no reservoir at Mewbourne's location.
- (e) The Division's and the Commission's orders on the pool rules and prorationing of the Catclaw Draw-Morrow Pool have inadvertently created ambiguity regarding whether a second well is allowed on a well unit without simultaneous dedication approval.
- (f) Texaco has an advantage over the S% of Section 1, and in order to prevent waste and protect correlative rights, Mewbourne's location should be approved.

### IT IS THEREFORE ORDERED THAT:

- (1) A non-standard gas spacing and proration unit in the Catclaw Draw-Morrow Gas Pool comprised of Lots 29-32 and the SW% (S% equivalent) of Section 1, Township 21 South, Range 25 East, NMPM, is hereby approved.
- (2) The unorthodox gas well location 660 feet from the South line and 2310 feet from the East line (Unit W) of Section 1, sought by Mewbourne in Case 11723, is hereby approved.
- (3) The application of Fasken in Case 11755 is approved as to the Cisco formation. However, Mewbourne's well shall be drilled first. If Mewbourne's well does not result in a well capable of producing gas from the Morrow formation in paying quantities, then Fasken may drill to the Morrow formation at its location.
- (4) Texaco's request for a clarification of the rules for the Catclaw Draw-Morrow Gas Pool and Division Rule 104.D(3) is approved, and Texaco may produce its Levers Well Nos. 1 and 2 simultaneously.
- (5) OPTION A: Due to the ambiguity created by the Division's and the Commission's orders, Texaco did not obtain a simultaneous dedication order on its wells in Section 12 before commencing the Levers Well No. 2. Thus, Texaco had the opportunity to produce 2.2 BCF of gas without applying for simultaneous dedication and giving

notice thereof to offsetting owners, which notice offsetting owners could reasonably have expected to receive before Texaco drilled a second well. Therefore, no penalty is imposed upon Mewbourne's well location.

OPTION B: A penalty is imposed upon Mewbourne's well equal to 23% of the deliverable volume from the well into the transporter's pipeline, provided that a minimum allowable of 2,000 MCF/day is established so that the well can effectively compete with Texaco's wells. In the alternative, if Mewbourne drills its well at any location 990 feet from the South line and at least 1650 feet from the East or West line of Section 1, which location is hereby approved, no penalty on production shall be imposed.

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

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

WILLIAM J. LEMAY Chairman

JAMI BAILEY Member

WILLIAM WEISS Member