RULE 37 CASE NO. 0201029

APPLICATION OF EAST TEXAS ENERGY CORPORATION FOR AN EXCEPTION TO STATEWIDE RULE 37 FOR ITS CARTWRIGHT LEASE, WELL NO. 1, AVENTURA RANCH (JAMES LIME) AND WILDCAT FIELDS, VAN ZANDT COUNTY, TEXAS

APPEARANCES:

For Applicant: Applicant:

Skipper Lay, Attorney East Texas Energy Corporation

Mark Hays Mark Tarver Scott Ritchey Paula Nuckolls

For Protestants: Protestants:

John Soule, Attorney Palmer Petroleum

John W. Palmer

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

Date of Notice of Hearing:

Date Case Heard:

Date Reopened Case Heard:

January 26, 1993

February 23, 1993

June 15, 1993

Heard By: Barbara Epstein, Hearings Examiner

Donna Chandler, P.E., Technical Examiner

Transcript Date:

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Current Status:

June 23, 1993

July 13, 1993

Protested

STATEMENT OF THE CASE

East Texas Energy Corporation, hereinafter referred to as "East Texas", has applied for a spacing exception for its Cartwright Lease, Well No. 1, in the Aventura Ranch (James Lime) and Wildcat Fields, Van Zandt County, Texas. The application is protested by Palmer Petroleum, hereinafter referred to as "Palmer".

BACKGROUND

East Texas seeks an exception to Statewide Rule 37 for its Cartwright Well No. 1. An exception is required because the well will be located 479 feet from the northeast lease line. Field rules for the Aventura Ranch (James Lime) Field require 933 feet spacing from lease lines. Field rules for the Wildcat are 467 feet spacing and internal lease lines make the application for a Wildcat zone irregular also.

Palmer initially stated that it protested this application for two reasons. First, its offsetting unit acreage will be cut if the permit is granted because a fractional interest in this tract is currently assigned to the Palmer Morris Unit. Secondly, Palmer asserted that the productive acreage for the Cartwright tract should be determined for allowable purposes if the permit is granted. In the course of the re-opened hearing, Palmer asserted that East Texas had failed to meet its burden of proof that an exception is necessary to prevent confiscation.

DISCUSSION OF THE EVIDENCE

East Texas has leased a 3/4 interest in a 111.45 acre tract from L. Cartwright Production Company; the remaining 1/4 undivided interest is leased and included in the offsetting Morris Unit operated by Palmer. Acreage in the 111.45 acre tract currently assigned to the offsetting unit will be allocated to East Texas' unit if this application is granted. East Texas has leased acreage to the west and north of the Cartwright tract and intends to form its own unit once the proposed well is permitted, but no decision has been made regarding acreage at this time.

East Texas testified that this tract is a substandard acreage tract requiring development to prevent confiscation. Field rules require 640 acre drilling units. The tract took its present size and shape on August 23, 1966 before the first well was discovered for the Aventura Ranch (James Lime) Field. The first well in the field was discovered on August 17, 1990. Due to the size and shape of the Cartwright tract, a well cannot be drilled at a regular location. The proposed location provides the best opportunity to recover its share of hydrocarbons underlying the tract.

The reservoir is a limestone reef with reef debris facies; it is made up of reef cores, patch reefs or one large reef which have been destroyed and redeposited. (Vol. 1 Tr. p. 74) The proposed well will be located on the southeast portion of the tract. East Texas picked its proposed location, relying on data from five producing Aventura Ranch (James Lime) Field wells, several dry holes (including a plugged dry Cartwright well to the east), and the gas/water contact found updip of the proposed location. (Vol. 1 Tr. p. 31)

East Texas introduced a cross-section of A-A' as Exhibit No. 8 to show that the proposed well will encounter the productive James Lime reef above the water contact. East Texas has calculated the gas/water contact point for the Aventura Ranch (James Lime) Field at -8214. (Vol.1 Tr. p. 28) East Texas believes that the reservoir may extend a mile west of the Cartwright lease boundary but asserts that the proposed location provides the least risky opportunity to drill the most productive well on the Cartwright tract. The nearest well, the Beaver No. 1, is the most productive well in the field.

In the re-opened hearing, East Texas introduced Exhibit 23R to show two possible interpretations of the James Lime porosity above 8%; one interpretation indicates a permeability barrier in the middle of the Cartwright lease and the other interpretation indicates porosity extending to the west of the tract. East Texas' witness testified that the permeability barrier cannot be established until the well is actually drilled, and declined to state that the western portion of the tract is not productive. East Texas' witness said he believes that the proposed location is a safer location. It should be productive because it will be on strike and well control establishes known production. East Texas believes that the western portion of the tract may yield significant additional reserves if no permeability barrier is present.

East Texas contends that the entire field, and the Beaver lease in particular, are draining the Cartwright tract, based on the "common sense" presumption that gas will flow from a high pressure point to a low pressure point. (Vol. 2 Tr. p. 84) East Texas has well control showing bottom hole pressures of surrounding wells and believes that gas is being drained from the Cartwright tract to the offsetting wells. East Texas admitted that it had not done any study to prove up its assertion that the Beaver well specifically is draining its tract but complained that it had not received sufficient data it requested from Palmer. (East Texas acknowledged that it had neither informed Palmer nor the examiners of the perceived deficiencies in the material.)

With respect to the fair share issue in this case, East Texas introduced Exhibit No. 19R which presented hypothetical cases of estimated reserves in the Aventura Ranch (James Lime) Field and estimated recovery based on the most productive well in the field, the Beaver No. 1. For the purposes of the exhibit, it was assumed that the Beaver well drains the entire field, that the field contains 20 bcf of gas, and that the Cartwright lease

has maximum reserves in place of 3 bcf of gas, if 30 feet of pay are encountered. (Vol. 2 Tr. p. 166) Assuming the Beaver well drains the entire field, Cartwright estimated its share of gas as 547.6 mmcf of gas. (Vol. 2 Tr. p. 25) East Texas also concluded that it is entitled to the 3 bcf of gas from its tract plus its share of the field, which would total 1.028 bcf of gas.

In its opening statement at the re-opened hearing, Palmer quoted from a paper delivered by Mr. Skipper Lay, which stated that the Railroad Commission will grant a Rule 37 permit to drill a first well on a small tract if the applicant proves that it (and its grantor) are not receiving their share of hydrocarbons underlying the tract or from any commonly owned offsetting tracts in the field and if a well is located in the geometric center of the tract. Palmer stated that once East Texas showed its lessor was not already receiving its share of hydrocarbons underlying its tract, it would have to show that the proposed location was either necessary to keep it within the reservoir or to offset drainage.

Palmer's witness testified that his interpretation of East Texas' Exhibit No. 23R showing the axis of the best porosity indicated that the best well should be drilled as close as possible to the axis in the western portion of the tract where the pay thickness should be greatest. Palmer's witness stated that a no flow boundary would be located halfway between a well drilled in the western portion of the tract and the Beaver well.

Palmer introduced an exhibit estimating Cartwright's share of hydrocarbons underlying its tract, using East Texas' figures for recoverable gas and the most conservative estimate of reserves, reducing the productive acreage on Cartwright's tract to 55 acres. This estimate supports the need to drill a well in the eastern portion of the tract, where it is undisputed that the acreage is productive. Palmer calculated East Texas' interest in the Cartwright tract to be 93 mmcf of gas by multiplying 907 mcf per acre feet time 55 productive acres times 10 feet of pay thickness times 18.75%, which is East Texas' interest in the Cartwright tract. (The 907 mcf per acre feet of gas is taken from East Texas' Exhibit No. 27R.) Palmer testified that Cartwright has a 2.738% interest in the Beaver Unit. (This figure is taken from East Texas' Exhibit 15R.) Palmer then estimated that, using the "small reservoir interpretation", Cartwright would be entitled to a total of 229 mmcf of gas from its tract and its interest in the Beaver well.

Palmer testified that the Beaver well alone will produce 8.8 bcf of gas, using an estimate that it will recover 44% of the production from the reservoir. Cartwright's interest in the Beaver production would be 241 mmcf of gas, or 12 mmcf of gas more than its fair share of production from a well on its tract plus its interest in the Beaver well. Since Cartwright owns an interest in both the Morris and Everitt units, and no calculation

has been made of recoverable reserves from those wells, Palmer contends that Cartwright is not entitled to a well, and hence, neither is its lessee. East Texas did not present any evidence to refute Palmer's calculations.

Palmer urged the Commission to evaluate East Texas' application with three possible outcomes. First, if the Commission accepts the proposition that the entire tract is productive, it should require East Texas to drill a well in the western portion of the tract. Second, if the Commission concludes that a permeability barrier exists, it should deny the application because Cartwright will already be receiving its fair share of hydrocarbons from offsetting production. Lastly, if the Commission determines that East Texas should be granted an exception in the eastern portion of the tract, it should require the location to be 933 feet from the east lease line and limit acreage to 55 acres until a productive acreage hearing is held.

EXAMINERS' OPINION

It is the examiners' opinion that this exception to Statewide Rule 37 should be denied because the applicant failed to show that the proposed location is necessary to prevent confiscation.

The record is uncontradicted that the Cartwright tract is a legal subdivision because it took its present size and shape before the discovery of the field. (The tract took its present size and shape on August 23, 1966. The Aventura Ranch (James Lime) Field was discovered on August 17, 1990, and field rules were not established until August 5, 1991.)

Since this application involves drilling the first well on the Cartwright tract, the first question is whether the applicant is entitled to a well as a matter of law. The answer is not an implicit yes. In <u>Gulf Land Co. v. Atlantic Refining Co.</u> 131 S.W.2d 73, (Tex. 1939) at p.80, the court expressly stated "...The right to be protected against `confiscation' under Commission oil and gas rules is not absolutely unconditional or unlimited". The court in <u>Railroad Commission v. Williams</u> 163 Tex 370, 356 S.W.2d 131 (1961) went on to state at p. 135:

"It thus appears that the courts were perhaps compelled to the conclusions in these cases that the only way to protect the small tract owner was to give him at least one well as a matter of law. We have concluded, however, that such a small tract owner is not necessarily entitled to a first well as a matter of law. He is entitled to the exception, under Rule 37, if it is necessary to

prevent waste or to prevent confiscation of property... The basic right of every landowner, including small tract owners, is to a fair chance to recover the oil and gas in and under his land or their equivalent in kind."

The holdings in <u>Williams</u> have been applied to ensuing cases involving the rights of small tract owners applying for a first well. As recently as 1988, in the case of <u>Musick v. Railroad Commission</u> 747 S.W.2d 892 (Tex. Civ. App.-Austin 1988, writ denied), the court upheld the Railroad Commission's denial of an application in which a small tract owner applied to drill a first well on a tract that could not support a regular location. The court held that Musick's predecessors in title had already had an opportunity to recover their share of hydrocarbons underlying the tract through their fractional interests in nearby production. Although Musick did not own any interest in such production, the court held that her grantor, and hence, she was not entitled to a well.

In this application, East Texas needed to prove that the proposed exception is necessary to prevent confiscation. In the re-opened hearing, East Texas presented two geologic interpretations of its tract. One interpretation supports the assertion that the entire tract is productive, while the other supports the necessity of drilling a well at the proposed location. On more than one occasion during the hearing, the examiners asked the applicant to provide the Commission with data to show the reserves under the tract, the estimated recoverable reserves and a comparison of the proposed location to an alternate well location in the western portion of the tract. East Texas did not present the data.

East Texas' evidence was insufficient for the examiners to extrapolate enough data to determine what it could recover from a well at the proposed location or at an alternate location on the western half of the Cartwright tract. The examiners do not have the data to show the limits of the field because East Texas has presented evidence of two interpretations. With respect to the reserves under Cartwright's tract, the examiners do not know how much gas in the Aventura Ranch (James Lime) Field is located under the Cartwright tract.

The examiners have not addressed here the issue of Cartwright's fair share discussed by the parties because we believe that the applicant has failed in its initial burden of proof. There is no point in discussing Cartwright's or East Texas' fair share when we do not know the elements with which to ascertain fair share. If the Commission is not presented with one interpretation of the field and East Texas' estimate of recoverable reserves for the Cartwright tract, it cannot proceed to a determination of whether Cartwright has already received (or will receive) that share from participation in offsetting production. Confiscation has not been established by the submitted evidence.

Based on the testimony presented at the hearing and the evidence admitted into the record, the examiners hereby make the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

- 1. At least ten (10) days' notice was given to all affected persons including designated operators, lessees of record for tracts that have no designated operator and owners of record of unleased mineral interests of each adjacent unleased tract.
- 2. The applicable field rules for the Aventura Ranch (James Lime) and Wildcat Fields are respectively:

933'/2640'/640 acres 467'/1200'

- 3. An exception to Statewide Rule 37 is required for the Cartwright Lease Well No. 1 because the proposed well will be located 479 feet from the northeast lease line and internal lease lines make the Wildcat location irregular.
- 4. This application is protested by Palmer Petroleum.
- 5. A regular location is not possible on the subject tract, due to its size and shape.
- 6. The Cartwright tract is a legal subdivision.
 - a. The Cartwright tract took its present size and shape on August 23, 1966, before the discovery of the Aventura Ranch (James Lime) Field.
 - b. The discovery date for the first well for the Aventura Ranch (James Lime) Field was August 17, 1990.
 - c. Field rules for the Aventura Ranch Field became effective August 5, 1991.
- 7. The Cartwright tract reserves are being depleted by general production from wells in the Aventura Ranch (James Lime) Field.
- 8. By presenting two interpretations of the field, East Texas has not established the limits of the Aventura Ranch (James Lime) Field.

- 9. East Texas has not established how much gas in the reservoir lies under the Cartwright tract.
- 10. The applicant has not estimated the amount of gas that can be recovered by the proposed well.

CONCLUSIONS OF LAW

- 1. A Railroad Commission Form W-1 was properly filed.
- 2. Proper notice was issued by the Railroad Commission to appropriate persons legally entitled to notice.
- 3. All things have been done or have occurred to give the Railroad Commission jurisdiction to decide this matter.
- 4. The applicant has not met its burden of proof to show that the proposed location is necessary to prevent confiscation.

RECOMMENDATION

The examiners recommend that the above findings of fact and conclusions of law be adopted and that this exception to Statewide Rule 37 be **DENIED**.

Respectfully submitted,

Barbara Epstein Hearings Examiner

Donna Chandler, P.E. Technical Examiner