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* KEY ISSUES: Waste                                     *
*               Fair Share                             *
*               Rule 39                                *
*                                                       *
* FINAL ORDER: DENIED                                 *
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RULE 37 CASE NO. 0214723
DISTRICT 3

**APPLICATION OF GINGER PETROLEUM COMPANY FOR AN EXCEPTION TO
STATEWIDE RULE 37 TO DRILL WELL NO. 1, STAMPER-WILSON LEASE,
GIDDINGS (AUSTIN CHALK-3), GIDDINGS (AUSTIN CHALK-GAS) AND WILDCAT
FIELDS, FAYETTE COUNTY, TEXAS.**

APPEARANCES:

FOR APPLICANT:

Doug Dashiell (Atty.)
Joe Alfred Keeling
Steve Hillhouse
Walter A. Williford

APPLICANT:

Ginger Petroleum Company
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"
"

FOR PROTESTANTS:

James Bostic (Atty.)
Terry Payne
Lee Higgins
Andrew Taylor (Atty.)

Kerry Pollard

PROTESTANTS:

C.R.M.
"
"
Stable Energy & Anchor
Operating
"

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

APPLICATION FILED:

January 3, 1997

AMENDED NOTICE OF HEARING:

March 6, 1997

DATE CASE HEARD:

April 11 & April 16, 1997

HEARD BY:

Marshall Enquist
Hearings Examiner
Donna Chandler
Technical Examiner

TRANSCRIPT DATES:

May 15 & May 22, 1997

PFD CIRCULATION DATE:

September 22, 1997

STATEMENT OF THE CASE

Ginger Petroleum Company ("Ginger" or "applicant") seeks an exception to Statewide Rules 37 and 39 to drill its proposed Well No. 1 on the Stamper-Wilson Lease ("subject lease") for the Giddings (Austin Chalk-3), Giddings (Austin Chalk-gas) and Wildcat Fields. The application is protested by CRM Energy, Inc. ("CRM") and Stable Energy ("Stable"). Walter Williford, a mineral interest owner in the J. Cooke Wilson tract, appeared in support of the application. The Giddings (Austin Chalk-3) Field Rules require spacing of 467 feet from lease lines and 1200 feet between wells, on 160 acre units with an 80 acre option. The Giddings (Austin Chalk-gas) Field Rules also require spacing of 467 feet from lease lines and 1200 feet between wells, on 160 acre units with an 80 acre option. The Wildcat Field is on Statewide rules, which require lease line spacing of 467 feet, with 1200 feet between wells, on 40 acre units. The 132.62 acre Stamper-Wilson Unit consists of the 80.56 acre Betty Stamper tract to the northwest and two J. Cooke Wilson tracts to the southeast, which together comprise 52.06 acres. The J. Cooke Wilson tract was once contiguous, but is now divided into two tracts 1,500 feet apart because the center section of the original tract was assigned to the CRM Schumacher No. 2 Unit. The J. Cooke Wilson tract now consists of a 38.27 acre tract contiguous to the Betty Stamper tract and a separate 13.79 acre tract 1500 feet to the southeast (see Attachment I) which necessitates the request for an exception to SWR 39.

DISCUSSION OF THE EVIDENCE**APPLICANT'S EVIDENCE**

The applicant, Ginger, presented two expert witnesses and five exhibits on direct, plus one additional exhibit on cross-examination, basing its case on waste and confiscation. Ginger noted the difficulty of determining currently recoverable reserves in the Austin Chalk, and suggested that their fair share should be determined by reference to production figures for the seven nearest horizontal wells. These cumulative production figures range from a high of 3,122,158 Mcf of gas and 109,573 bbls of oil on the Moonstone Unit to a low of 1,236,231 Mcf of gas and 42,837 bbls of oil on the Britta 1 Unit. Ginger suggests that its fair share lies somewhere in between those production figures. Ginger's proposed wellbore would have a horizontal run 3,910 feet long.

Ginger presented seismic evidence indicating the presence of three fracture zones underlying their tract. The northernmost fracture zone is 990 feet wide (F-1 on Attachment I). The central fracture zone, lying just north of the point at which the subject lease narrows into a southeastern panhandle, is 660 feet wide (F-2 on Attachment I). Ginger presented evidence that the central fracture zone is inferior in quality to the northern fracture zone. The southernmost fracture zone, which lies at the southern end of the southeastern panhandle of the contiguous tract, is 990 feet wide (F-3 on Attachment I).

PROTESTANTS' EVIDENCE

CRM

CRM presented two expert witnesses and fourteen exhibits on direct, plus one exhibit on cross-examination. CRM argues that Ginger is entitled to a regular location on its tract, but not to an extension of the wellbore into the narrow southeastern portion of its tract. CRM asserts that any hydrocarbons under that portion can be drained from a regular offsetting location and thus there is no case for extending Ginger's wellbore into this area on the basis of waste.

CRM also asserts that Ginger cannot prove confiscation because Ginger can recover its fair share of hydrocarbons from a well at a regular location, with a horizontal wellbore 1,725 feet long. CRM believes Ginger's fair share can be determined by comparison to average recoveries per acre from 43 horizontal wells within a 3 1/2 mile radius of applicant's proposed location. From this study area, CRM derived a figure representing linear feet of horizontal wellbore divided by lease acreage (feet/acre) which CRM believes can be fairly used to approximate the length of horizontal wellbore that Ginger is entitled to given the number of acres in its unit. CRM derived a second ratio representing the median MMCFe (million cubic feet of gas equivalent) EUR per horizontal displacement foot (MMCFe/foot), as well as a third ratio representing the median MMCFe EUR per acre. Using the second ratio, CRM estimates that Ginger is entitled to a recovery of 0.580 MMCFe/foot, which, for a 1,725 foot horizontal run, would result in a recovery of 1,000.2 MMCFe EUR. Using the third ratio, CRM believes the 132.62 acre Ginger tract would be expected to recover 874 MMCFe. If the Rule 39 is not allowed, the Ginger tract will consist of only 118.83 acres and would be expected to recover 783 MMCFe.

STABLE ENERGY

Stable Energy presented one expert witness and one exhibit on cross-examination. Stable argued that Ginger failed to show it could not recover its fair share with a regularly located well. Although conceding that Ginger is entitled to protection against confiscation, Stable argues that Ginger is only entitled to protection against net uncompensated drainage and that the 3 1/2 mile radius study area shows that Ginger can obtain its fair share with a 1,725 foot wellbore. Stable supports CRM's position that Ginger has provided no evidence which would justify an exception

based on waste or confiscation.

EXAMINERS' OPINION

Ginger's applied-for Stamper-Wilson Unit consists of 132.62 acres, but 13.79 acres of this is a non-contiguous tract approximately 1500 feet southeast of the main tract. Ginger seeks a Statewide Rule 39 exception to allow the non-contiguous acreage to be included in the drilling unit. The rule, in its entirety, states:

§3.39 RULE 39 PRORATION AND DRILLING UNITS - CONTIGUITY OF ACREAGE AND EXCEPTION THERETO.

- (a) Proration and drilling units established for individual wells drilled or to be drilled shall consist of acreage which is contiguous.
- (b) An exception to the contiguous acreage provision may be granted at the operator's request if acreage that is to be included in the proration or drilling unit is separated by a long, narrow right-of-way tract.

16 TAC §3.39. The only exception listed in the rule is for long, narrow right-of-way tracts, such as would be produced by highways, county roads, and railways. The Commission has granted exceptions under this rule in the past for small, non-contiguous tracts isolated from a parent tract by a distance much greater than would be expected of a narrow right-of-way if the isolated tract could be shown to be productive in the same field as the parent tract and if the exception could be shown to prevent waste or protect correlative rights.

Even if it is assumed that this tract is productive in the Austin Chalk, no case has been made that the SWR 39 exception is necessary to prevent waste or protect correlative rights. There has been no showing that offsetting wells at regular locations cannot drain this tract, thus causing waste. Even if this were shown, applicant does not propose to extend its wellbore to this tract, so the applicant would not be draining this tract either and waste would not be prevented by the grant of an exception.

Granting this exception would adversely affect the correlative rights of two sets of mineral interest owners. First, inclusion of the 13.79 acre tract in the unit would increase the unit allowable, allowing a greater recovery by the parent tract, adversely affecting the correlative rights of offset tract owners. Second, the mineral interest of Betty Stamper, owner of a mineral interest in 80.56 acres of the applied-for unit, would be diluted, thereby harming her correlative rights. The non-contiguous 13.79 acre tract is separated from the parent tract by approximately 1,500 feet, not by a narrow right-of-way. Additionally, the 13.79 acre tract was created when 30 acres of the original tract were

assigned to the Schumacher No. 2 Well in the Giddings (Austin Chalk-gas) Field. As to that field, the 13.79 acre tract is a voluntary subdivision and is not entitled to protection from confiscation. It is unknown whether the 13.79 acre tract is a voluntary subdivision as to the Giddings (Austin Chalk-3) Field because applicant failed to carry his burden of proof by giving the date the assignment of the 30 acre portion of the original tract took place. There is no basis under SWR 39 or other Commission authority to grant an exception to the contiguity requirement for this tract. The examiners recommend that the Statewide Rule 39 exception be denied. Because the examiners recommend that the Statewide Rule 39 exception be denied, the Stamper-Wilson tract will be considered to consist of 118.83 acres for the remainder of this discussion.

Exceptions to Statewide Rule 37 may be granted to prevent waste or to protect correlative rights/prevent confiscation. An applicant seeking an exception to Rule 37 based on waste must establish three elements: 1.) that unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought; 2.) that, as a result of these conditions, hydrocarbons will be recovered by the well for which a permit is sought that would not be recovered by any existing well or by additional wells drilled at regular locations; and 3.) that the volume of otherwise recoverable hydrocarbons is substantial.

Applicant has failed to demonstrate the existence of an unusual condition which would result in waste if the exception permit is not granted. Ginger suggested the possibility that the three fractures under its tract could be very short, and if this were true, that they might not extend onto the offset tracts, preventing recovery of those hydrocarbons. Ginger did not provide any evidence that this was the case, but presented expert testimony that fracture lengths in the Austin Chalk vary from 400 feet to 9,000 feet, with a typical length of 800 to 1,500 feet. CRM countered by presenting testimony that, in the area of the applied-for well, there is between-well communication at distances up to 7,000 feet and that the linear extent of fractures in this area is more typically in the range of thousands of feet rather than hundreds of feet. Ginger has not shown that the hydrocarbons under its tract cannot be recovered by adjacent wells off-lease and, therefore, is not entitled to an exception based on waste.

To obtain an exception to Statewide Rule 37 to protect correlative rights, the applicant must show that: 1.) It is not possible for the applicant to recover its fair share of minerals under its tract from regular locations; and, 2.) that the proposed irregular location is reasonable. A mineral interest owner's fair share is measured by the currently recoverable reserves under his property.

Ginger argues that its fair share may be determined by reference to the cumulative recoveries of the seven wells nearest its tract. This argument is ill-conceived because an applicant is only entitled to an opportunity to recover the reserves under its tract. It is not entitled to recover an amount equal to the reserves recoverable for neighboring tracts. Furthermore, although it is true that the seven wells nearest to the proposed Ginger well each have high cumulatives (ranging from

1,236,231 MCF to 3,122,158 MCF), it is also true that the acreage of those tracts¹ is greater than that of the Ginger tract and that the horizontal wellbores on those units are longer than the proposed Ginger horizontal wellbore. Ginger made no other estimate of its fair share.

Protestants argue that Ginger can recover its fair share with a regular location, and recover as much, on average, as other wells within an arbitrarily selected 3 1/2 mile radius study area. CRM suggested Ginger's fair share can be calculated as a ratio of MMCFe EUR to lease acres. Using 36 wells within a 3 1/2 mile radius of the proposed Ginger location, CRM derived a fair share recovery average of 6.59 MMCFe/acre. Using CRM's method, Ginger's fair share for its 118.83 acre tract is 783.1 MMCFe. The same process, using the 7 wells nearest the Ginger tract, results in a figure of 8.51 MMCFe/acre. Using the latter figure, the one most advantageous to Ginger, results in an expected fair share recovery for the 118.83 acre tract of 1,011.24 MMCFe.

CRM, using 43 horizontal wells within a 3 1/2 mile radius of the proposed Ginger well, derived a "Horizontal Displacement to Acre" ratio of 10.9 feet/acre. By applying CRM's method to the seven wells nearest to the Ginger tract, the examiners derived a Horizontal Displacement to Acre ratio of 11 feet/acre, a figure almost identical to the one derived by CRM over a much larger area. Using the latter figure (horizontal displacement of 11 feet/acre), the Ginger 118.83 acre tract would, in comparison to the seven nearest tracts, be expected to have a 1,307.13 foot horizontal wellbore, which is about 417 feet shorter than the 1,725 foot wellbore Ginger would be entitled to at a regular location.

CRM also derived a median figure from 36 nearby wells representing a "MMCFe EUR to Horizontal Displacement" ratio (MMCFe/foot), yielding a figure of 0.580 MMCFe/foot. Using the seven wells nearest the Ginger location results in a higher figure, 0.75 MMCFe/foot. Using the latter figure (the one most advantageous to Ginger) and assuming a 1725 foot horizontal wellbore, the Ginger tract would be expected to recover 1,293.75 MMCFe.

Ginger failed to meet its burden of proof because it did not provide a credible estimate of the subject tract's fair share and therefore is not entitled to the applied-for exception. Protestant CRM provided a credible estimate of the tract's fair share and showed that it can be recovered from a regularly located well. Due to variations within the field, the examiners believe it is reasonable to base Ginger's fair share on the recoveries from the nearest wells, in this case the seven nearest wells that Ginger cites. Assuming 1,011.24 MMCFe to be Ginger's fair share, it is probable that Ginger can recover more than its fair share (1,293.75 MMCFe) with a wellbore 1,725 feet long at a regular location. Because Ginger can recover its fair share of the hydrocarbons under its tract from a regular location, the examiners recommend that the Statewide Rule 37 exception be denied.

¹ The acreages of the seven nearest horizontal wells cited by Ginger and the lengths of their horizontal runs are: a.) Marathon Britta #1 - 320 acres, 3,831 feet; b.) Marathon Britta #2 - 530 acres, 4,591 feet; c.) Marathon Kristina #2 - 160 acres, 2,145 feet; d.) UPRC Garnet #1 - 831 acres, 8,694 feet; e.) UPRC Giant #1 - 401 acres, 4,574 feet; f.) UPRC Jasper #1 - 613 acres, 6,914 feet; g.) UPRC Moonstone #1 - 589 acres, 6,708 feet.

FINDINGS OF FACT

1. Notice of hearing was given on March 6, 1997 to all designated operators, lessees of record for tracts that have no designated operator, and owners of record of unleased mineral interests for each adjacent tract and each tract nearer to the well than the prescribed minimum lease-line spacing distance.
2. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed or have occurred.
3. The applicant, Ginger Petroleum Company, seeks an exception to Statewide Rule 37 to drill Well No. 1 on the Stamper-Wilson Lease. Applicant proposes to drill its well at a surface location 314 feet FNWL and 458 feet FSWL of the unit, and 2350 feet FSEL and 14,400 feet FSWL of the survey with a terminus 50 feet FSEL and 337 feet FNEL of the unit, and 1560 feet FNWL and 14,300 feet FSWL of the survey. Applicant has applied for completion of its proposed well in the Giddings (Austin Chalk-3), Giddings (Austin Chalk-gas) and Wildcat Fields. Both Austin Chalk Fields have leaseline spacing rules of 467 feet, with 1200 feet of between-well spacing on 160 acre units with 80 acre options. The Wildcat Field is on statewide rules, which require leaseline spacing of 467 feet, with 1200 feet of between-well spacing, on 40 acre units.
4. The 13.79 acre Wilson tract cannot be drained from the 118.83 acre main tract, nor will it contribute to the production of any well located on the main tract.
5. The 13.79 acre Wilson tract is separated from the 118.83 acre main tract by approximately 1500 feet.
6. Applicant's Stamper-Wilson Lease is a tract of regular size and shape, containing 118.83 acres.
7. Ginger Petroleum Company can recover its fair share of the hydrocarbons underlying its 118.82 acre Stamper-Wilson unit from a regular location.

CONCLUSIONS OF LAW

1. Proper notice was timely given to all parties legally entitled to notice.
2. The application on Form W-1 was properly filed.

3. All things have occurred and have been done to give the Commission jurisdiction to decide this matter.
4. An exception to the lease-line spacing rules for the applied-for fields is not necessary to give the mineral interest owners of the Stamper-Wilson unit a reasonable opportunity to recover their fair share of hydrocarbons in the subject fields underlying the unit.
5. The 13.79 acre Wilson tract is not entitled to an exception to Statewide Rule 39.
6. Denial of the Statewide Rule 39 exception will not cause waste or harm correlative rights.

RECOMMENDATION

The examiners recommend that Applicant's request for an exception to Statewide Rule 37 for its Stamper-Wilson Lease, Well No. 1, as to the Giddings (Austin Chalk-3), Giddings (Austin Chalk-gas) and Wildcat Fields be denied. The examiners also recommend that the exception to Statewide Rule 39 for the 13.79 acre Wilson tract be denied.

Respectfully submitted,

Marshall F. Enquist
Hearings Examiner

Donna Chandler
Technical Examiner

MFE