

Key Issues:

R37 Granted/Denied

RULE 37 CASE NO. 0222480

**APPLICATION OF FALCON RESOURCES, INC. FOR AN EXCEPTION TO STATEWIDE
RULE 37 FOR ITS T. FERGUSON WELL NO. 1, FERGUSON LEASE, EAST TEXAS
FIELD, RUSK COUNTY, TEXAS.**

APPEARANCES:

FOR APPLICANT:

Jamie Nielson (Attorney)
George Neale (Attorney)
Richard A. Johnston
Brad Faulkner
Tom Sartor

APPLICANT:

Falcon Resources, Inc.
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FOR PROTESTANTS:

Mike McElroy (Attorney)
Thomas D. Worley

PROTESTANTS:

Bargo Energy Company
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PROPOSAL FOR DECISION

PROCEDURAL HISTORY

APPLICATION FILED:

August 24, 1990

NOTICE OF HEARING:

September 2, 1999

DATE CASE HEARD:

October 12, 1999

HEARD BY:

Marshall Enquist, Hearings Examiner
Margaret Allen, Technical Examiner

TRANSCRIPT DATE:

October 15, 1999

PFD CIRCULATION DATE:

February 10, 2000

STATEMENT OF THE CASE

Falcon Resources, Inc. ("Falcon") seeks an exception to the East Texas Field Rules to drill its proposed Well No. 1 on the 66.5 acre Ferguson Lease in the East Texas Field. The application is protested by Bargo Energy Company ("Bargo"), an offset to the east and north of the proposed location. The East Texas Field requires spacing of 330 feet from leaselines and 660 feet between wells on 5 acre units. A Railroad Commission memo, dated June 24, 1957 and titled "Rule 37 and Density Policy for East Texas Field Applications", indicates that edge tracts with five available productive acres are entitled to leaseline spacing of 233 feet and between-well spacing of 467 feet. In the event that a well at a 233 foot location is not likely to be a producer, a location no closer than 100 feet from the leaseline may be granted.

The applied-for well location is 100 feet south of the southerly north line of the lease and 125 feet east of the westerly west line of the of the lease (see Attachment I).

DISCUSSION OF THE EVIDENCE

APPLICANT'S EVIDENCE

Falcon presented one expert witness and 17 exhibits. Falcon argues that its lease is entitled to an exception to the usual East Texas Field leaseline spacing rules pursuant to a June 24, 1957 Commission memo. According to that memo, if a tract is shown to be located at the edge of the East Texas Field and contains at least 5 available productive acres, it is subject to 233 foot leaseline spacing and 467 feet between-well spacing. Further, in the event that it is improbable that a well at 233 feet will be a producer, a first well on the lease may be granted no closer than 100 feet from the leaseline.

Falcon presented an isopach map indicating that the 66.5 acre Ferguson Lease consists entirely of productive acreage, with approximately 10-12 feet of productive sand at the NW side of the lease, gradually pinching out to a zero line just southeast of the lease. No production exists to the southeast of the lease, indicating that the Ferguson Lease is an edge tract. Currently, there is no producing well on the Ferguson Lease.

The Ferguson Lease is bordered to the north and west by the South Kilgore Unit, a tract unitized for secondary recovery. As the South Kilgore Unit re-pressures the field and drives oil away from its injector wells, some of the swept oil will be driven to the Ferguson Lease. Falcon estimates there are 113,000 barrels of recoverable oil beneath its lease. At this time, there is no well in place on the Ferguson Lease to recover this oil, or any oil swept onto the lease. Oil swept from the South Kilgore Unit onto the Ferguson Lease would enter the reservoir pinch-out and, absent any producing well, become unrecoverable. Falcon's isopach maps indicate that there is 12-14 feet of productive sand at the northwest corners of the lease, 12 feet of sand at the proposed 100 foot location, and 10 feet of sand at a 233 foot location. Falcon believes the proposed location near the north end of the westerly west line of its lease will present the best opportunity for drilling a producing well. Falcon fears that locations farther south and southeast will find reduced sand thickness and reductions in

sand quality.

Falcon presented an exhibit delineating an area from which oil will be swept from the South Kilgore Unit by Kilgore Unit Injection Well No. 59-1 (see Attachment II). Falcon argues that oil within these lines will be driven onto the Ferguson Lease and cannot be recovered by existing wells on the South Kilgore Unit. According to Falcon, a well on the Ferguson Lease at the 100 by 125 foot applied-for location will recover the reserves from 5.5 acre-feet of sand on the Ferguson Lease (1,601 BO) and the reserves swept from another 69.5 acre-feet of sand from the South Kilgore Unit for a total of 21,838 BO. A well at the 233 by 233 foot location will drain 21 acre-feet of sand on the Ferguson Lease (6,115 BO) and also recover the reserves swept from 77 acre-feet of sand under the South Kilgore Unit for a total of 28,535 BO. Falcon anticipates very little radial drainage. Most of the oil recovered by either location will be swept from the South Kilgore Unit.

Falcon believes that a well location as close to the lease line as possible is desirable because sand discontinuities and pinchouts in the field can be abrupt. Falcon offers the example of the Rosa Jones No. 5 and the Rosa Jones No. 5A, just 1200 feet north of the Ferguson Lease. These wells are only fifty feet apart, yet the Rosa Jones No. 5 shows approximately 8 feet of producing sand whereas the Rosa Jones No. 5A does not show the equivalent sand at all.

PROTESTANT'S EVIDENCE

Bargo presented two witnesses and six exhibits. Bargo noted that the plugged Agey Well No. 1 (shown by the purple dot on Attachment II) is found at a regular 330 foot lease line spacing location on the Ferguson Lease. Driller's logs show this well encountered 12 feet of sand, contradicting Falcon's isopach showing only about 8 feet of sand at that location. Bargo defended the log showing 12 feet of sand, arguing that the logger probably based this interpretation on sand in the returns and an increase in the rate of penetration. Records show that the Agey No. 1 flowed 40 barrels of oil in 30 minutes on completion, which Bargo believes is a pretty good well. Bargo's witness stated that the 330 foot location will make a good well and will recover as much oil (if not more) as the proposed well or a well located at the 233 foot location, with the added benefit of preventing waste. Bargo argues that if Falcon thinks it needs 12 feet of sand to drill a producing well at the 100 x 125 location, that there are 12 feet of sand at a regular 330 foot lease line spacing location as shown by the driller's log of the Agey No. 1.

EXAMINERS' OPINION

Spacing rules in the East Texas Field require 330 foot lease line spacing and 660 foot between-well spacing on 5 acre units. Falcon has requested an exception location pursuant to a June 24, 1957 Commission memo which permits special field rules for tracts at the edge of the field. The first three paragraphs of that memo are pertinent to this case.

1. A rule 37 permit will be granted only if the total surface acres of a legally established tract, divided by the total number of existing wells plus the one for which a permit is requested, does not result in a density of less than five acres per well.

2. Additional permits will be granted on legally established edge tracts only if sufficient step out for a new location is made to prove up five additional productive acres. This will be construed as meaning that such step out well must be located not less than 233' from the nearest property line and 467' from the nearest producing well on the same tract.

3. An exception to 2 above may be granted for a first producing well on a tract in the event that previously plugged and abandoned wells on said tract or on adjoining tracts indicate that it is highly improbable that a producing well could be drilled 233' from the property lines, such first producing well to be located at least 100' from the property lines. In the case where one or more producing wells already exist on an edge tract, the Commission will not grant additional wells other than 467' from the nearest well and 233' from the property line, as provided in 2 above, except when evidence presented at a hearing justifies, and in such case there must be a clear showing that sufficient productive acreage exists to comply with the Commission's 5 acre density rule.

(Tex. R.R. Comm'n Memo, *Rule 37 and Density Policy for East Texas Field Applications*, June 24, 1957)(see Attachment III) Currently, the 66.5 acre Ferguson Lease does not have a producing well. Granting a permit for a single well on the lease will not result in a density of less than five acres per well, thus the requirements of Paragraph 1 of the memo are met. There is no production to the southeast of the Ferguson Lease, therefore it appears to be at the edge of the East Texas Field, and qualifies as an edge tract. Falcon's isopach maps indicate that all 66.5 acres of the Ferguson Lease are productive, thus there is no difficulty proving five productive acres under Paragraph 2. Pursuant to the June 24, 1957 Memo, Falcon is entitled to a well location 233 feet from its lease line.

Falcon has applied for a 100 foot location which is permissible under Paragraph 3 of the memo if a 233' location would be "highly improbable" to result in a producing well. However, Falcon's own evidence demonstrates that a well at a 233' location will recover more oil (28,535 BO) than a well at a 100' location (21,838 BO).¹ Beyond this, Falcon's evidence is contradictory. Falcon's Exhibit No. 2 (see Attachment IV) purports to be a conceptual schematic suggesting the possibility that sand thickness and quality may pinch out abruptly just past a 233 foot spacing location. This would tend to repudiate Falcon's Exhibit No. 13 (see Attachment II), which shows a gentle pinch-out of sand from NW to SE, with drillable sand over a much greater range than suggested by Exhibit No. 2. Falcon cannot have it both ways, claiming the presence of productive sand over its entire 66.5 acre Ferguson Lease to meet the productive acreage requirement of the 1957 memo and then claiming very limited sands in order to qualify for a 100 foot location. Falcon is not entitled to the applied-for location 100 feet from the north lease line under the 1957 memo.

Although Falcon has failed to show that it is entitled to the applied-for exception location under the June, 1957 memo, it may still be entitled to a Rule 37 exception to prevent waste or confiscation.

¹ The Protestant's evidence relating to the sand thickness, 12 feet, encountered by the currently plugged Agey No. 1, which is at a 330 foot lease line spacing location, suggests that a well at a 233 foot location would be likely to encounter an even greater sand thickness and be a good producer. Falcon's own evidence shows that the Agey No. 1 produced 20,000 BO in ten years. Falcon was able to blunt the impact of this information by pointing out that it is unknown whether the Agey No. 1 is vertical or a slant-hole, implying that the well may actually be bottomed in thicker sands to the NW of its surface location.

An applicant seeking an exception based on waste must establish three elements: 1.) unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought; 2.) as a result of the unusual conditions, hydrocarbons will be recovered by the well for which the permit is sought that would not have been recovered by any existing well or by additional wells drilled at regular locations; and 3.) that the volume of otherwise unrecoverable reserves is substantial.

Falcon's own evidence shows that a well drilled at a more regular location (233 feet in this case) will recover more oil than a well drilled at the applied-for location. Falcon is not entitled to the applied-for location based on prevention of waste.

To obtain an exception to Statewide Rule 37 to prevent confiscation/protect correlative rights, the applicant must show: 1.) that it is not possible for the applicant to recover its fair share by placing the well at any regular location; and 2.) that the proposed irregular location is reasonable.

Falcon did not show that it could not recover its fair share by placing the proposed well at a regular 330 foot location, or at a 233 foot location, which is arguably regular under the 1957 memo. Falcon's own evidence indicates a greater recovery farther from the lease line than the proposed location. Falcon is not entitled to the proposed exception location under Statewide Rule 37 based on prevention of confiscation/protection of correlative rights.

Accordingly, the examiners find that Falcon is not entitled to a well at its proposed location, but does meet the requirements for a well location pursuant to the 1957 memo at 233 feet.

Based on the record in this docket, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. Notice of hearing was given on September 2, 1999, 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, Falcon Resources, Inc., seeks an exception to the East Texas Field Rules pursuant to a June 24, 1957 Commission memo titled "Rule 37 and Density Policy for East Texas Field Applications" to drill Well No. 1 on the Ferguson Lease. Applicant proposes to drill its well at a location 100 feet FNL and 125 feet FWL of the unit, and 4025 feet FNL and 2875 feet FWL of the survey. Applicant has applied for completion of its proposed well in the East Texas Field, having spacing rules requiring 330 foot lease line spacing and 660 foot between well spacing, on 5 acre units.

4. Applicant's Ferguson Lease is a tract of regular size and shape, containing 66.5 acres. Currently, there is no producing well on the Ferguson Lease.
5. Pursuant to the June 24, 1957 memo titled "Rule 37 and Density Policy for East Texas Field Applications", tracts in the East Texas Field, composed of at least five productive acres and located on the edge of the field, are entitled to a well drilled on 233 foot leaseline spacing and 467 foot between-well spacing.
6. The Ferguson Lease is located on the edge of the East Texas Field and contains at least 5 productive acres available for assignment to the proposed well.
7. A well at a 233 foot location will recover more oil from the East Texas Field than a well at the proposed 100 x 125 foot location.
 - a. A well at the applied-for location, 100 feet south of the southerly north line and 125 feet east of the westerly west line, will recover 21,838 BO.
 - b. A well at a location 233 feet south of the southerly north line and 233 feet east of the westerly west line will recover 28,535 BO.
8. Falcon's isopach map indicates there is sufficient sand (12 feet plus) at the 233 foot location for a productive well in the East Texas Field.
9. The sand quality of the East Texas Field is at least as good at the 233 foot location as at the 100 foot location.

CONCLUSIONS OF LAW

1. Proper notice was timely given to all parties legally entitled to notice.
2. The Commission has jurisdiction to decide this matter.
3. The mineral interest owners of the Ferguson Lease are entitled to a location 233 feet from leaselines to protect their correlative rights pursuant to the June 24, 1957 Commission memo titled "Rule 37 and Density Policy for East Texas Field Applications."
4. The mineral interest owners of the Ferguson Lease are not entitled to their applied-for exception location 100 feet south of the southerly north line and 125 feet east of the westerly west line of the lease pursuant to the June 24, 1957 Commission memo titled "Rule 37 and Density Policy for East Texas Field Applications."
5. The mineral interest owners of the Falcon Lease are not entitled to an exception for their proposed location under the provisions of Statewide Rule 37 to prevent waste or prevent confiscation/protect correlative rights.

RECOMMENDATION

The examiners recommend that Applicant's request for an exception to the field rules for the East Texas Field pursuant to the June 24, 1957 Commission memo titled "Rule 37 and Density Policy for East Texas Field Applications" for the applied-for location of Well No. 1, Ferguson Lease, East Texas Field, Rusk County, Texas be denied. The examiners recommend that Applicant be granted an exception permit, pursuant to the June 24, 1957 memo, for its Well No. 1, Ferguson Lease, East Texas Field, Rusk County, at a location 233 feet east of the westerly west line and 233 feet south of the southerly north line of the lease.

Respectfully submitted,

Marshall F. Enquist
Hearings Examiner

Margaret Allen
Technical Examiner

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