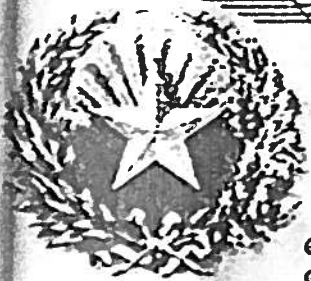


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OFFICE OF

RAILROAD COMMISSION

OF TEXAS.



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Rule 37 Case No. 0203508

APPLICATION OF AMOCO PRODUCTION COMPANY FOR EXCEPTIONS TO STATEWIDE RULES 37 AND 38 TO DRILL ITS WELL NO. 2-12, GLISAN LEASE, ALLISON PARKS (U. MORROW) FIELD, HEMPHILL COUNTY, TEXAS

APPEARANCES:

REPRESENTING:

APPLICANT

Tim George (Attorney)
Robert G. Kemp
Stuart E. McFarland
Darrell Finneman

Amoco Production Company

INTERESTED PARTY

David Nelson
Robert D. McKenna
Paul Clark

Samson Resources

PROTESTANT

George Neale (Attorney)
Bobby Gibson
Bruce Heath
W.N. McKinney, Jr.

Sonat Exploration Company

PROCEDURAL HISTORY

Application Filed:
Notice of Hearing:
Hearing Held:
PFD Circulated
Heard by:

September 30, 1993
November 2, 1993
December 15, 1993
May 3, 1994
Jeffrey T. Pender, Hearings Examiner
Thomas H. Richter, P.E., Technical Examiner

STATEMENT OF THE CASE

A joint hearing was held to consider the exception applications of Amoco Production Company ("Amoco") and Sonat Exploration Company ("Sonat") because the applications involve similar issues of fact and law. Both applications were for exceptions to Rules 37 and 38. Only Amoco's application is the subject of this Proposal for Decision. Sonat's Application is the subject of companion Docket No. 0203727.

Amoco has applied to drill its Well No. 2-12 on the Glisan Lease ("subject lease and well"), in the Allison Parks (U. Morrow) Field, Hemphill County, Texas. Field rules require 467' lease line spacing, 3735' between-well spacing and 640 acre density. The proposed well is 3542' from the Glisan No. 1 and is the second well on the lease in the applied-for field. Therefore exceptions to Statewide Rules 37 and 38 are required. The proposed location is, however, regular with respect to lease lines. The exceptions are sought to prevent confiscation. Exceptions based on waste were not pleaded.

Amoco's application was protested by Sonat. Sonat requests that if Amoco is granted this permit Sonat be granted a permit to drill an offset well to the southeast to prevent drainage of their Lee lease (see attached plat). Sonat's location would also be regular with respect to lease lines but is only 3382 feet from the Lee 2-5. The Lee lease already contains two completions in the applied-for field. Sonat's application is for the third well on the Lee lease.

Samson Resources appeared as an interested party in the Amoco application and a protestant in the Sonat application. Samson's direct and cross refers mostly to Sonat's application and so will be discussed in the Proposal for Final Decision in the companion Docket No. 0203727.

DISCUSSION

The Glisan Lease is a regular tract with one well in the applied-for field. In order to get an exception well on the tract, Amoco must refute a regular location, show the proposed location to be reasonable and prove that the applied-for location is necessary to recover their share of hydrocarbons from under the lease.

The only regular locations available on the Glisan Lease are found immediately southwest of the Brown No. 1 (see the attached plat). The Brown No. 1 encountered 7 feet of gross Puryear sand but was not completed in that interval. Amoco claims that any regular well drilled in the immediate area of the Brown No. 1 would not be productive from the Puryear. They presented core and sediment source studies showing that the reservoir quality

and thickness increase away from the Brown No. 1 toward the eastline of the Lease. This point was uncontroverted by Sonat.

Amoco must also show that without this permit, they would be denied a reasonable opportunity to recover their share of hydrocarbons from under the lease. To calculate its share, Amoco used well log, core and sediment source studies to produce a net sand map from which gas-in-place could be determined. It is undisputed that the Glisan Lease contained at least 12 BCF recoverable reserves prior to any exploitation. The Glisan No. 1 has recovered 3.6 BCF through June, 1993. The well will probably produce another 1.7 BCF yielding an ultimate recovery of 5.3 BCF. No other wells have ever drained the lease. This means that there is an additional 7 BCF that will not be recovered by the applicant if the exception permit is not granted. It was not alleged or proved that Amoco would receive their share of Glisan Lease reserves from other wells.

EXAMINERS' RECOMMENDATION

The evidence most disputed at the hearing was the shape of the "net sand" contours. Whereas Sonat's maps were derived using some qualitative geologic bias, they were by and large the product of "mechanical contouring." Amoco made more use of the available geologic information (expected sand body geometry and sediment transport direction) to intelligently constrain the contours of its final maps. Consequently, the examiners believe that Amoco's recoverable reserve estimates are more accurate.

Regular locations were sufficiently refuted by the applicant and the proposed location is reasonable. The applicant should be granted exceptions to Statewide Rules 37 and 38 for its Glisan No. 2-12.

FINDINGS OF FACT

1. Notice of hearing was given on November 2, 1993, 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 than 467 feet to the proposed well.
2. Amoco Production Company has applied on Form W-1 for a permit to drill Well No. 2-12 on the Glisan Lease. This would be the second well on the lease in the subject field. The Glisan Lease is a regular tract containing 640 acres.
3. Amoco has applied for completion of its proposed well in the Allison Parks (U. Morrow) Field having spacing rules of 467' lease line, 3735' between-well and 640-acre density.

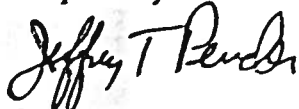
4. A well at a regular location would not give Amoco a reasonable opportunity to recover its share of hydrocarbons under the subject lease.
 - a. There are regular drilling locations available to the southwest of the Brown No. 1.
 - b. The Brown No. 1 is not productive from the Puryear sand. The gross sand interval is 7 feet thick but has no net pay.
 - c. A regular well drilled to the southwest of the Brown No. 1 would probably be non-productive in the Puryear because the Brown No. 1 contained no productive Puryear sand.
5. The proposed location is necessary in order to give Amoco a reasonable opportunity to recover its share of hydrocarbons under the subject lease.
 - a. Recoverable reserves are in excess of 12 BCF. The Glisan No. 1 will ultimately recover only 5 BCF leaving 7 BCF unrecovered.
 - b. There are no regular locations available from which Amoco would have a fair opportunity to recover the remaining 7 BCF.
 - c. Amoco will not recover the remaining reserves from any other well or wells draining the subject tract.
6. The proposed location is reasonable because it is regular to lease lines and minimizes the risks of encountering non-productive Puryear sand.

CONCLUSIONS OF LAW

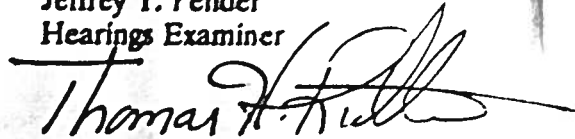
1. Proper notice of hearing was timely given to all persons legally entitled to notice.
2. All things have occurred and have been done to give the Commission jurisdiction to decide this matter.
3. The Glisan Lease is a regular tract.

4. Approval of the applied-for permit to drill a well at the proposed location is necessary to give the mineral interest owners of the subject tract a reasonable opportunity to recover their share of hydrocarbons in the applied-for field underlying the tract.

Respectfully submitted,



Jeffrey T. Pender
Hearings Examiner



Thomas H. Richter, P.E.
Technical Examiner

JTP/kam