

July 25 ,2000

OIL AND GAS DOCKET NO. 03-0225136

APPLICATION OF COX AND PERKINS INC. TO CONSIDER TEMPORARY FIELD RULES FOR THE PHASE FOUR (10500 YEGUA) FIELD, WHARTON COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E.

DATE OF HEARING: July 20, 2000

APPEARANCES:

Lloyd Muennink, attorney
R. Lynn McCoy

REPRESENTING:

Cox & Perkins Inc.

PROTESTANT: none

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the unprotested application of Cox & Perkins Inc. for the Commission to consider temporary field rules for the Phase Four (10500 Yegua) Field that provide for:

1. The entire correlative interval from 10,502' to 10,548' subsurface depth as shown on the Dual Induction-SFL-Density-Neutron-Litho-Gamma Ray log of the Cox & Perkins Exploration Inc., Gold-Zapp Lease Well No. 1, in the L & G.N.R.R. No. 15 Survey, A-236, Wharton County, Texas be recognized and designated as the Phase Four (10500 Yegua) Field.
2. Minimum well spacing of 467'/1200' (lease line/between well),
3. 160 acre gas proration units with 10% tolerance and maximum diagonal of 6,000';
4. An allocation formula based on 100% acreage.

Cox & Perkins originally requested the proposed field rules be adopted as permanent. The examiner believes that temporary field rules subject to review in 18 months be adopted based on the the relative data presented at the hearing. Cox & Perkins did not considered this to be adverse.

DISCUSSION OF THE EVIDENCE

The Phase Four (10500 Yegua) Field was discovered May 30, 1987 by completion of the Cox & Perkins Exploration inc, Gold-Zapp Lease Well No. 1 through perforations from 10,506' - 10,545' subsurface depth. The field is governed by Statewide Rules. Cox & Perkins is the only operator in the field with one well that is currently shut-in. Since field discovery only two wells have produced from the field. Basic reservoir parameters are: average porosity 25%; average water saturation 30%; average net pay thickness 42.5 feet. It is proposed the entire correlative interval from 10,502' to 10,548' subsurface depth as shown on the Dual Induction-SFL-Density-Neutron-Litho-Gamma Ray log of the Cox & Perkins Exploration Inc., Gold-Zapp Lease Well No. 1, in the L & G.N.R.R. No. 15 Survey, A-236, Wharton County, Texas be recognized and designated as the Phase Four (10500 Yegua) Field.

One hundred and sixty (160) acre gas proration unit density should be appropriate well density for wells completed in the subject field. Cumulative production from the field is 7.27 BCF of gas. The Cox & Perkins, Gold-Zapp Well No. 1 has cumulative production of 5.312 BCF of gas and last produced in August 1998. The Cox & Perkins, Yockey Well No. 1 had cumulative production of 1.958 BCF of gas and last produced in May 1999. A computer model estimates that a well in the subject field assuming a 160 acre drainage area should recover 15.71 BCF of gas. A well on 80 acres should recover 7.86 BCF of gas. A well on 40 acres should recover 3.94 BCF of gas. Cox & Perkins believes that the two wells that had produced from the 10500 Yegua reservoir were located in the channel neck of a fluvial fan deposit. This is confirmed by well log analysis and 3-D seismic data. It is proposed that a well be located in the fluvial fan area where a more homogeneous, thicker sand should be present. The proposed 160 acre density is identical to 11 other Yegua fields in the immediate area.

The proposed minimum well spacing, 467'/1200' (leaseline/between well), is necessary to provide for flexibility in locating wells in this area. The 100% acreage allocation formula will provide for the protection of correlative rights.

EXAMINER'S OPINION

The examiner believes the proposed field rule should be adopted as temporary instead of permanent. No conclusive evidence was presented to substantiate the 160 acre density. The maximum recovery from either of the wells was almost 5.3 BCF of gas which is close to the computer model's predicted 7.86 BCF for 80 acres.

FINDINGS OF FACT

Based on the evidence presented, the examiner proposes the following findings:

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
2. There was no protest at the call of the hearing.
3. The Phase Four (10500 Yegua) Field was discovered May 30, 1987 by completion of the Cox & Perkins Exploration inc, Gold-Zapp Lease Well No. 1 through perforations from 10,506' - 10,545' subsurface depth.
 - a. The field is governed by Statewide Rules.
 - b. Cox & Perkins is the only operator in the field with one well that is currently shut-in.
4. The entire correlative interval from 10,502' to 10,548' subsurface depth as shown on the Dual Induction-SFL-Density-Neutron-Litho-Gamma Ray log of the Cox & Perkins Exploration Inc., Gold-Zapp Lease Well No. 1, in the L & G.N.R.R. No. 15 Survey, A-236, Wharton County, Texas be recognized and designated as the Phase Four (10500 Yegua) Field.
5. One hundred and sixty (160) acre gas proration unit density should be appropriate well density for wells completed in the subject field.
 - a. Cumulative production from the field is 7.27 BCF of gas.
 - b. The Cox & Perkins, Gold-Zapp Well No. 1 has cumulative production of 5.312 BCF of gas and last produced in August 1998.
 - c. The Cox & Perkins, Yockey Well No. 1 had cumulative production of 1.958 BCF of gas and last produced in May 1999.
 - d. The proposed 160 acre density is identical to 11 other Yequa fields in the immediate area.
6. The proposed minimum well spacing, 467'/1200' (leaseline/between well) is necessary to provide for flexibility in locating wells in this area.
7. The 100% acreage allocation formula will provide for the protection of correlative rights.

CONCLUSIONS OF LAW

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Consideration of field rules, a determination of their effectiveness and appropriate actions is a matter within the Commission jurisdiction.
4. Adoption of the proposed fields rule will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed field rules as temporary for 18 months for the Phase Four (10500 Yegua) Field.

Respectfully submitted,

Thomas H. Richter, P.E.
Technical Examiner
Office of General Counsel