

**OIL AND GAS DOCKET NO. 7B-0224485**

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**THE APPLICATION OF L.C.S. PRODUCTION COMPANY FOR TEMPORARY FIELD RULES IN THE WEAVER SPRINGS (PALO PINTO) FIELD, NOLAN AND TAYLOR COUNTIES, TEXAS**

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**Heard by:** Margaret Allen, Technical Hearings Examiner

**Procedural history**

Application received: March 30, 2000

Hearing held: May 9, 2000

**Appearances**

Dale Miller	Representing L.C.S. Production Company
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**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

L.C.S. Production Company is seeking the following temporary field rules:

1. Designated interval from 4651 to 5250 feet as shown on the log of the L.C.S. Production (originally Hallwood Petroleum, Inc.) Connally Unit Well No. 1;
2. 330-933 feet well spacing;
3. 40 acre proration units with 20-acre tolerance for the last well on a lease and a maximum diagonal of 2100 feet; and
4. Allocation based on acreage.

**DISCUSSION OF THE EVIDENCE**

The Weaver Springs (Palo Pinto) Field was discovered in June of 1997, at a depth of 4740 feet. The field is now under Nolan County Regular Rules which provide for 330-933 foot well spacing, 20 acre density and a maximum allowable of 48 barrels per day. There have been nineteen wells completed in the field, though two are now shut-in and two are used as water disposal wells. R.L. Adkins Corp. and Ventex Operating Corp. each operate one well and L.C.S. operates the remaining wells.

The discovery well, the Connally Unit No. 1 was perforated from 4744 to 4750 feet within the Palo Pinto Formation that extends from 4651 to 5250 feet in this well. The initial potential for this well was 194 BOPD and its cumulative production has been 57,000 BO and 29 MMCF of gas. Several other wells have had initial potentials of 100 BOPD or greater and one well, the Guthrie No.

3, had an initial potential of 343 BOPD. Most wells produce less than the current daily allowable but some newly completed wells are capable of producing over 48 BOPD.

Cumulative production from the field as a whole is 227,000 BO and 70 MMCF. The field is believed to have a moderate water drive as water production is increasing. However, the reservoir pressure has decreased and most wells are now being pumped. There has been little decline in production from the Connally Unit No. 1, but the applicant believes that a 40% decline rate is reasonable based on other wells in the field. The discovery well is producing 49 BOPD and, assuming 40% decline, its ultimate recovery will be 90,000 BO.

Porosity in the Palo Pinto is 6%, water saturation equals 35% and the net pay for the various field wells is about 25 feet. The recovery factor is assumed to be 35% due to the partial water drive. Based on these reservoir parameters, there are 96 barrels of recoverable oil per acre-foot. If the Connally Unit No. 1 produces 90,000 barrels of oil, it will drain 38 acres. The field is still being actively developed and when the temporary rules are reviewed in 18 months it may be apparent that infill drilling will be necessary to recover all the available reserves.

The field already has numerous wells that have been drilled under the spacing rule of 330-933 feet, and the applicant believes that future wells to be drilled under the same rule. This spacing will also facilitate infill drilling should it be necessary. Allocation based on acreage will protect correlative rights.

### **FINDINGS OF FACT**

1. Notice of this hearing was given to the applicant, to Ventex Operating Corp., and to all offset operators to the discovery tract on April 18, 2000.
2. The other operator in the field--R.L. Adkins Corp.--acquired its one producing well after the notice of hearing was issued but was notified of its right to participate at least 10 days prior to the entry of the final order.
3. The discovery well, the Connally Unit Well No. 1, was perforated from 4744 to 4750 feet in the Palo Pinto Formation on May 31, 1997.
4. There are already fifteen active wells in the field, with more being drilled, and cumulative production from the field is 227,000 BO and 70 MMCF of gas.
5. The field is now under Nolan County Regular Rules which specify 20-acre density and a maximum allowable of 48 BOPD.
6. Temporary rules of 40-acres are appropriate for a period of 18 months.
  - a. The initial potential of the discovery well was 194 BOPD, with 96 MCF of gas.
  - b. Several other wells in the field had initial potentials of 100 BOPD or greater, and some of the newest wells are capable of producing more than 48 BOPD.

- c. Volumetric calculations indicate that 96,000 barrels of oil are recoverable from underneath 40 acres.
  - d. The discovery well has already produced 56,000 BO and is expected to ultimately recover 90,000 BO.
- 7. Well spacing of 330-933 feet is standard for county regular rules at this depth and there have already been 19 wells drilled under this spacing rule.
  - 8. The productive Palo Pinto section in this reservoir extends from 4651 to 5250 feet as shown on the log of the Connally Unit Well No. 1.
  - 9. Allocation based on acreage will protect correlative rights.

**CONCLUSIONS OF LAW**

- 1. Proper notice was given as required by statute.
- 2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
- 3. The requested temporary field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoir.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the requested temporary field rules for the Weaver Springs (Palo Pinto) Field be approved and reviewed in 18 months.

Respectfully submitted,

Margaret Allen  
Technical Hearings Examiner

Date of Commission Action: July 11, 2000

Exhibits

1. Map
2. Proration schedule
3. Completion data
4. Monthly production
5. Graph of production
6. Data from Forms W-10
7. Type log
8. Volumetric calculations
9. Drainage calculations
10. Reservoir data sheet
11. Other Palo Pinto field rules